

SITE CHARACTERIZATION REPORT

HOOSICK FALLS LANDFILL SITE 9 WALNUT STREET TOWN OF HOOSICK, NEW YORK 12090

NYSDEC Site No. 442007 Work Assignment No. D007620-34.1

Submitted to:

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1.0 INTRODUCTION

This report presents the results of the Site Characterization (SC) for the Hoosick Falls Landfill Site (referred to as the "Site") located at 9 Walnut Street, near the intersection with New York State Route 22 (RT-22), in the Town of Hoosick Falls, Rensselaer County, New York. Refer to **Figure 1**, Site Location Map. The SC was completed in accordance with the New York State Department of Environmental Conservation (NYSDEC or the "Department") Division of Environmental Remediation (DER) Work Assignment (WA) No. D007620-34 Notice to Proceed dated December 23, 2016, the NYSDEC-approved amended Scope of Work dated June 18, 2018 (WA No. D007620-34.1), and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (DER-10).

The Site Investigation Area includes the Hoosick Falls Landfill Site, properties bordering the Site and off-site properties located north of the landfill. Refer to **Figure 2**, Project Limits and Pre-Existing Site Features. The Site has been assigned NYSDEC Site No. 442007. The SC was performed to further investigate known and potential contamination caused by the historic operations at the Site for the purposes of assisting the Department in determining whether the Site poses a significant threat to public health and/or the environment, warranting a Remedial Investigation (RI).

During operation, the Hoosick Falls Landfill is believed to have accepted industrial waste, including waste containing per- and polyfluoroalkyl substances (PFAS). Monitoring wells at the Site were sampled and found to contain concentrations of PFAS above United States Environmental Protection Agency (USEPA) Health Advisory Levels for drinking water. A leachate sample and surface water sample collected from the Site also contained elevated PFAS concentrations. As indicated above, in December 2016, the Department issued a SC WA to TRC Engineers, Inc. (TRC) to further investigate known and potential contamination on the Hoosick Falls Landfill property and adjacent parcels. The scope of the SC included surface soil sampling, surface water and sediment sampling, monitoring well installation and subsurface soil sampling, groundwater sampling, and surveying. The SC field investigation activities were implemented between May 2017 and June 2018, as described in this report.

2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Location and Setting

The Hoosick Falls Landfill Site is in a mixed residential, agricultural and commercial area approximately one-half mile north of the Village of Hoosick Falls (referred to as the "Village"), in northeastern Rensselaer County, New York (see **Figure 1**). The Site is primarily comprised of an irregularly shaped 28.55-acre parcel of land identified on the Town of Hoosick Tax Maps as Section 17, Block 2, Lot 16.2. The Site's Property Class is "852 – Landfill". The Village owned and operated a landfill at the Site from the mid-1930s until the facility stopped accepting waste in 1993. The Site is currently owned and/or operated by the Village (subject to several easements, etc.), and access is via a gated gravel driveway at the end of Walnut Street, which leads to the Village's active Transfer Station at the northeastern corner of the Site. The Site is not fenced.

The Site is bordered by undeveloped land, a railroad corridor for Pan Am Southern (PAS), Hoosick Junction Road and Walloomsac River to the north; undeveloped land, residential and commercial properties, and RT-22 to the east; undeveloped land, Thayer's Pond, residential and commercial properties, and Sewer Plant Road to the south; and, a railroad corridor for PAS, the Hoosick River and undeveloped land to the west. There is an 80-foot wide north-northwest - south-southeast easement for Niagara Mohawk Power Corporation on the western portion of the Site. However, the utility poles and lines associated with this easement were re-routed around the Site to extend the operational life of the landfill.

Thayer's Pond is the closest surface water body to the Site. A portion of the pond is within the southernmost part of the Site. The Hoosick River, a "protected stream" designated as Class C (T) waters, is located less than 200 feet west of the Site. The Walloomsac River, also a "protected stream" designated as Class C (T) waters, is located approximately 2,850 feet north of the Site. A municipal water supply well, which supplies drinking water for the Village, is located approximately 2 miles south of the Site. Some homes and businesses within the Site Investigation Area are serviced by private water supply wells and private sewer systems.

2.2 Site Features and Use

The landfill is currently inactive. However, the Village operates a Transfer Station in the northeastern part of the Site. The Transfer Station area consists of a gravel driveway and lot, which contains two (2) small storage sheds, portable sanitary facilities, roll-off containers, a waste staging pad and a loading platform. Monolith Solar Associates, LLC operates an approximately 75,000 square foot solar farm on top of the southwest portion of the landfill. The solar farm consists of three (3) 200 kilowatt systems and includes solar panels, inverters, modules, conduit trenches, a summing panel and a utility tie-in point. Other notable features include the utility poles and power lines along the southern, eastern and northern perimeters of the Site, a leachate collection vault (HFL-GW-PW-1), a manhole (HFL-MH-001, purpose unknown), and three (3)

overburden groundwater monitoring wells (HFL-MW-001B, HFL-MW-002 and HFL-MW-004). **Figure 2** shows the locations of the Site features which existed at the start of the SC field investigation activities.

2.3 Site History/Past Use¹

The Village of Hoosick Falls operated an "unlined" municipal landfill at the Site from the mid-1930s until it stopped accepting waste at the landfill in 1993. During this time, the landfill reportedly received an average of 23 tons of municipal and industrial waste per day from local residential and industrial communities. The municipal waste included sewage sludge from the Hoosick Falls Wastewater Treatment Plant and general household trash. The industrial waste included oil, wastepaper sludge, polymerized epoxy resin, thermoset molding flash, TeflonTM chips, and phenolic resin. The landfill reportedly operated more like an "open dump" rather than a planned facility. Historically, sludge piles, lagoons, and open metal drums were noted as being randomly placed throughout the Site and comingled with the general fill and waste material. The Hoosick Falls Landfill closure system consists of an approximately 12-inch thick passive gas venting layer beneath an approximately 24-inch thick clay barrier layer. Above the clay barrier layer is an approximately 24-inch thick soil protection layer and an approximately 6-inch thick topsoil final cap surface layer.

In 2012, the Village of Hoosick Falls entered into a partnership with Monolith Solar to design and install a solar power facility on the Hoosick Falls Landfill property. Construction of the solar power facility was completed in November 2015. The active facility consists of ground-mounted solar panels producing approximately 590 kilowatts of power, encompassing approximately 1.77 acres of the Hoosick Falls Landfill cap area. **Figure 2** shows the locations of the solar panels which existed at the start of the SC field investigation activities.

¹ Detailed historical information obtained from the following reports:

[•] Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York, Phase I Investigation for Hoosick Falls Landfill, Site Code: 442007, Hoosick, Rensselaer County, New York, prepared by Wehran Engineering, P.C., dated May 1987.

[•] Engineering Investigations at Inactive Hazardous Waste Sites, Phase II Investigation, Hoosick Falls Landfill, Site No. 442007, Town of Hoosick, Rensselaer County, prepared by Gibbs & Hill, Inc., dated March 1991.

[•] Closure Investigation Report, Village of Hoosick Falls Landfill, Rensselaer County, New York, prepared by Laberge Engineering and Consulting Group LTD, December 1991.

Buonanno, Nicholas. "Hoosick Falls Solar Garden Now Open." *The Record*, 16 Nov. 2015, www.troyrecord.com/news/hoosick-falls-solar-garden-now-open/article_2d72df18-d6a5-5eba-9d12-070c321b0260.html.

^{• &}quot;Solar Energy Ribbon Cutting." *The Village of Hoosick Falls, NY*, www.villageofhoosickfalls.com/Events/solar ribbon cutting.html#.XDJL0FxKg2x.

2.4 Topography and Site Drainage

The Site is located on a steep slope approximately 200 feet east of the Hoosick River. Elevations at the Site range from approximately 420 to 540 feet North American Vertical Datum (NAVD) 1988, with the highest elevations on the northern portion of the landfill and the lowest elevations near the Hoosick River. The overall slope of the Site is downward from east to west. The majority of surface water runoff at the Site occurs via sheet flow, although there are a few small ditches around the landfill. Drainage at the Site is towards the west and generally away from the landfill. Surface water runoff from the Site drains to Thayer's Pond and the Hoosick River.

3.0 PREVIOUS INVESTIGATIONS

Summaries of previous environmental investigations for the Hoosick Falls Landfill Site are presented in this Section. The investigations are documented in the following reports:

- Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York, Phase I
 Investigation for Hoosick Falls Landfill, Site Code: 442007, Hoosick, Rensselaer County, New
 York, prepared by Wehran Engineering, P.C., dated May 1987;
- Engineering Investigations at Inactive Hazardous Waste Sites, Phase II Investigation, Hoosick Falls Landfill, Site No. 442007, Town of Hoosick, Rensselaer County, prepared by Gibbs & Hill, Inc., dated March 1991; and,
- Closure Investigation Report, Village of Hoosick Falls Landfill, Rensselaer County, New York, prepared by Laberge Engineering and Consulting Group LTD, December 1991.

3.1 Wehran Engineering, P.C. Phase I Investigation

In 1987, Wehran Engineering, P.C. (Wehran), was retained by NYSDEC to complete a Phase I Investigation (Phase I) to evaluate the potential environmental or public health hazards associated with past disposal activities at the Site. The Phase I consisted of a file review, site inspection and development of a preliminary Hazard Ranking System (HRS) score. The May 1987 Phase I Investigation Report for Hoosick Falls Landfill, Site Code: 442007, prepared by Wehran, presents the results of the Phase I, which are summarized below.

3.1.1 File Review

NYSDEC's files reportedly showed that the following materials were disposed of at the landfill: hydraulic oil, wastepaper sludge, polymerized epoxy resin, phenolic thermoset molding flash, TeflonTM chips, formaldehyde, septic sludge and general municipal trash. The files also showed that the Site had a history of being poorly operated and was under a Consent Order with the Department beginning in 1979. According to the Phase I Report, the RCDH noted numerous violations at the Site in 1979 including leachate entering surface water; open burning; missing or inadequate soil and vegetative cover; soil erosion and drainage problems; refuse within 50 feet of surface water or site boundary; refuse layer more than 2 feet thick; and, poorly compacted refuse. A subsequent site inspection completed by the RCDH and/or the NYSDEC on February 16, 1984 noted numerous 6 NYCRR Part 360 violations, including the presence of leaking waste containers. Sampling of leachate from the landfill in 1975, 1979, 1981, and 1984 reportedly showed the presence of iron, cadmium, lead, zinc, manganese, chloroform, and 1,1-dichloroethene at low concentrations.

3.1.2 Site Inspection

As part of the Phase I, a site inspection was completed by Wehran on April 24, 1986. During the site inspection, the landfill was observed to contain metal debris, sludge, and general municipal trash. In addition, approximately 35 empty metal drums were noted throughout the landfill. Exposed debris was reportedly observed in all portions of the landfill, including within 50 feet of Thayer's Pond. In the northeastern portion of the landfill, a large exposed pile of septic sludge was observed. A large pile of reddish sludge was noted in the active portion of the landfill. Leachate seeps were noted in all portions of the landfill and soil staining was noted on the landfill access road. Leachate was reportedly observed flowing from the landfill into Thayer's Pond.

3.1.3 Preliminary Hazard Ranking System Score

Based on the Phase I report, the preliminary HRS scores for the Hoosick Falls Landfill were as follows: Migration Routes (i.e., groundwater, surface water, and air) = 37.31, Fire and Explosion = 0 and Direct Contact = 25. In terms of the HRS, the Migration Routes score reflects the potential for harm due to migration of hazardous substances away from the facility. This score is a composite of the scores for groundwater, surface water and air exposure routes. The Fire and Explosion score reflects the potential for harm from substances that can cause fires and explosions, and the Direct Contact score reflects the potential for harm from direct contact with hazardous substances.

The low Fire and Explosion score was attributed to a lack of documentation of a fire and explosion threat at the Site from either a state or local fire marshal. The threat of potential contamination from direct contact was attributed primarily to the lack of proper soil cover and containment mechanisms at the Site. Due to the potential for human health and environmental impacts at the Site, and the absence of site-specific information, the Phase I report recommended completion of a Phase II investigation.

3.2 Gibbs & Hill, Inc. Phase II Investigation

In 1991, Gibbs & Hill, Inc. (Gibbs & Hill), was retained by NYSDEC to complete a Phase II Investigation (Phase II) to gather additional information to classify the Site and to calculate a Final HRS score for the Site. Phase II field investigation activities included a geophysical investigation; installation of four (4) overburden groundwater monitoring wells (MW-1, MW-2, MW-3 and MW-4); and, the collection and analysis of groundwater, surface water, sediment and soil samples. A description of the monitoring well locations is presented below:

• MW-1 – former upgradient overburden well located near the eastern Site boundary, west of the offsite residential area, replaced by overburden monitoring well HFL-MW-001B shown on **Figure 2**.

- MW-2 downgradient overburden well located in the northwest portion of the Site, east of the Hoosick River, shown as overburden monitoring well HFL-MW-002 on **Figure 2**.
- MW-3 former downgradient overburden well located east of the Hoosick River, along the western Site boundary near manhole HFL-MH-001 as shown on **Figure 2**.
- MW-4 downgradient overburden well in the southwest corner of the Site, east of the Hoosick River and west of Thayer's Pond, shown as overburden monitoring well HFL-MW-004 on **Figure 2**.

The May 1991 Phase II Investigation Report for the Hoosick Falls Landfill, Site No. 442007, prepared by Gibbs & Hill, presents the results of the Phase II, which are summarized below.

3.2.1 Geophysical Survey

A geophysical survey was completed at the Site to characterize subsurface conditions. A terrain conductivity survey was performed to locate potential areas of de-graded groundwater quality. A magnetometer survey was completed at proposed monitoring well locations to detect buried metals objects which may be present in the subsurface prior to drilling. The conductivity survey reportedly provided limited evidence (i.e., higher conductivity readings) that groundwater was de-graded near the locations of proposed monitoring wells MW-3 and MW-4. The conductivity survey identified evidence of fill east of the scrap metal pile (i.e., near Thayer's Pond). Results of the magnetometer survey indicated there were no buried objects near the proposed monitoring well locations.

3.2.2 Groundwater Sampling

Four (4) groundwater samples (GW-1, GW-2, GW-3 and GW-4) were collected from the four (4) overburden groundwater monitoring wells (MW-1, MW-2, MW-3 and MW-4) that were installed at the Site. The samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL polychlorinated biphenyl (PCBs), TCL pesticides, and Target Analyte List (TAL) metals. The results of the analysis of the groundwater samples revealed the following:

- The VOCs 1,1,2-trichloroethane, vinyl chloride, 1,1-dichloroethene, 1,2-dichloroethene, and 1,2-dichloroethane were detected at concentrations above state and federal drinking water standards in the groundwater sample collected from monitoring well MW-1. No VOCs were detected at concentrations above state or federal standards in the downgradient monitoring wells (MW-2, MW-3 and MW-4).
- No SVOCs, PCBs or pesticides were detected in the groundwater samples at concentrations above state and federal drinking water standards.
- The metals cadmium, chromium, lead, and manganese were detected at concentrations above state and federal drinking water standards in the groundwater samples collected from monitoring wells

MW-1, MW-3, and MW-4. However, the Phase II report noted that the concentrations may have been attributed to high turbidity as the samples were unfiltered.

3.2.3 Surface Water Sampling

Surface water samples were collected from two (2) locations along the Hoosick River (SW-2 and SW-3) and one (1) location along a small stream draining from the Site into Thayer's Pond. The samples were analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TCL pesticides, and TAL metals. The results of the analysis suggested that there was no adverse impact to the water quality of the Hoosick River or Thayer's Pond resulting from surface water runoff from the Site.

3.2.4 Sediment and Soil Sampling

Three (3) sediment samples (SD-1, SD-2, and SD-3) and one (1) soil sample (W-1) were collected from the Site as part of the Phase II investigation. The three (3) sediment sample locations corresponded to the three (3) surface water sample locations. The soil sample was collected in the northeastern part of the Site. The sediment and soil samples were analyzed for TCL VOCs, TCL SVOCs, TCL PCBs, TCL pesticides, and TAL metals. The results of the analysis of the sediment and soil samples revealed the following:

- No VOCs, SVOCs or PCBs were detected in the sediment or soil samples.
- Lindane was detected in sediment sample SD-2 at a concentration of 25 micrograms per kilogram ($\mu g/kg$) and sediment sample SD-3 at a concentration of 72 $\mu g/kg$. Lindane was the only pesticide detected in the sediment samples.
- Analytical results showed similar concentrations of metals in all three (3) sediment samples. SD-1, which was collected closest to the Site, contained barium concentrations three (3) times greater than sediment samples SD-2 and SD-3, but lower than the Contract Required Quantitation Limit (CRQL).
- Lead was detected in sediment sample SD-1 at concentrations twenty (20) times greater than sediment sample SD-2 and eight (8) times greater than sediment sample SD-3. Sediment sample SD-1 contained concentrations of zinc significantly higher than sediment samples SD-2 and SD-3.
- Soil sample W-1 contained metal concentrations similar to sediment samples SD-2 and SD-3.

3.2.5 Final Hazard Ranking System Score

Based on the results of the Phase II investigation, the final HRS scores for the Hoosick Falls Landfill were as follows: Migration Routes (i.e., groundwater, surface water and air) = No Score, Fire and Explosion = Not Applicable and Direct Contact = 0. A "No Score" value indicates that there was insufficient information available to draw a conclusion.

Based on the results of the field investigation activities, the Phase II report recommended installation of two (2) additional groundwater monitoring wells to better assess groundwater flow direction at the Site and to determine the source of the VOCs detected in monitoring well MW-1.

3.3 Laberge Engineering and Consulting Group LTD Closure Investigation Report

On behalf of the Village, Laberge Engineering and Consulting Group LTD (Laberge) initiated investigation activities at the landfill in connection with a preliminary plan for landfill closure. The objective of the investigation was to evaluate the current and future potential for contaminant migration from the Site. The investigation also assessed the hydrogeologic conditions at the Site, including groundwater quality at and near the landfill, migration of explosive gas, and surface leachate and vectors. Presented below are summaries of the results of the investigation presented in the closure investigation report.

3.3.1 Private Water Well Survey

A private water well survey was conducted as part of the closure investigation. Surveys were reportedly sent to property owners up to one mile downgradient of the Site and up to one-half mile upgradient of the Site. Of the 152 surveys distributed, 71 were returned. Thirty-five property owners indicated that water wells were present on their properties, and the remaining responses were negative. Reportedly, the survey results did not identify any issues with the private wells.

3.3.2 Groundwater Sampling

Six (6) groundwater samples were collected from (6) overburden groundwater monitoring wells (MW-1, MW-1A, MW-1B, MW-2, MW-3 and MW-4) at the Site. The samples were analyzed for 6 NYCRR Part 360 Baseline Parameters. The results of the analysis of the groundwater samples revealed the following:

- The VOCs 1,1,2-trichloroethane, vinyl chloride, 1,1-dichloroethene, 1,2-dichloroethene, and chloroethane were detected in monitoring wells MW-1 and MW-3 at concentrations ranging from 3 micrograms per liter (μ g/L) to 170 μ g/L.
- The metals barium, cadmium, chromium, lead, and zinc were detected in monitoring wells MW-1, MW-1A, MW-2 and MW-3 at concentrations ranging from 0.02 milligrams per liter (mg/L) to 0.38 mg/L.
- Leachate indicators including aluminum, calcium, iron, magnesium, manganese, potassium and sodium were detected at varying concentrations in each of the six (6) monitoring wells, with the highest concentrations downgradient of the landfill.

3.3.3 Leachate Sampling

Two (2) leachate samples were collected near the landfill waste mass (L-1 and L-2) and two (2) were collected downgradient of the Site (L-3 and L-4). The samples were analyzed for 6 NYCRR Part 360 Baseline Parameters. The results of the analysis of the leachate samples revealed the following:

- The VOCs trichlorofluoromethane, ethylbenzene, vinyl chloride, and trans-1,2-dichloroethane were detected in leachate samples L-1, L-2 and L-3 at concentrations ranging from 2 μg/L to 3 μg/L.
- The metals barium, beryllium, copper, nickel and zinc were detected in each sample at concentrations ranging from 0.006 mg/L to 6.4 mg/L.
- Leachate indicators including aluminum, calcium, iron, magnesium, manganese, nickel and sodium were detected at varying concentrations in each of the samples.
- Dissolved solids were detected in samples L-1 and L-2 with the highest concentration of 3,230 mg/l at L-1. Chloride was also detected in the samples with the highest concentration of 226 mg/l at L-1.

3.3.4 Surface Water Sampling

One (1) surface water sample was collected from Thayer's Pond. The laboratory analyses showed no evidence of contamination.

3.3.5 Soil Gas Survey

Soil gas samples were collected from twenty (20) points advanced at the Site. Soil gas was screened for volatile organic compounds, lower explosive limit (LEL), percent oxygen, percent methane, and hydrogen sulfide. The soil gas survey identified two (2) locations on the landfill which exhibited excessive levels of landfill gasses and low oxygen levels.

The closure investigation report contained the following conclusions:

- Although VOCs were detected in monitoring wells MW-1 and MW-3, the steep groundwater gradient in
 the area should prevent migration of the contamination to upgradient locations. Additionally, the
 Hoosick River should intercept contamination migrating west toward the river. The contaminants could
 either move with the groundwater gradient below the river or enter the surface water and be transported
 by the flow. However, the majority of locations (e.g., private water supply wells) west of the river should
 be unaffected.
- Covering the landfill with an impermeable cap should reduce the quantity of leachate and improve the leachate quality over time. As such, it was determined that a leachate collection system was not initially required.

- Based on the results of the soil gas survey, it was determined that landfill gas was not migrating off-site under current conditions and would likely not migrate off-site once the landfill was capped.
- The landfill is not having a significant impact on the surrounding environment and the closure design will not present any significant issues.

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4.0 SITE CHARACTERIZATION

The SC field activities were performed between May 2017 and June 2018 in general conformance with the NYSDEC DER WA No. D007620-34 Notice to Proceed dated December 23, 2016, the NYSDEC-approved amended Scope of Work dated June 18, 2018 (WA No. D007620-34.1), and DER-10. The SC field activities consisted of the following:

- Implementation of a Community Air Monitoring Plan (CAMP), which included real-time monitoring
 for VOCs and particulates at the downwind perimeter of each work area during ground intrusive
 work.
- Collection of five (5) surface soil samples (HFL-SS-101, HFL-SS-102, HFL-SS-104, HFL-SS-105, and HFL-SS-106). HFL-SS-101 and HFL-SS-102 were collected on the western side of the landfill while inspecting the Site for leachate seeps and HFL-SS-104, HFL-SS-105, and HFL-SS-106 were collected at locations of newly installed monitoring wells HFL-MW-104, HFL-MW-105, and HFL-MW-106.
- Collection of co-located surface water and sediment samples from eleven (11) locations (HFL-WS/SD-102 through HFL-WS/SD-106, HFL-WS/SD-108, HFL-WS/SD-109, HFL-WS/SD-111 through HFL-WS/SD-113, and HFL-MH-WS/SD) throughout the Site. Collection of one (1) sediment sample (HFL-SD-101) from a small depression downgradient and adjacent to the northwest corner of the landfill. Collection of one (1) surface water sample (HFL-WS-114) from a drainage ditch along the western side of the landfill, downgradient of the suspected discharge point of manhole HFL-MH-001.
- Installation of six (6) overburden groundwater monitoring wells (HFL-MW-101, HFL-MW-102, HFL-MW-103, HFL-MW-104, HFL-MW-105, HFL-MW-106), one (1) intermediate-depth bedrock groundwater monitoring well (HFL-MW-101B), and four (4) deep bedrock groundwater monitoring wells (HFL-MW-101C, HFL-MW-104C, HFL-MW-105C and HFL-MW-106C). Groundwater monitoring well clusters HFL-MW-101/101B/101C and HFL-MW-104/104C and groundwater monitoring wells HFL-MW-102 and HFL-MW-103 are located on the Hoosick Falls Landfill Site. Groundwater monitoring well clusters HFL-MW-105/105C and HFL-MW-106/106C are located on off-site properties north of the landfill along Hoosick Junction Road. During installation of each monitoring well, soil sampling was performed. Approximately ten (10) feet of bedrock cores were collected from intermediate-depth bedrock groundwater monitoring well (HFL-MW-101B) and approximately thirty (30) feet of bedrock cores were collected from the bedrock monitoring wells HFL-MW-101C, HFL-MW-104C, HFL-MW-105C, and HFL-MW-106C. Six (6) subsurface soil samples (collected from the boreholes for monitoring wells HFL-MW-101, HFL-MW-101B, HFL-MW-103, HFL-MW-104, HFL-MW-105, and HFL-MW-106) were submitted for laboratory analysis.
- Development of the eleven (11) newly installed groundwater monitoring wells.

- Collection of two (2) rounds of groundwater elevation measurement from the pre-existing and newly installed groundwater monitoring wells.
- Collection and analysis of two (2) rounds of groundwater samples, including groundwater elevation measurements, and collection of two (2) rounds of leachate samples. In June 2017 samples were collected from the three (3) newly installed monitoring wells (HFL-MW-101 through HFL-MW-103), three (3) pre-existing monitoring wells (HFL-MW-001B, HFL-MW-002 and HFL-MW-004), and the leachate collection vault (HFL-GW-PW-1). Samples were collected from the eleven (11) newly installed monitoring wells (HFL-MW-101, HFL-MW-101B, HFL-MW-101C, HFL-MW-102, HFL-MW-103, HFL-MW-104, HFL-MW-104C, HFL-MW-105, HFL-MW-105C, HFL-MW-106, and HFL-MW-106C), three (3) pre-existing monitoring wells (HFL-MW-001B, HFL-MW-002 and HFL-MW-004), and the leachate collection vault (HFL-GW-PW-1) in June 2018.
- A survey of physical features, utilities, property boundaries and sample locations.
- Off-site disposal of investigation-derived waste, including development water, purge water, decontamination fluids, and drill cuttings.

A sampling location plan is presented as **Figure 3**. The scope of work for the SC and associated field methods are described in detail below. The methods implemented during the SC were in accordance with the NYSDEC-approved generic Health and Safety Plan (HASP), Field Activities Plan (FAP), and Quality Assurance Project Plan (QAPP), including modifications for sampling of emerging contaminants (i.e., PFAS and 1,4-dioxane). Equipment and materials (i.e., PFAS-free pumps, stainless steel, high density polyethylene (HDPE) and polypropylene) compatible with recent recommendations from NYSDEC for sampling of emerging contaminants were used at the Site. In addition, equipment blank samples were collected for PFAS analysis to confirm PFAS contamination was not introduced by the sampling methods, equipment or materials.

Standard chain-of-custody procedures were followed for all samples. Quality control samples, including matrix spike and matrix spike duplicates, were collected at a minimum frequency of one per 20 samples in accordance with the approved generic QAPP. Trip blanks were included in each cooler containing aqueous samples for VOC analysis. Category B data deliverable packages were requested.

4.1 Implementation of Community Air Monitoring Plan (CAMP)

A Community Air Monitoring Plan (CAMP) was implemented during intrusive investigation activities. The CAMP was implemented in accordance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 1A - Generic Community Air Monitoring Plan. A DustTRAKTM II aerosol monitor and a photoionization detector (PID) were positioned at locations upwind and downwind of the work areas. The CAMP was implemented during advancement of soil borings and monitoring well installation, but not during surface soil sampling, surface water and sediment sampling, monitoring well development and

sampling, and surveying. The purpose of the CAMP was to monitor air downwind of the work area for potential impacts associated with the investigation activities. There were no exceedances of the CAMP action levels during the performance of the SC field activities.

4.2 Surface Soil Sampling

Surface soil sampling was completed on June 13, 2017 and April 4, 2018. The 2017 sampling consisted of collecting two (2) samples along the western side of the landfill during a Site inspection for suspected leachate seeps. Since no leachate seeps were identified during the Site inspection, the samples were collected near the drainage swale leading to Thayer's Pond. The two (2) locations sampled as part of this event were HFL-SS-101 and HFL-SS-102. The 2018 surface soil sampling was completed at the locations of newly installed monitoring wells HFL-MW-104, HFL-MW-105 and HFL-MW-106. The three (3) samples collected are HFL-SS-104, HFL-SS-105, and HFL-SS-106. Surface soil samples were collected from 0 to 0.5 feet below the vegetative layer using a 2-inch diameter bucket auger. During sample collection, the surface soil samples were visually examined for evidence of contamination. No odors, staining or visual evidence of impacts were noted. Field screening results and soil characteristics are presented on the field forms provided in **Appendix B**. The surface soil sampling locations are presented on **Figure 3**.

The five (5) surface soil samples were submitted to TestAmerica, Inc. (TestAmerica) and analyzed for TCL VOCs by USEPA Method 8260, TCL SVOCs by USEPA Method 8270, TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7471, and PFAS by Modified USEPA Method 537 Revision 1.1. Additionally, surface soil samples HFL-SS-104, HFL-SS-105, and HFL-SS-106 were analyzed for 1,4-dioxane by USEPA Method 8270.

4.3 Surface Water and Sediment Sampling

Surface water and sediment sampling was completed between June 2, 2017 and June 11, 2018. Co-located surface water and sediment samples were collected from eleven (11) locations (HFL-WS/SD-102 through HFL-WS/SD-106, HFL-WS/SD-108, HFL-WS/SD-109, HFL-WS/SD-111 through HFL-WS/SD-113 and HFL-MH-WS/SD) throughout the Site, including the small drainage ditches around the landfill (HFL-WS/SD-102 through HFL-WS/SD-106, HFL-WS/SD-108 and HFL-WS/SD-109), Thayer's Pond (HFL-WS/SD-111 through HFL-WS/SD-113), and the manhole (HFL-MH-WS/SD) located on the western side of the landfill. One (1) sediment sample (HFL-SD-101) was collected from a small depression downgradient and adjacent to the northwest corner of the landfill. It should be noted that this location was only sampled for sediment due to a lack of water at the time of sampling. Additionally, one (1) surface water sample (HFL-WS-114) was collected from a drainage ditch located along the western side of the landfill and downgradient from the suspected discharge point of the manhole. This location was sampled for surface water only. The surface water and sediment sampling locations are presented on **Figure 3**.

The surface water samples from the drainage ditches and Thayer's Pond were obtained by collecting the water directly in laboratory-supplied containers. The surface water sample from the manhole was collected using a peristaltic pump and HDPE tubing. Sediment samples from the drainage ditches were collected using a 2-inch diameter bucket auger. Sediment samples from Thayer's Pond were collected using a Ponar Grab Sampler. During sample collection, the surface water and sediment samples were visually examined for evidence of contamination. No odors, staining or visual evidence of impacts were noted. Field screening results and surface water and sediment characteristics are presented on the field forms provided in **Appendix B**.

The surface water and sediment samples were submitted to TestAmerica and analyzed for TCL VOCs by USEPA Method 8260, TCL SVOCs by USEPA Method 8270 (including 1,4-dioxane), TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7470/7471, and PFAS by Modified USEPA Method 537 Revision 1.1. Additionally, the surface water and sediment samples collected from the manhole (HFL-MH-WS/SD) and the surface water sample collected from the drainage ditch downgradient of the manhole (HFL-WS-114) were analyzed for 1,4-dioxane by USEPA Method 8270.

4.4 Monitoring Well Installation and Subsurface Soil Sampling

Six (6) overburden groundwater monitoring wells (HFL-MW-101, HFL-MW-102, HFL-MW-103, HFL-MW-104, HFL-MW-105, HFL-MW-106), one (1) intermediate-depth bedrock groundwater monitoring well (HFL-MW-101B), and four (4) deep bedrock groundwater monitoring wells (HFL-MW-101C, HFL-MW-104C, HFL-MW-105C and HFL-MW-106C) were installed between May 2017 and April 2018. Groundwater monitoring well clusters HFL-MW-101/101B/101C and HFL-MW-104/104C and groundwater monitoring wells HFL-MW-102 and HFL-MW-103 are located on the Hoosick Falls Landfill Site. Groundwater monitoring well clusters HFL-MW-105/105C and HFL-MW-106/106C are located on off-site properties north of the landfill along Hoosick Junction Road. Parratt-Wolff, Inc. was retained as a subcontractor by TRC to install the groundwater monitoring wells using a combination of hollow stem auger (HSA) and mud rotary drilling and rock coring methods. The monitoring well locations are presented on **Figure 3**. A summary of the monitoring well type, depth of each well and depth to bedrock, approximate screen interval depths, maximum PID readings recorded during soil sampling, and soil sample intervals submitted for laboratory samples are presented in the table below.

| Summary of Depths of Monitoring Wells, Depth to Bedrock, Monitoring Well Screened Interval Depths and Diameters, |
|--|
| Maximum PID Screening Results, and Soil Sample Intervals Selected for Analysis |

| Monitoring Well Identification Number | Monitoring Well Type | Approx. Total Depth of Well (feet bgs) | Approx. Depth to Bedrock (feet bgs) | Approx. Depth of Screened Interval (feet bgs) | Monitoring Well Screen Length (feet)/Well Diameter (inches) | Maximum PID Reading during Borehole Sampling (ppm) | Depth of Sample Intervals Selected for Laboratory Analysis (feet bgs) |
|--|--------------------------------|--|-------------------------------------|---|---|--|---|
| HFL-MW-101 | Overburden | 28.84 | NA | 13.84-28.84 | 15.00/4.00 | 0.0 | 16.00-20.00 |
| HFL-MW-102 | Overburden | 63.46 | NA | 48.46-63.46 | 15.00/4.00 | 0.0 | NA |
| HFL-MW-103 | Overburden | 19.85 | NA | 4.85-19.85 | 15.00/4.00 | 0.0 | 6.00-10.00 |
| HFL-MW-104 | Overburden | 22.78 | NA | 7.78-22.78 | 15.00/2.00 | 0.0 | 9.00-11.00 |
| HFL-MW-105 | Overburden | 29.09 | NA | 14.09-29.09 | 15.00/2.00 | 0.0 | 22.00-24.00 |
| HFL-MW-106 | Overburden | 29.62 | NA | 14.62-29.62 | 15.00/2.00 | 0.0 | 19.00-21.00 |
| HFL-MW-101B | Intermediate- Depth Bedrock | 79.69 | 70.00 | 64.69-79.69 | 15.00/2.00 | 0.0 | 48.00-50.00 |
| HFL-MW-101C | Deep Bedrock | 99.55 | 70.00 | 71.55-99.55 | 28.00/2.00 | 0.0 | NA |
| HFL-MW-104C | Deep Bedrock | 93.51 | 63.00 | 65.51-93.51 | 28.00/2.00 | 0.0 | NA |
| HFL-MW-105C | Deep Bedrock | 152.77 | 122.00 | 124.77-152.77 | 28.00/2.00 | 0.0 | NA |
| HFL-MW-106C | Deep Bedrock | 137.93 | 106.00 | 109.93-137.93 | 28.00/2.00 | 0.0 | NA |

Notes:

Approx.: Approximate bgs: Below ground surface NA: Not applicable PID: Photoionization detector

ppm: Parts per million

4.4.1 Overburden Groundwater Monitoring Wells

The six (6) overburden groundwater monitoring wells (HFL-MW-101, HFL-MW-102, HFL-MW-103, HFL-MW-104, HFL-MW-105, and HFL-MW-106) were completed at depths ranging from approximately 19.85 feet below ground surface (bgs) to 63.46 feet bgs. Monitoring wells HFL-MW-101 through HFL-MW-103 were constructed with 4-inch diameter polyvinyl chloride (PVC) casing and 15 feet of 10-slot (0.010-inch) PVC well screen. Monitoring wells HFL-MW-104 through HFL-MW-106 were constructed with 2-inch diameter PVC casing and 15 feet of 10-slot (0.010-inch) PVC well screen.

Boreholes for monitoring wells HFL-MW-101 through HFL-MW-103 were advanced using a track-mounted HSA drill rig and 6.25-inch inside diameter (I.D.) augers. The borehole for monitoring well HFL-MW-104 was also advanced using a track-mounted HSA drill rig; however, 4.25-inch I.D. augers were used at this location. Boreholes for monitoring wells HFL-MW-105 and HFL-MW-106 were advanced using a truck-mounted HSA drill rig and 4.25-inch I.D. augers. During soil boring advancement at HFL-MW-101 through HFL-MW-103 soil samples were collected continuously from the ground surface to the well completion depth using 2-inch diameter split spoon samplers. Utility clearance test pits were completed to a depth of approximately 5 feet bgs at monitoring well locations HFL-MW-104 through HFL-MW-106 prior to soil boring advancement. As a result, soil samples at these locations were collected continuously from the bottom

of the utility clearance test pits to the well completion depths using 2-inch diameter split spoon samplers. The soil samples were inspected for physical evidence of impacts and screened for VOCs with a PID. In addition, a description of the soil was logged in a field book. No odors, staining, or PID readings were detected in the samples recovered from the soil borings. Soil boring and monitoring well construction logs are provided in **Appendix A**.

Five (5) subsurface soil samples (HFL-MW-101 (16'-20'), HFL-MW-103 (6'-10'), HFL-MW-104 (9'-11'), HFL-MW-105 (22'-24'), and HFL-MW-106 (19'-21')) were submitted to TestAmerica and analyzed for TCL VOCs by USEPA Method 8260 (including 1,4-dioxane), TCL SVOCs by USEPA Method 8270, TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7471, and PFAS by Modified USEPA Method 537 Revision 1.1. Additionally, subsurface soil samples HFL-MW-104 (9'-11'), HFL-MW-105 (22'-24'), and HFL-MW-106 (19'-21') were analyzed for 1,4-dioxane by USEPA Method 8270.

4.4.2 Intermediate-Depth Bedrock Groundwater Monitoring Well

The intermediate-depth bedrock groundwater monitoring well, HFL-MW-101B, was completed at approximately 79.69 feet bgs, approximately 10 feet into bedrock. HFL-MW-101B was constructed with 2-inch diameter PVC casing and 15 feet of 10-slot (0.010-inch) PVC well screen.

The borehole for monitoring well HFL-MW-101B was advanced using a track-mounted drill rig and a combination of 6-inch diameter mud rotary drilling and HQ diameter rock coring methods. During mud rotary drilling soil samples were collected continuously from the ground surface to the top of bedrock, which was encountered approximately 70 feet bgs, using 2-inch diameter split spoon samplers. Rock core samples were collected in 5-foot lengths starting at the top of bedrock and extending to the completion depth of the well. The soil and rock core samples were inspected for physical evidence of impacts and screened for the presence of VOCs with a PID. In addition, a description of the soil and rock was logged in a field book. No odors, staining, or PID readings were detected in the samples recovered from the borehole. Soil boring and monitoring well construction logs are provided in **Appendix A**.

One (1) subsurface soil sample (HFL-MW-101B (48'-50')) was submitted to TestAmerica and analyzed for TCL VOCs by USEPA Method 8260 (including 1,4-dioxane), TCL SVOCs by USEPA Method 8270 (including 1,4-dioxane), TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7471, and PFAS by Modified USEPA Method 537 Revision 1.1.

4.4.3 Deep Bedrock Groundwater Monitoring Wells

Four (4) deep bedrock groundwater monitoring wells (HFL-MW-101C, HFL-MW-104C, HFL-MW-105C, and HFL-MW-106C) were completed at depths ranging from approximately 93.51 feet bgs to 152.77 feet bgs, approximately 30 feet into bedrock. The monitoring wells were constructed with 2-inch diameter PVC casing and 28 feet of 10-slot (0.010-inch) PVC well screen. A 4-inch diameter permanent outer steel casing was also installed at monitoring well HFL-MW-101C.

The boreholes for monitoring well HFL-MW-101C and HFL-MW-104C were advanced using a track-mounted drill rig and the boreholes for monitoring well HFL-MW-105C and HFL-MW-106C were advanced using a truck-mounted drill rig. All deep bedrock monitoring well boreholes were advanced using a combination of 6-inch diameter mud rotary drilling and HQ diameter rock coring methods.

During mud rotary drilling at monitoring wells HFL-MW-104C, HFL-MW-105C and HFL-MW-106C, soil samples were collected continuously from the bottom of the adjacent overburden monitoring well to the top of bedrock, which was encountered approximately 63 feet bgs, 122.00 feet bgs and 106 feet bgs, respectively, using 2-inch diameter split spoon samplers. During mud rotary drilling at monitoring well HFL-MW-101C soil samples were collected continuously from 46 feet bgs to 54 feet bgs using 2-inch diameter split spoon samplers to determine if a water-bearing zone existed below the bottom of existing overburden monitoring well HFL-MW-101. Mud rotary drilling was also used at monitoring well HFL-MW-101C to extend the borehole approximately 5 feet into rock, so the 4-inch diameter outer steel casing could be grouted into place prior to rock coring.

Rock core samples were collected in 5-foot lengths starting at the top of bedrock (bottom of the 4-inch diameter steel casing at HFL-MW-101C) and extending to the completion depth of each well. The soil and rock core samples were inspected for physical evidence of impacts and screened for the presence of VOCs with a PID. In addition, a description of the soil and rock was logged in a field book. No odors, staining, or PID readings were detected in the samples recovered from the boreholes. No subsurface soil samples collected from the deep bedrock groundwater monitoring well boreholes were submitted for laboratory analysis. Soil boring and monitoring well construction logs are provided in **Appendix A**.

4.5 Monitoring Well Development

After installation, the monitoring wells were developed using a Wattera Hydrolift-2 pump and dedicated HDPE tubing until the water was reasonably free of turbidity or 10 well volumes were removed. Conductivity, pH, temperature, and dissolved oxygen were also monitored using a YSI Pro DSS water quality meter during development. Development water was containerized in 55-gallon drums for off-site disposal. During well development, depth to groundwater and total well depth were measured using an oil/water

interface probe. Light non-aqueous phase liquid (LNAPL) and evidence of contamination (sheens, odors, etc.) were not observed during monitoring well development.

4.6 Groundwater Level Measurements

Two (2) rounds of groundwater level measurements were completed during the SC field activities. Groundwater levels in the pre-existing and new wells installed in 2017 were measured in February 2018. Groundwater levels in the pre-existing wells and the new wells installed in 2018 were measured in July 2018. Depth to groundwater was measured in each monitoring well using an oil/water interface probe to determine groundwater surface elevation. While completing groundwater level measurements, headspace readings were also measured using a PID. No PID readings or LNAPL were encountered during either groundwater level measurement event. PID headspace readings are presented on the field forms provided in **Appendix B. Figure 10** and **Figure 12** present the groundwater surface elevations and contours from the groundwater level measurement events.

4.7 Groundwater and Leachate Sampling

Two (2) rounds of groundwater and leachate samples were collected from the Site monitoring wells and leachate collection vault, in June 2017 and June 2018. Prior to the collection of samples, the groundwater monitoring wells were gauged for total well depth, depth to water, and if present, depth to LNAPL. **Figure 9** and **Figure 11** present the groundwater surface elevations and contours from the groundwater sampling events. While completing the measurements, headspace readings were also measured using a PID. PID headspace readings are presented on the field forms provided in **Appendix B**.

Except for HFL-MW-102, the overburden groundwater monitoring wells were purged using a peristaltic pump and dedicated HDPE tubing connected to a flow-through cell for monitoring water quality parameters. Overburden groundwater monitoring well HFL-MW-102 and the bedrock groundwater monitoring wells were purged using a PFAS-free bladder pump and dedicated HDPE tubing also connected to a flow-through cell. Low-flow purging rates and techniques were used to minimize suspension of particulate matter in the wells. Water quality parameters, including temperature, pH, conductivity, dissolved oxygen concentration, oxidation reduction potential, and turbidity were recorded prior to and during purging. Groundwater samples were collected after field parameters stabilized within established ranges. Water quality readings collected during the sampling events were recorded on low-flow groundwater sampling logs. The leachate samples from the leachate collection vault were collected using a peristaltic pump and HDPE tubing. The leachate collection vault was not purged prior to sample collection due to the configuration of the vault. Copies of the low-flow sampling logs are included as **Appendix B**. No elevated PID headspace readings or LNAPL was encountered during the sampling activities.

4.7.1 June 2017 Sampling Event

Samples were collected from the three (3) newly installed monitoring wells (HFL-MW-101, HFL-MW-102, and HFL-MW-103), three (3) pre-existing monitoring wells (HFL-MW-001B, HFL-MW-002, and HFL-MW-004), and the leachate collection vault (HFL-GW-PW-1) in June 2017.

Following stabilization of the water quality parameters (at monitoring well locations only), groundwater and leachate samples were collected and submitted to TestAmerica and analyzed for TCL VOCs by USEPA Method 8260 (including 1,4-dioxane), TCL SVOCs by USEPA Method 8270, TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7470, and PFAS by Modified USEPA Method 537 Revision 1.1.

4.7.2 June 2018 Sampling Event

Samples were collected from the eleven (11) newly installed monitoring wells (HFL-MW-101, HFL-MW-101B, HFL-MW-101C, HFL-MW-102, HFL-MW-103, HFL-MW-104, HFL-MW-104C, HFL-MW-105, HFL-MW-105C, HFL-MW-106, and HFL-MW-106C), three (3) pre-existing monitoring wells (HFL-MW-001B, HFL-MW-002 and HFL-MW-004), and leachate collection vault (HFL-GW-PW-1) in June 2018.

Following stabilization of the water quality parameters (at monitoring well locations only), groundwater and leachate samples were collected and submitted to TestAmerica and analyzed for TCL VOCs by USEPA Method 8260 (including 1,4-dioxane), TCL SVOCs by USEPA Method 8270 (including 1,4-dioxane), TCL pesticides by USEPA Method 8081, TCL PCBs by USEPA Method 8082, TAL metals by USEPA Methods 6010 and 7470, and PFAS by Modified USEPA Method 537 Revision 1.1.

4.8 Site Survey

In August 2017, C.T. Male Associates (C.T. Male), a New York State licensed land surveyor, completed a survey of physical features, property boundaries, and known utilities at the Site. Additionally, the survey included the locations and elevations (ground surface and top of PVC well casing) of the pre-existing and new monitoring wells as well as the locations of surface soil, surface water and sediment sampling locations. A second survey was completed in August 2018 by C.T. Male to survey the locations and elevations of the monitoring wells installed in April 2018. The survey map prepared by C.T. Male is presented in **Appendix C**.

4.9 Investigation-Derived Waste (IDW)

Investigation-derived waste (IDW) generated during the investigation included soil generated during drilling and coring activities, and water from well development, well purging, and decontamination of sampling equipment. The IDW was placed in United States Department of Transportation (USDOT) approved 55-gallon drums, labeled and secured awaiting transportation off-site for disposal.

On September 7, 2017, the IDW generated during 2017 SC activities was loaded and transported by Brookside Environmental, Inc. of Copiague, New York (Brookside) for disposal off-site at Clean Water of New York located in Staten Island, New York. A total of 10 drums of non-hazardous water generated during well development, well purging, and decontamination of sampling equipment and 13 drums of soil generated during drilling activities were transported off-site for disposal.

On November 1, 2018, the IDW generated during 2018 SC activities was loaded and transported by Brookside for disposal off-Site at Cycle Chem, Inc. in Elizabeth, New Jersey. In total, 35 drums of water from well development, well purging, and decontamination of sampling equipment and 84 drums of soil generated during drilling and coring activities were transported off-Site for disposal.

A total of 142 drums were shipped for off-site disposal during SC activities. The final waste disposal manifests are included in **Appendix D**.

5.0 DISCUSSION OF RESULTS

This section presents a discussion of the results of the SC. The results of laboratory analyses are summarized in **Tables 1** through **25**. The results of validation of the laboratory analytical data are summarized in the Data Usability Summary Report (DUSR) in **Appendix E**. The data validation was performed in accordance with NYSDEC requirements, as well as the requirements for development of DUSRs in Appendix 2B of DER-10, Technical Guidance for Site Investigations and Remediation. The complete Analytical Services Protocol (ASP) Category B Laboratory Analytical Data Reports will be provided separately from this report.

5.1 Applicable Regulatory Standards

This section identifies the regulatory standards and guidelines used to evaluate the results of analysis of the surface water and sediment, surface soil, subsurface soil and groundwater samples. The standards and guidelines used to evaluate the data associated with each specific media are described individually below.

5.1.1 Surface Water

Surface water sampling results were evaluated by comparison to the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values for Class C Water. Surface water sampling results were compared to the most stringent Standards and Guidance Values listed for the following Class C Water Types: Type A(A) (Fish Survival), Type A(C) (Fish Propagation), Type H(FC) (Human Consumption of Fish), and Type W (Wildlife Protection). The USEPA Health Advisory Level for PFAS in drinking water of 70 nanograms per liter (ng/L) is provided as a reference only.

5.1.2 Sediment

Sediment sampling results were evaluated by comparison to the NYSDEC Division of Fish, Wildlife and Marine Resources Bureau of Habitat Screening and Assessment of Contaminated Sediment Class A Freshwater Sediment Guidance Values (SGVs). Additionally, sediment sampling results for metals were evaluated by comparison to the Class A, Class B, and Class C Freshwater SGVs.

5.1.3 Soil

Soil sampling results were evaluated by comparison to Unrestricted Use Soil Cleanup Objectives (SCOs) in Table 375-6.8(a) of 6 NYCRR Part 375, Residential Use and Commercial Use SCOs in Table 375-6.8(b) of 6 NYCRR Part 375 and the Commissioner Policy 51 (CP-51) Supplemental SCOs. For PFAS, soil sampling results were evaluated by comparison to the New York State Department of Health (NYSDOH) preliminary Residential Use SCO of 140 micrograms per kilogram (µg/kg) developed for a potential site or sites in the Hoosick Falls area.

5.1.4 Groundwater and Leachate

Groundwater and Leachate sampling results were evaluated by comparison to the following NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values: Standards and Guidance Values for Class GA Water ("Class GA Values"). The USEPA Health Advisory Level for PFAS in drinking water of 70 ng/L is provided as a reference only.

5.2 Surface Soil Sampling

Summaries of the results of the analyses of the surface soil samples are presented in **Tables 1** through **5**. **Figure 4** presents a summary of the results of the analyses of the surface soil samples. A review of the results of the analyses of the surface soil samples is presented below.

5.2.1 VOCs in Surface Soil

There were no VOCs detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in the surface soil samples submitted for analysis. The complete results of the analyses of surface soil samples for VOCs are presented in **Table 1**.

5.2.2 SVOCs in Surface Soil

There were no SVOCs detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in the surface soil samples submitted for analysis. 1,4-Dioxane was not detected in the samples analyzed for 1,4-dioxane via USEPA Method 8270². The complete results of analyses of surface soil samples for SVOCs are presented in **Table 2**.

5.2.3 Pesticides in Surface Soil

With the exception of 4,4'-DDT, no pesticides were detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in the surface soil samples. 4,4'-DDT was detected at a concentration of 0.0039 milligrams per kilogram (mg/kg) in surface soil sample HFL-SS-101, collected in the southwestern part of the Site, which is above the Unrestricted Use SCO of 0.0033 mg/kg. The complete results of analyses of surface soil samples for pesticides are presented in **Table 3**.

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² The non-detect VOC results for 1,4-dioxane were rejected due to low relative response factors in VOC initial and continuing calibrations, causing the result to not be usable for project objectives. Results for 1,4-dioxane reported from the SVOC analysis of the samples have been determined to be usable for the purposes of this report.

5.2.4 Polychlorinated Biphenyls in Surface Soil

There were no PCBs detected at concentrations above the Commercial Use, Residential Use, or Unrestricted Use SCOs in the surface soil samples submitted for analysis. The results of the analyses of surface soil samples for PCBs are presented in **Table 3**.

5.2.5 Metals in Surface Soil

Metals were detected in each of the surface soil samples analyzed. The results of the analyses of the surface soil samples for metals are presented in **Table 4**. **Figure 4** shows the surface soil sampling locations and results of analyses for metals above the comparison criteria. Results of the analyses of surface soil samples for metals are further discussed below.

Arsenic was detected in one (1) surface soil sample, HFL-SS-101, at a concentration (18.6 mg/kg) above the Commercial Use SCO of 16 mg/kg. Barium, chromium, copper, lead, mercury, nickel, and zinc were detected at concentrations above the Residential Use or Unrestricted Use SCOs in surface soil. The more stringent SCOs for hexavalent chromium were used for screening total chromium results since there are no SCOs for total chromium. Additionally, iron was detected in surface soil at concentrations above the CP-51 Residential Use SCO. A summary of the concentrations of metals detected above SCOs in surface soil samples is presented in the table below. There were no other metals detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in the surface soil samples.

| Metals Detected at Concentrations Above Commercial Use, Residential Use, and/or Unrestricted Use SCOs in Surface Soil Samples | | | | | | | | |
|---|------------|------------|------------|------------|------------|--|--|--|
| Sample Location: | HFL-SS-101 | HFL-SS-102 | HFL-SS-104 | HFL-SS-105 | HFL-SS-106 | | | |
| Analytes | Results | Results | Results | Results | Results | | | |
| Arsenic | 18.6 | 6.1 | 6.3 | 5.8 | 6.2 | | | |
| Barium | 394 | 103 | 131 J | 83.1 J | 78.6 J | | | |
| Chromium* | 30.2 | 21.1 | 20.5 J | 12.3 J | 13.6 J | | | |
| Copper | 50.8 | 23.6 | 22.4 | 59.3 | 25 | | | |
| Iron | 139,000 | 25,300 | 28,000 J | 20,700 J | 24,900 J | | | |
| Lead | 120 | 25.5 | 25.1 | 164 | 83.4 | | | |
| Mercury | 0.38 | 0.055 | 0.05 | 0.15 | 0.037 | | | |
| Nickel | 32.2 | 25.5 | 26.2 | 19.2 | 21.6 | | | |
| Zinc | 237 | 81.6 | 87.9 | 208 | 91 | | | |

Notes:

All concentrations are in milligrams per kilogram (mg/kg).

Values in **bold** indicate the analyte was detected.

Shading indicates the result exceeds Commercial Use, Residential Use, and/or Unrestricted Use SCOs.

J: Estimated value

SCO: Soil Cleanup Objective

^{*}The more stringent SCOs for hexavalent chromium were used for screening total chromium results.

5.2.6 Per- and Polyfluoroalkyl Substances (PFAS) in Surface Soil

There were no PFAS detected in the surface soil at concentrations exceeding the preliminary Residential Use SCO of 140 μ g/kg for a potential site or sites in the Hoosick Falls area. The complete results of analyses of surface soil samples for PFAS are presented in **Table 5**.

5.3 Surface Water Sampling

Summaries of the results of the analyses of the surface water samples are presented in **Tables 6** through **10**. **Figure 5** and **Figure 6** show the surface water sampling locations and results of analyses greater than applicable comparison criteria. A review of the results of the analyses of the surface water samples is presented below.

5.3.1 VOCs in Surface Water

There were no VOCs detected at concentrations exceeding the comparison criteria in the surface water samples submitted for analysis. The complete results of the analyses of surface water samples for VOCs are presented in **Table 6**.

5.3.2 SVOCs in Surface Water

There were no SVOCs detected at concentrations exceeding the comparison criteria in the surface water samples submitted for analysis. 1,4-Dioxane was detected at concentrations of 0.3 μ g/L (HFL-WS-114) and 1.5 μ g/L (HFL-MH-WS) in the samples analyzed for 1,4-dioxane using USEPA Method 8270³. The complete results of the analyses of surface water samples for SVOCs are presented in **Table 7**.

5.3.3 Pesticides in Surface Water

There were no pesticides detected at concentrations exceeding the comparison criteria in the surface water samples submitted for analysis. The complete results of the analyses of surface water samples for pesticides are presented in **Table 8**.

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³ The non-detect VOC results for 1,4-dioxane were rejected due to low relative response factors in VOC initial and continuing calibrations, causing the result to not be usable for project objectives. Results for 1,4-dioxane reported from the SVOC analysis of the samples have been determined to be usable for the purposes of this report.

5.3.4 Polychlorinated Biphenyls (PCBs) in Surface Water

There were no PCBs detected at concentrations exceeding the comparison criteria in the surface water samples submitted for analysis. The complete results of the analyses of surface water samples for PCBs are presented in **Table 8**.

5.3.5 Metals in Surface Water

Aluminum, cadmium, cobalt, copper, iron, lead, nickel, vanadium, and zinc were detected at concentrations above the comparison criteria for Class C surface water. A summary of the concentrations of metals detected above the comparison criteria in surface water samples is presented in the table below. There were no other metals detected in the surface water samples at concentrations exceeding the comparison criteria.

| | Metals Detected at Concentrations Above the Comparison Criteria in Surface Water Samples | | | | | | | | |
|---------------------|--|------------|------------|------------|------------|------------|--|--|--|
| Sample Location: | HFL-WS-102 | HFL-WS-103 | HFL-WS-104 | HFL-WS-105 | HFL-WS-106 | HFL-WS-108 | | | |
| Analytes | Results | Results | Results | Results | Results | Results | | | |
| Aluminum | 24,500 | 63 J | 150 J | 520 | 650 | 200 U | | | |
| Cadmium | 1.5 J | 2 U | 2 U | 2 U | 2 U | 2 U | | | |
| Cobalt | 27 | 4 U | 4 U | 4 U | 4 U | 4 U | | | |
| Copper | 53 | 10 U | 22 | 23 | 15 | 10 U | | | |
| Iron | 61,000 | 590 | 160 | 580 | 670 | 410 | | | |
| Lead | 34 | 4.2 J | 11 | 25 | 9.7 J | 10 U | | | |
| Nickel | 45 | 10 U | 1.8 J | 2.7 J | 2.3 J | 2.2 J | | | |
| Vanadium | 35 | 5 U | 5 U | 5 U | 5 U | 5 U | | | |
| Zinc | 180 | 11 J+ | 48 | 51 | 35 | 10 U | | | |
| Sample Location: | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS | | | |
| Analytes | Results | Results | Results | Results | Results | Results | | | |
| Aluminum | 200 U | 200 U | 200 U | 200 U | 170 J | 6,800 | | | |
| Cadmium | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 | | | |
| Cobalt | 4 U | 4 U | 4 U | 4 U | 0.86 J | 5.1 | | | |
| Copper | 10 U | 2.6 J | 3 Ј | 1.8 J | 3.8 J | 20 | | | |
| Iron | 500 | 71 | 500 | 65 | 2,500 | 156,000 | | | |
| Lead | 3 J | 10 U | 10 U | 10 U | 57 | 26 J+ | | | |
| Nickel | 1.6 J | 10 U | 10 U | 10 U | 3.4 J | 13 J- | | | |
| Vanadium | 5 U | 5 U | 5 U | 5 U | 5 U | 11 | | | |
| Zinc | 2.3 U | 5.3 J | 6 J | 2.8 J | 3 J | 260 | | | |

Notes:

All concentrations are in micrograms per Liter (μ g/L).

Values in **bold** indicate the analyte was detected.

Shading indicates the result exceeds one or more comparison criteria.

- J: Estimated value.
- J-: Estimate value; biased low.
- J+: Estimate value; biased high.
- U: Analyte was not detected at specified quantitation limit.

The complete results of the analyses of surface water samples for metals are presented in **Table 9**.

5.3.6 Per- and Polyfluoroalkyl Substances (PFAS) in Surface Water

PFAS compounds PFOA and/or PFOS were detected in all surface water samples submitted for analysis. The table below summarizes the concentrations of PFAS detected in surface water samples. The USEPA Health Advisory Level is for drinking water and is provided as a reference only.

| PFAS Concentrations Detected in Surface Water Samples | | | | | | | | |
|---|------------|------------|------------|------------|------------|-----------|--|--|
| Sample Location: | HFL-WS-106 | HFL-WS-108 | | | | | | |
| Analytes | Results | Results | Results | Results | Results | Results | | |
| PFOS | 45 | 11 | 3.4 | 5 | 4.1 | 44 | | |
| PFOA | 280 | 390 | 150 | 170 | 190 | 11,000 | | |
| Sample Location: | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS | | |
| Analytes | Results | Results | Results | Results | Results | Results | | |
| PFOS | 41 | 4.9 | 8.9 | 4.4 | 150 J | 20 | | |
| PFOA | 10,000 | 930 | 920 | 910 | 24,000 | 4,700 | | |

Notes:

All concentrations are in nanograms per Liter (ng/L).

As reference only: the USEPA Health Advisory Level for drinking water is 70 ng/L (individual or combined concentrations).

The complete results of the analyses of surface water samples for PFAS are presented in **Table 10**. For reference purposes only, **Appendix F** contains a summary of the results of Thayer's Pond fish sampling (for PFOA and PFOS only) generated by NYSDEC Division of Fish and Wildlife as part of a 2016 – 2017 Hoosick Falls area PFAS fish study, independent of the Hoosick Falls Landfill SC efforts.

5.4 Sediment Sampling

Summaries of the results of the analyses of the sediment samples are presented in **Tables 11** through **15**. **Figure 7** shows the sediment sampling locations and results of analyses greater than applicable comparison criteria. A review of the results of the analyses of the sediment samples is presented below. Note: the manhole sediment sample (HFL-MH-SD) is not compared to the sediment guidance values since the sample location is within a manhole and is not readily accessible to fish and wildlife.

5.4.1 VOCs in Sediment

There were no VOCs detected at concentrations exceeding the Class A SGVs in the sediment samples submitted for analysis. The complete results of the analyses of the sediment samples for VOCs are presented in **Table 11**.

5.4.2 SVOCs in Sediment

There were no SVOCs detected at concentrations exceeding the Class A SGVs in the sediment samples submitted for analysis. 1,4-Dioxane was not detected in the sample (HFL-MH-SD) analyzed for 1,4-dioxane

J: Estimated value.

U: Analyte was not detected at specified quantitation limit.

via USEPA Method 8270⁴. The complete results of the analyses of the sediment samples for SVOCs are presented in **Table 12**.

5.4.3 Pesticides in Sediment

There were no pesticides detected at concentrations exceeding the Class A SGVs in the sediment samples submitted for analysis. The complete results of the analyses of the sediment samples for pesticides are presented in **Table 13**.

5.4.4 Polychlorinated Biphenyls (PCBs) in Sediment

There were no PCBs detected at concentrations exceeding the Class A SGVs in the sediment samples submitted for analysis. The complete results of the analyses of the sediment samples for PCBs are presented in **Table 13**.

5.4.5 Metals in Sediment

Arsenic, cadmium, copper, lead, mercury, nickel, and zinc were detected at concentrations above the Class A SGVs in sediment. A summary of the concentrations of metals detected above Class A SGVs in the sediment samples is presented in the table below. There were no other metals detected at concentrations exceeding the Class A SGVs in the sediment samples.

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⁴ The non-detect VOC results for 1,4-dioxane were rejected due to low relative response factors in VOC initial and continuing calibrations, causing the result to not be usable for project objectives. Results for 1,4-dioxane are reported from the SVOC analysis of the samples and have been determined to be usable for the purposes of this report.

| Metals Detected at Concentrations Above Class A SGVs in Sediment Samples | | | | | | | |
|--|------------|------------|------------|------------|--|--|--|
| Sample Location: | HFL-SD-101 | HFL-SD-102 | HFL-SD-104 | HFL-SD-105 | | | |
| Analytes | Results | Results | Results | Results | | | |
| Arsenic | 5.6 | 6.2 | 9.6 J | 10.3 | | | |
| Cadmium | 0.31 J+ | 0.2 J | 0.87 | 0.62 J+ | | | |
| Copper | 30 | 22.6 | 102 | 35.1 | | | |
| Lead | 18.4 | 13.3 | 354 | 45.4 | | | |
| Mercury | 0.058 | 0.019 J | 2.7 | 0.58 | | | |
| Nickel | 29.3 | 25.9 | 21.1 | 45.6 | | | |
| Zinc | 75.3 | 64 | 318 | 107 | | | |
| Sample Location: | HFL-SD-106 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | | | |
| Analytes | Results | Results | Results | Results | | | |
| Arsenic | 11 J- | 8 | 9.8 | 14.8 J | | | |
| Cadmium | 1.1 J+ | 1.4 J+ | 1.4 J+ | 1.4 J | | | |
| Copper | 93.6 | 71.1 | 72 | 71.7 J | | | |
| Lead | 542 | 147 | 137 | 93.7 J | | | |
| Mercury | 0.31 | 0.15 | 0.2 | 0.11 J | | | |
| Nickel | 25.2 | 31.9 | 41.6 | 45.7 | | | |
| Zinc | 393 | 357 | 361 | 336 J | | | |

Notes:

All concentrations are in milligrams per kilogram (mg/kg).

Values in **bold** indicate the analyte was detected.

No shading indicates the result meets Class A SGVs.

Shading indicates the result corresponds with Class B SGVs. **Shading** indicates the result corresponds with Class C SGVs

J: Estimated value.

J-: Estimate value; biased low. J+: Estimate value; biased high.

The complete results of the analyses of sediment samples for metals are presented in **Table 14**.

5.4.6 Per- and Polyfluoroalkyl Substances (PFAS) in Sediment

There are no SGVs currently established for PFAS in sediment; however, no PFAS were detected in sediment at a concentration above the preliminary Residential Use SCO of 140 μ g/kg for PFAS in soil at a potential site or sites in the Hoosick Falls area. The complete results of the analyses of the sediment samples for PFAS are presented in **Table 15**. For reference purposes only, **Appendix F** contains a summary of the results of Thayer's Pond fish sampling (for PFOA and PFOS only) generated by NYSDEC Division of Fish and Wildlife as part of a 2016 – 2017 Hoosick Falls area PFAS fish study, independent of the Hoosick Falls Landfill SC efforts.

5.5 Subsurface Soil Sampling

Summaries of the results of the analyses of the subsurface soil samples are presented in **Tables 16** through **20**. **Figure 8** presents a summary of the results of the analyses of the subsurface soil samples. A review of the results of the analyses of the subsurface soil samples is presented below.

5.5.1 VOCs in Subsurface Soil

There were no VOCs detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in any subsurface soil samples submitted for analysis. The complete results of the analyses of subsurface soil samples for VOCs are presented in **Table 16**.

5.5.2 SVOCs in Subsurface Soil

There were no SVOCs detected at concentrations exceeding the Commercial Use, Residential Use, or Unrestricted Use SCOs in any subsurface soil samples submitted for analysis. 1,4-Dioxane was not detected in the samples analyzed for 1,4-dioxane via USEPA Method 8270⁵. The complete results of analyses of subsurface soil samples for SVOCs are presented in **Table 17**.

5.5.3 Pesticides in Subsurface Soil

There were no pesticides detected at concentrations above the Commercial Use, Residential Use, or Unrestricted Use SCOs in the subsurface soil samples submitted for analysis. The results of the analyses of subsurface soil samples for pesticides are presented in **Table 18**.

5.5.4 Polychlorinated Biphenyls in Subsurface Soil

PCBs were detected at a concentration of 4.8 mg/kg, which exceeds the Commercial Use SCO of 1 mg/kg, in the sample collected 6 to 10 feet bgs in the borehole for monitoring well HFL-MW-103, located in the southeast corner of the Site. There were no PCBs detected at concentrations above the Commercial Use, Residential Use, or Unrestricted Use SCOs in the other subsurface soil samples submitted for laboratory analysis. The results of the analyses of subsurface soil samples for PCBs are presented in **Table 18**. **Figure 8** shows the subsurface soil sampling locations and results of analyses for PCBs above the comparison criteria.

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⁵ The non-detect VOC results for 1,4-dioxane were rejected due to low relative response factors in VOC initial and continuing calibrations, causing the result to not be usable for project objectives. Results for 1,4-dioxane reported from the SVOC analysis of the samples have been determined to be usable for the purposes of this report.

5.5.5 Metals in Subsurface Soil

Metals were detected in each of the subsurface soil samples analyzed. The results of the analyses of the subsurface soil samples for metals are presented in **Table 19**. **Figure 8** shows the subsurface soil sampling locations and results of analyses for metals above the comparison criteria. Results of the analyses of soil samples for metals are discussed further below.

Chromium was detected at concentrations exceeding the Unrestricted Use SCO in five of the subsurface soil samples and at a concentration above the Residential Use SCO in one of the subsurface soil samples (HFL-MW-101B (48'-50')). The more stringent SCOs for hexavalent chromium were used for screening total chromium results since there are no SCOs for total chromium. Nickel was detected at a concentration above the Unrestricted Use SCO in one subsurface soil sample (HFL-MW-101B (48'-50')). Additionally, iron was detected in subsurface soil at concentrations above the CP-51 Residential Use SCO in all subsurface soil samples. A summary of the concentrations of metals detected above SCOs in subsurface soil samples is presented in the table below. There were no other metals detected at concentrations exceeding the Commercial Use, Residential Use or Unrestricted Use SCOs in the subsurface soil samples.

| | Metals Detected at Concentrations Above Residential Use and/or Unrestricted Use SCOs in Subsurface Soil Samples | | | | | | | | | | | |
|---------------------|---|-----------------|------------|------------|------------|------------|--|--|--|--|--|--|
| Sample Location: | HFL-MW-101 | HFL-MW- 101B | HFL-MW-103 | HFL-MW-104 | HFL-MW-105 | HFL-MW-106 | | | | | | |
| Sample Depth: | 16-20 | 48-50 | 6-10 | 9-11 | 22-24 | 19-21 | | | | | | |
| Analytes | Results | Results | Results | Results | Results | Results | | | | | | |
| Chromium* | 13.8 | 32.4 | 17.3 | 17.1 | 16.2 | 19.7 | | | | | | |
| Iron | 17,700 37,300 | | 25,500 | 26,400 | 25,200 | 21,300 | | | | | | |
| Nickel | 17.8 41.5 28.2 26.3 26.8 20 | | | | | | | | | | | |

Notes:

All concentrations are in milligrams per kilogram (mg/kg).

Sample depths in feet below ground surface (bgs).

Values in **bold** indicate the analyte was detected.

Shading indicates the result exceeds Residential Use and/or Unrestricted Use SCOs.

SCO: Soil Cleanup Objective

The complete results of the analyses of subsurface soil samples for metals are presented in **Table 19**.

5.5.6 Per- and Polyfluoroalkyl Substances (PFAS) in Subsurface Soil

There were no PFAS detected in the subsurface soil samples at concentrations exceeding the preliminary Residential Use SCO of $140 \,\mu\text{g/kg}$ for a potential site or sites in the Hoosick Falls area. The complete results of analyses of subsurface soil samples for PFAS are presented in **Table 20**.

^{*}The more stringent SCOs for hexavalent chromium were used for screening total chromium results.

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5.6 Groundwater and Leachate Sampling

Summaries of the results of the analyses of the groundwater and leachate samples are presented in **Tables 21** through **Table 25**. **Figures 13** and **14** show the monitoring well locations and results of analyses greater than the Class GA Values. A review of the results of the analyses of the groundwater and leachate samples is presented below.

5.6.1 VOCs in Groundwater and Leachate

There were no VOCs detected at concentrations exceeding the Class GA Values in the groundwater and leachate samples submitted for analysis. The complete results of the analyses of groundwater and leachate samples for VOCs are presented in **Table 21**.

5.6.2 SVOCs in Groundwater and Leachate

There were no SVOCs detected at concentrations exceeding the Class GA Values in the groundwater and leachate samples submitted for analysis. 1,4-Dioxane concentrations ranged from not detected to $180 \mu g/L$ (estimated value biased high, detected in sample collected from HFL-MW-002) in the samples analyzed for 1,4-dioxane via USEPA Method 8270^6 . The complete results of the analyses of groundwater and leachate samples for SVOCs are presented in **Table 22**.

5.6.3 Pesticides in Groundwater and Leachate

There were no pesticides detected at concentrations exceeding the Class GA Values in the groundwater and leachate samples submitted for analysis. The complete results of the analyses of groundwater and leachate samples for pesticides are presented in **Table 23**.

5.6.4 Polychlorinated Biphenyls (PCBs) in Groundwater and Leachate

There were no PCBs detected at concentrations exceeding the Class GA Values in the groundwater and leachate samples submitted for analysis. The complete results of the analyses of groundwater and leachate samples for PCBs are presented in **Table 23**.

⁶ The non-detect VOC results for 1,4-dioxane were rejected due to low relative response factors in VOC initial and continuing calibrations, causing the result to not be usable for project objectives. Results for 1,4-dioxane reported from the SVOC analysis of the samples have been determined to be usable for the purposes of this report.

5.6.5 Metals in Groundwater and Leachate

Arsenic, chromium, iron, lead, magnesium, manganese, and sodium were detected at concentrations above the Class GA Values in groundwater and leachate. A summary of the concentrations of metals detected above Class GA Values in groundwater and leachate samples is presented in the table below. There were no other metals detected at concentrations exceeding the Class GA Values in the groundwater and leachate samples.

| | Metals Detected | l at Concentrations A | bove Class GA Value | s in Groundwater an | d Leachate Samples | S |
|---------------------|-----------------|-----------------------|---------------------|---------------------|--------------------|-------------|
| Sample Location: | HFL-GW-PW1 | HFL-M | IW-002 | HFL-M | W-004 | HFL-MW-101 |
| Sample Date: | 6/6/2018 | 6/8/2017 | 6/7/2018 | 6/8/2017 | 6/7/2018 | 6/7/2017 |
| Analytes | Results | Results | Results | Results | Results | Results |
| Arsenic | 15 U | 15 U | 15 U | 15 U | 15 U | 8.6 J |
| Iron | 35,200 | 1,700 | 2,000 | 2,500 | 1,700 | 4,100 |
| Magnesium | 13,600 | 35,600 | 35,700 | 51,500 | 51,300 | 34,400 |
| Manganese | 830 | 600 | 690 | 10,200 | 3,200 | 1,300 |
| Sodium | 49,900 | 30,500 | 29,800 | 23,400 | 25,700 | 14,200 |
| Sample Location: | HFL-MW-101 | HFL-MW-101B | HFL-MW-101C | HFL-M | W-102 | HFL-MW-103 |
| Sample Date: | 6/6/2018 | 6/6/2018 | 6/6/2018 | 6/8/2017 | 6/7/2018 | 6/7/2017 |
| Analytes | Results | Results | Results | Results | Results | Results |
| Arsenic | 43 | 7.7 J | 8.5J | 15 U | 15 U | 15 U |
| Iron | 11,100 | 4,800 | 18,400 | 2,700 | 10,200 | 300 |
| Magnesium | 36,400 | 15,000 | 18,800 | 23,200 | 19,000 | 18,300 |
| Manganese | 1,500 | 1,700 | 1,700 | 590 | 770 | 67 |
| Sodium | 14,700 | 15,400 | 16,800 | 27,000 | 21,900 | 76,000 |
| Sample Location: | HFL-MW-103 | HFL-MW-104 | HFL-MW-104C | HFL-MW-105C | HFL-MW-106 | HFL-MW-106C |
| Sample Date: | 6/6/2018 | 6/6/2018 | 6/6/2018 | 6/5/2018 | 6/5/2018 | 6/6/2018 |
| Analytes | Results | Results | Results | Results | Results | Results |
| Arsenic | 15 U | 15 U | 15 U | 14 J | 15 U | 15 U |
| Chromium | 4 U | 4 U | 4 U | 69 | 2.2 J | 4 U |
| Iron | 1,100 | 560 | 560 | 30,500 | 400 | 740 |
| Lead | 10 U | 10 U | 10 U | 34 | 10 U | 10 U |
| Magnesium | 26,700 | 27,800 | 30,500 | 37,500 | 37,500 5,400 | |
| Manganese | 42 | 240 | 1,300 | 1,500 | 54 | 170 |
| Sodium | 85,800 | 18,300 | 19,800 | 98,700 | 10,600 | 24,800 |

Notes:

All concentrations are in micrograms per kilogram ($\mu g/L$).

Values in **bold** indicate the analyte was detected.

Shading indicates the result exceeds the Class GA Value.

J: Estimated value.

U: Analyte was not detected at specified quantitation limit.

^{*:} NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

The complete results of the analyses of groundwater and leachate samples for metals are presented in **Table 24**.

5.6.6 Per- and Polyfluoroalkyl Substances (PFAS) in Groundwater and Leachate

The PFAS compound PFOA was detected in each of the groundwater samples collected from overburden wells. The highest concentration of PFAS was detected in a sample collected from HFL-MW-002, located near the western boundary of the Site. A concentration of PFOA of 25,000 ng/L was detected in the sample collected from HFL-MW-002 in June 2018. The highest concentration of PFOA or PFOS detected in bedrock groundwater was 28 ng/L of PFOA, detected in the groundwater sample collected from intermediate-depth bedrock well HFL-MW-101B, located near the northern boundary of the Site. PFOA and PFOS were also detected in the leachate samples collected from the leachate collection vault. The highest concentration of PFAS detected in leachate was the concentration of PFOA of 1,300 ng/L, detected in the leachate sample collected in June 2018. A summary of concentrations of PFAS detected in groundwater and leachate samples is presented in the table below. The USEPA Health Advisory Level for drinking water is provided as a reference only.

| | Summar | y of PFAS Concentra | tions Detected in Gro | oundwater and Leach | nate Samples | |
|---------------------|------------|---------------------|-----------------------|---------------------|--------------|-------------|
| Sample Location: | HFL-G | W-PW-1 | HFL-M | W-001B | HFL-M | IW-002 |
| Sample Date: | 6/13/2017 | 6/6/2018 | 6/8/2017 | 6/6/2018 | 6/8/2017 | 6/7/2018 |
| Analytes | Results | Results | Results | Results | Results | Results |
| PFOS | 2.2 | 10 | 1.2 J | 0.71 J | 1.9 U | 20 U |
| PFOA | 43 | 1,300 | 550 | 310 | 24,000 | 25,000 |
| Sample Location: | HFL-I | MW-004 | HFL-M | IW-101 | HFL-MW-101B | HFL-MW-101C |
| Sample Date: | 6/8/2017 | 6/7/2018 | 6/7/2018 | 6/6/2018 | 6/6/2018 | 6/6/2018 |
| Analytes | Results | Results | Results | Results | Results | Results |
| PFOS | 6.7 | 9.9 J | 46 | 34 | 2.1 U | 1.9 U |
| PFOA | 1,900 | 2,200 | 5,300 | 4,400 | 28 | 10 |
| Sample Location: | HFL-I | MW-102 | HFL-MW-103 | HFL-MW-103 | HFL-MW-104 | HFL-MW-104C |
| Sample Date: | 6/8/2017 | 6/7/2018 | 6/7/2017 | 6/6/2018 | 6/6/2018 | 6/6/2018 |
| Analytes | Results | Results | Results | Results | Results | Results |
| PFOS | 2.1 | 0.88 J | 11 | 8.5 J | 1.2 J | 2.1 U |
| PFOA | 94 | 1,800 | 570 | 650 | 590 | 5.3 |
| Sample Location: | HFL-MW-105 | HFL-MW-105C | HFL-MW-106 | | | |
| Sample Date: | 6/5/2018 | 6/5/2018 | 6/5/2018 |] | | |
| Analytes | Results | Results | Results | | | |
| PFOS | 2.5 J | 1.9 U | 1.1 J |] | | |
| PFOA | 930 | 2.5 | 850 | | | |

Notes:

All concentrations are in nanograms per liter (ng/L).

Values in **bold** indicate the analyte was detected.

 $As\ reference\ only:\ the\ USEPA\ Health\ Advisory\ Level\ for\ drinking\ water\ is\ 70\ ng/L\ (individual\ or\ combined\ concentrations).$

The complete results of the analyses of groundwater samples for PFAS are presented in **Table 25**.

5.7 Data Usability

The results of the data validation are summarized in Data Usability Summary Reports (DUSRs). The DUSRs are provided in **Appendix E** and include a discussion on each qualified result, the potential bias and the effects on data usability. With the exception of the analyses of 1,4-dioxane by USEPA Method 8260 and TCL VOCs by USEPA Method 8260 in one (1) sediment sample (HFL-SD-103), the results of analyses of the surface soil, surface water, sediment, subsurface soil, and groundwater samples were found to be valid and usable for decision-making purposes. The non-detect sample results for 1,4-dioxane by USEPA Method 8260 were rejected due to low relative response factors (RRFs) in initial and continuing calibrations. The

J: Estimated value.

U: Analyte was not detected at specified quantitation limit.

non-detect VOC results in sediment sample HFL-SD-103 were rejected due to significantly low recoveries of internal standards. Since 1,4-dioxane was also analyzed using USEPA Method 8270 at select surface soil, surface water, sediment, subsurface soil, and groundwater sample locations, the rejection of the 1,4-dioxane in the VOC analysis did not have a significant impact on the SC. TCL VOCs were analyzed at other sediment sample locations as well as surface soil, surface water, subsurface soil and groundwater sample locations. There were no VOCs detected at concentrations above applicable screening criteria in the samples collected at the Site. As a result, the rejection of the VOC analysis in sediment sample HFL-SD-103 did not have a significant impact on the SC.

5.8 Geology and Hydrogeology

Based on published information, unconsolidated material near the Site consists of glacial deposits, primarily sand and gravel. The soil type at the Site is classified as man-made. Deeper soils underlying and adjacent to the Site are primarily silty loams with slopes ranging from 3 to 40 percent. Bedrock near the Site is the Walloomsac Formation and the Stockbridge Limestone, which are Ordovician and Late Cambrian in age, respectively. The high permeability sand and gravel over bedrock within the site investigation area generally promotes a potential hydraulic connection between the unconsolidated material and bedrock where confining layers do not exist. Regional groundwater flow direction near the Site is west towards the Hoosick River.

Based on the information gathered during the SC field activities and previous environmental investigations, the subsurface geology outside the limits of waste at the Site consists primarily of a brown/gray silty sand with sub-angular rock fragments from 0 to15 feet bgs, a finely graded sand with silt and clay from 15 to 50 feet bgs, and glacial till from 50 feet bgs to bedrock. Bedrock was encountered at 63 feet bgs at monitoring well HFL-MW-104C (located in the southeast part of the Site) and at 122 feet bgs at monitoring well HFL-MW-105C (located in the northwest part of the site investigation area). The bedrock at the Site consists primarily of phyllite/slate, likely associated with the Walloomsac, with prevalent post depositional fractures which have been filled with quartz and/or calcite varying in thickness from a few millimeters to several centimeters. The original orientation of the bedding has been deformed by regional deformation. Weathered seams and un-filled fractures are also evident throughout the bedrock. Boring logs and monitoring well construction logs are presented in **Appendix A**.

Overburden groundwater surface elevations were found to vary between 368.26 feet (HFL-MW-105, July 2018) and 497.82 feet (HFL-MW-001B, June 2017) during the SC field activities. Bedrock groundwater surface elevations were found to vary between 365.54 feet (HFL-MW-105C, June 2018) and 471.87 feet (HFL-MW-104C, June 2018) during the SC field activities. Based on groundwater surface elevation measurements, the predominant direction of overburden groundwater flow is west towards the Hoosick River and the predominant direction of bedrock groundwater flow is northwest. Groundwater surface elevations and contours are shown on **Figures 9** through **12**.

6.0 FINDINGS

The Site Characterization for the Hoosick Falls Landfill Site was completed in general accordance with the NYSDEC DER Work Assignment No. D007620-34 Notice to Proceed dated December 23, 2016, the NYSDEC-approved amended Scope of Work dated June 18, 2018 (WA No. D007620-34.1), and NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation. The findings, based on the results of the Site Characterization, are presented below.

- There was no physical evidence of contamination observed in any of the surface soil, subsurface soil, or sediment samples collected. Additionally, no physical evidence of contamination was observed in any of the groundwater, surface water or leachate samples collected, and no leachate seeps were identified during the site inspection. The subsurface geology outside the limits of waste at the Site consists primarily of a brown/gray silty sand with sub-angular rock fragments from 0 to 15 feet bgs, a finely graded sand with silt and clay from 15 to 50 feet bgs, and glacial till from 50 feet bgs to bedrock. Bedrock was encountered at depths ranging from 63 feet bgs (monitoring well HFL-MW-104C) to 122 feet bgs (monitoring well HFL-MW-105C) within the site investigation area. The bedrock at the Site consists primarily of phyllite/slate, with prevalent lenses of vein quartz and calcite varying in thickness from a few millimeters to several centimeters. Overburden groundwater surface elevations were found to vary between 368.26 feet (HFL-MW-105, July 2018) and 497.82 feet (HFL-MW-001B, June 2017) during the SC field activities. Bedrock groundwater surface elevations were found to vary between 365.54 feet (HFL-MW-105C, June 2018) and 471.87 feet (HFL-MW-104C, June 2018) during the SC field activities. Based on groundwater surface elevation measurements, the predominant direction of overburden groundwater flow is west towards the Hoosick River and the predominant direction of bedrock groundwater flow is northwest.
- With the exception of 4,4'-DDT in one (1) surface soil sample (HFL-SS-101) and PCBs in one (1) subsurface soil sample (HFL-MW-103 (6'-10')), there were no VOCs, SVOCs, pesticides or PCBs detected at concentrations above applicable screening criteria in surface soil, subsurface soil, sediment, surface water or groundwater.
- Arsenic was detected in one (1) surface soil sample, HFL-SS-101, at a concentration (18.6 mg/kg) above the Commercial Use SCO of 16 mg/kg. Barium, chromium, copper, iron, lead, mercury, nickel, and zinc were detected at concentrations above the Residential Use or Unrestricted Use SCOs in surface soil.
- In subsurface soil samples, the metals chromium, iron, and nickel were detected at concentrations above the Unrestricted Use SCOs. Chromium was detected in one (1) subsurface soil sample at a concentration marginally above the Residential Use SCO. (The more stringent SCOs for hexavalent chromium were used for screening total chromium results since there are no SCOs for total chromium).

- The metals lead and mercury (mercury in one (1) sample only, HFL-SD-104, collected from a drainage ditch southeast of the Village's Transfer Station) were detected at concentrations exceeding the Class A SGVs in sediment samples.
- The metals aluminum, cadmium, cobalt, copper, iron, lead, nickel, vanadium, and zinc were detected in surface water at concentrations above the comparison criteria. Generally, the highest concentrations of metals were detected in the surface water sample (HFL-WS-102) collected from a ditch in the southeastern part of the Site between the Village's Transfer Station and the limits of the landfill cap and in the surface water sample collected from the manhole on the western side of the landfill.
- The metals arsenic, chromium, iron, lead, magnesium, manganese, and sodium were detected at
 concentrations above the Class GA Values in groundwater samples. Chromium and lead were
 detected at concentrations above the Class GA Values in the groundwater sample collected from offsite bedrock well HFL-MW-105C. Arsenic was detected at a concentration above the Class GA
 Value in the groundwater sample collected from HFL-MW-101. (Note: all groundwater samples
 were analyzed unfiltered.)
- There were no PFAS detected in surface and subsurface soil at concentrations above the NYSDOH preliminary Residential Use SCO of 140 μg/kg developed for a potential site or sites in the Hoosick Falls area. The highest concentrations of PFAS (PFOS and PFOA combined) in sediment were detected in sample HFL-SD-108 (21.6 μg/kg) and the sediment sample collected from the manhole (22.7 μg/kg). HFL-SD-108 was collected from the drainage ditch located downgradient of the suspected discharge point of the manhole on the western side of the landfill.
- The PFAS compounds PFOA and/or PFOS were detected in all surface water samples collected. PFAS concentrations (PFOA and PFOS combined) in surface water samples ranged from 153.4 ng/L (in HFL-WS-104) to 24,150 ng/L (in HFL-WS-114). Surface water sample HFL-WS-114 was collected from the drainage ditch located downgradient of the suspected discharge point of the manhole on the western side of the landfill. Elevated concentrations of PFAS (greater than 10,000 ng/L) were also detected in surface water samples HFL-WS-108 and HFL-WS-109, also collected from the drainage ditch on the western side of the landfill. The concentrations of PFAS in surface water samples collected from Thayer's Pond ranged from 914.4 ng/L to 934.9 ng/L.
- The PFAS compound PFOA was detected in all overburden monitoring wells, including in the off-site overburden wells and leachate. In the off-site overburden monitoring wells, HFL-MW-105 and HFL-MW-106, PFOA was detected at 930 ng/L and 850 ng/L, respectively. The highest concentrations of PFAS (PFOA and PFOS combined) in groundwater were detected in HFL-MW-002, up to 25,000 ng/L. Monitoring well HFL-MW-002 is located west of the capped landfill, between the capped landfill and the Hoosick River. No PFAS compounds were detected at concentrations greater than 65 ng/L in any of the bedrock monitoring wells. The maximum

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concentration of PFOA detected in the bedrock monitoring wells was 28 ng/L, detected in the intermediate-depth bedrock groundwater monitoring well (HFL-MW-101B). PFOS was not detected in the bedrock groundwater monitoring wells. Similar to the surface water and leachate samples, in groundwater PFOA was consistently detected at significantly higher concentrations than PFOS.

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7.0 CERTIFICATION OF ENVIRONMENTAL PROFESSIONALS

I, Ryan Jorrey, certify that I am currently a NYS Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Site Characterization Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

TRC Engineers, Inc.

Prepared By:

Ryan S. Jorrey, P.G. (PA)

Staff Geologist

Reviewed By:

Jeffrey W. LaRock, P.G. Senior Technical Reviewer

8.0 REFERENCES

- 6 NYCRR 375, Remedial Program Requirements.
- 6 NYCRR 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.
- Buonanno, Nicholas. "Hoosick Falls Solar Garden Now Open." *The Record*, 16 Nov. 2015, www.troyrecord.com/news/hoosick-falls-solar-garden-now-open/article_2d72df18-d6a5-5eba-9d12-070c321b0260.html.
- Closure Investigation Report, Village of Hoosick Falls Landfill, Rensselaer County, New York, prepared by Laberge Engineering and Consulting Group LTD, December 1991.
- Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York, Phase I
 Investigation for Hoosick Falls Landfill, Site Code: 442007, Hoosick, Rensselaer County, New
 York, prepared by Wehran Engineering, P.C., dated May 1987.
- Engineering Investigations at Inactive Hazardous Waste Sites, Phase II Investigation, Hoosick Falls Landfill, Site No. 442007, Town of Hoosick, Rensselaer County, prepared by Gibbs & Hill, Inc., dated March 1991.
- New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation, May 2010.
- New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Program Management, Work Assignment Notice to Proceed, December 16, 2016.
- New York State Department of Environmental Conservation Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, January 1999, April 2000 and June 2004.
- New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources Bureau of Habitat Screening and Assessment of Contaminated Sediment, June 24, 2014.
- New York State Department of Environmental Conservation Environmental Remediation Database.
- New York State Department of Environmental Conservation Draft Guidance Document, Sampling for PFAS, October 2017.
- "Solar Energy Ribbon Cutting." *The Village of Hoosick Falls, NY*, www.villageofhoosickfalls.com/Events/solar_ribbon_cutting.html#.XDJL0FxKg2x.
- TRC Engineers, Inc. Standby Engineering Contract Work Assignment (WA) No. D007620-34.1, NYSDEC-approved amended Scope of Work dated June 18, 2018.

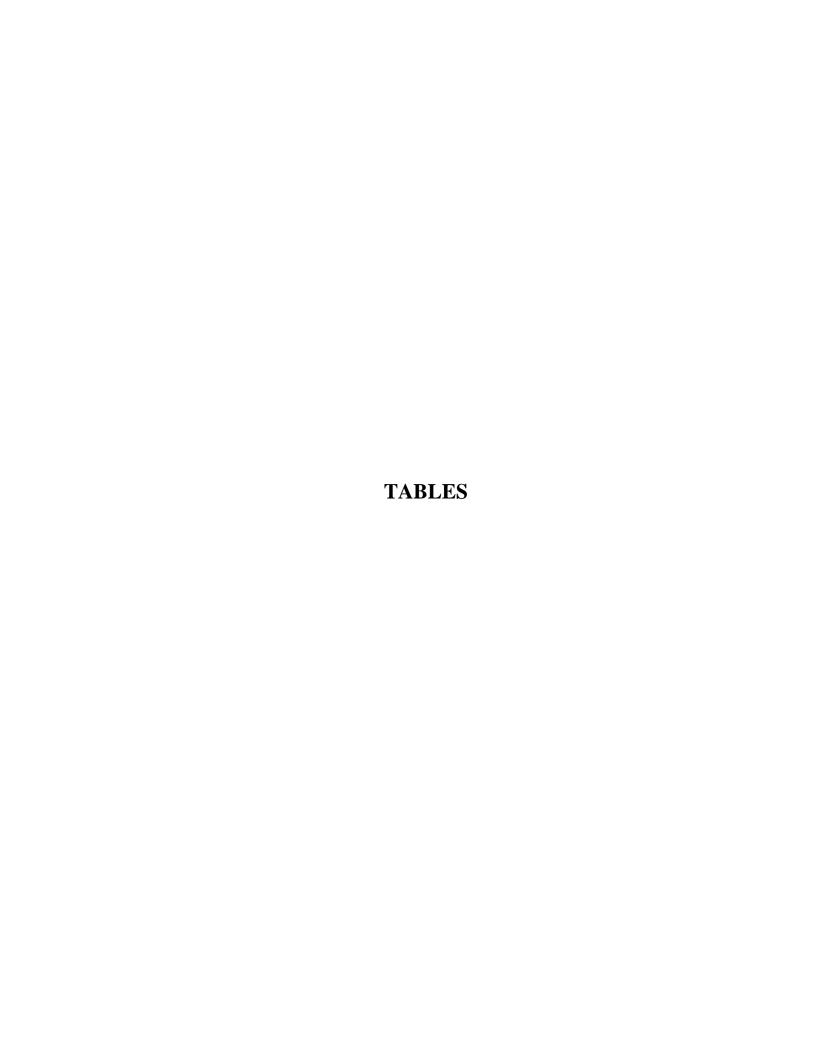


Table 1 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Soil for Volatile Organic Compounds

| | | SAMPLE | LOCATION: | HFL-SS-101 | HFL-SS-102 | HFL-SS-104 | HFL-SS-105 | HFL-SS-106 |
|--|--------------|-------------|------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| | I.A | BORATORY | | 480-119437-2 | 480-119437-3 | 480-133590-1 | 480-133590-3 | 480-133590-2 |
| | | AMPLE DEPT | | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| | 5. | | MPLE DATE: | 6/13/2017 | 6/13/2017 | 4/4/2018 | 4/4/2018 | 4/4/2018 |
| | | 57 1 | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| | Unrestricted | Residential | Commercial | mg kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results |
| 1,1,1-Trichloroethane | 0.68 | 100 | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,1,2,2-Tetrachloroethane | NS | 35 | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,1,2-Trichloroethane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane (Freon 113) | NS | 100 | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,1-Dichloroethane | 0.27 | 19 | 240 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,1-Dichloroethylene | 0.33 | 100 | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2,4-Trichlorobenzene | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2-Dichlorobenzene | 1.1 | 100 | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2-Dichloroethane | 0.02 | 2.3 | 30 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2-Dichloropropane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,3-Dichlorobenzene | 2.4 | 17 | 280 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 130 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 2-Butanone (MEK) | 0.12 | 100 | 500 | 0.066 U | 0.026 U | 0.019 U | 0.024 U | 0.023 U |
| 2-Hexanone (MBK) | NS | NS | NS | 0.066 U | 0.026 U | 0.019 U | 0.024 U | 0.023 U |
| 4-Methyl-2-pentanone (MIBK) | NS | NS | NS | 0.066 U | 0.026 U | 0.019 U | 0.024 U | 0.023 U |
| Acetone | 0.05 | 100 | 500 | 0.04 J | 0.021 J | 0.0032 J | 0.024 U | 0.023 U |
| Benzene | 0.06 | 2.9 | 44 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Bromodichloromethane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Bromoform | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Bromomethane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Carbon Disulfide | NS | 100 | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Carbon Tetrachloride | 0.76 | 1.4 | 22 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Chlorobenzene | 1.1 | 100 | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Chloroethane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Chloroform | 0.37 | 10 | 350 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Chloromethane | NS | NS | NS | 0.013 UJ | 0.0052 UJ | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,4-Dioxane | 0.1 | 9.8 | 130 | R | R | R | R | R |
| cis-1,2-Dichloroethylene | 0.25 | 59 | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| cis-1,3-Dichloropropene | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Cyclohexane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Chlorodibromomethane | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Dichlorodifluoromethane (Freon 12) | NS | NS | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Ethylbenzene | 1 | 30 | 390 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| 1,2-Dibromoethane (EDB) | NS | NS 100 | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Isopropylbenzene (Cumene) | NS NG | 100 | NS | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Methyl acetate Methyl test Putyl Ether (MTRE) | NS 0.02 | NS 62 | NS 500 | 0.066 U | 0.026 U | 0.019 U | 0.024 U | 0.023 U |
| Methyl tert-Butyl Ether (MTBE) | 0.93 | 62 NC | 500 NS | 0.013 U 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Methylcyclohexane Mathylana Chlorida | NS 0.05 | NS 51 | NS 500 | | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Methylene Chloride | 0.05 | 51 NC | 500 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Styrene Totrochloroothylono | NS 1.2 | NS 5.5 | NS 150 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Tetrachloroethylene Toluene | 1.3 0.7 | 5.5 100 | 150 500 | 0.013 U 0.013 U | 0.0052 U 0.0052 U | 0.0038 U 0.0038 U | 0.0048 U 0.0048 U | 0.0046 U 0.0046 U |
| trans-1,2-Dichloroethylene | | 100 | 500 | 0.013 U 0.013 U | 0.0052 U 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| trans-1,3-Dichloropropene | 0.19 NS | NS | NS NS | 0.013 U 0.013 U | 0.0052 U 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Trichloroethylene | NS 0.47 | NS 10 | NS 200 | 0.013 U 0.013 U | 0.0052 U 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Trichlorofluoromethane (Freon 11) | NS | NS | NS NS | 0.013 U 0.013 U | 0.0052 U 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| Vinyl Chloride | 0.02 | 0.21 | 13 | 0.013 U | 0.0052 U | 0.0038 U | 0.0048 U | 0.0046 U |
| _ | | | | | | | | |
| Xylene (Total) | 0.26 | 100 | 500 | 0.026 U | 0.01 U | 0.0077 U | 0.0096 U | 0.0091 U |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

J - Estimated value

R - Rejected data point during data validation.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - New York State Department of Environmental Conservation, Soil Cleanup Objectives (SCOs) (6NYCRR Part 375 and CP-51).

NS - No NYSDEC standard exists for this analyte.



Table 2 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Soil for Semivolatile Organic Compounds

| | | | LOCATION: | HFL-SS-101 | HFL-SS-102 | HFL-SS-104 | HFL-SS-105 | HFL-SS-106 |
|---|---------------------------|-------------------------|----------------------------|-----------------------|-----------------------|-----------------------|-------------------------|-----------------------|
| | | | SAMPLE ID: H (FT. BGS): | 480-119437-2 0-0.5 | 480-119437-3 0-0.5 | 480-133590-1 0-0.5 | 480-133590-3 0-0.5 | 480-133590-2 0-0.5 |
| | 3A | | MPLE DATE: | 6/13/2017 | 6/13/2017 | 4/4/2018 | 4/4/2018 | 4/4/2018 |
| | | Di li | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANALYTES | Unrestricte d Use SCO* | Residential Use SCO* | Commercial Use SCO* | Results | Results | Results | Results | Results |
| 1,1'-Biphenyl | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,2'-Oxybis(1-chloropropane) | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,4,5-Trichlorophenol | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,4,6-Trichlorophenol | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,4-Dichlorophenol | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,4-Dimethylphenol | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2,4-Dinitrophenol | NS | 100 | NS | 84 U | 20 U | 2.1 U | 9.4 U | 10 U |
| 2,4-Dinitrotoluene 2,6-Dinitrotoluene | NS NS | NS 1.02 | NS NS | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.96 U 0.96 U | 1.1 U 1.1 U |
| 2-Chloronaphthalene | NS NS | 1.03 NS | NS NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2-Chlorophenol | NS | 100 | NS NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2-Methylphenol | 0.33 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2-Methylnaphthalene | NS | 0.41 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 2-Nitroaniline | NS | NS | NS | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| 2-Nitrophenol | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 3,3'-Dichlorobenzidine | NS | NS | NS | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| 3-Nitroaniline | NS | NS | NS | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| 4,6-Dinitro-2-methylphenol | NS | NS | NS | 17 UJ | 4 UJ | 0.41 U | 1.9 U | 2.1 U |
| 4-Bromophenyl-phenylether | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 4-Chloro-3-methylphenol | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| 4-Chloroaniline 4-Chlorophenyl-phenyl ether | NS NS | 100 NS | NS NS | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.96 U 0.96 U | 1.1 U 1.1 U |
| 4-Methylphenol | 0.33 | 34 | 500 | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| 4-Nitroaniline | NS | NS | NS | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| 4-Nitrophenol | NS | NS | NS | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| Acenaphthene | 20 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Acenaphthylene | 100 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Acetophenone | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Anthracene | 100 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Atrazine | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Benzaldehyde Benzo(a)anthracene | NS 1 | NS 1 | NS 5.6 | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.96 U 0.18 J | 1.1 U 1.1 U |
| Benzo(a)pyrene | 1 | 1 | 1 | 8.6 U | 2 U | 0.21 U | 0.18 J 0.96 U | 1.1 U |
| Benzo(b)fluoranthene | 1 | 1 | 5.6 | 8.6 U | 2 U | 0.21 U | 0.25 J | 1.1 U |
| Benzo(g,h,i)perylene | 100 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Benzo(k)fluoranthene | 0.8 | 1 | 56 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Bis(2-chloroethoxy)methane | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Bis(2-chloroethyl) ether | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Bis(2-ethylhexyl)phthalate | NS | 50 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Butylbenzylphthalate Caprolactam | NS NS | 100 NS | NS NS | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.96 U 0.96 U | 1.1 U 1.1 U |
| Carbazole | NS NS | NS NS | NS NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Chrysene | 1 | 1 | 56 | 8.6 U | 2 U | 0.21 U | 0.23 J | 1.1 U |
| Dibenz(a,h)anthracene | 0.33 | 0.33 | 0.56 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Di-n-butylphthalate | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Di-n-octylphthalate | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Dibenzofuran | 7 | 14 | 350 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Diethyl phthalate | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Dimethylphthalate Fluoranthene | NS 100 | 100 | NS 500 | 8.6 U | 2 U 2 U | 0.21 U | 0.96 U | 1.1 U |
| Fluoranthene Fluorene | 100 30 | 100 100 | 500 500 | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.4 J 0.96 U | 1.1 U 1.1 U |
| Hexachlorobenzene | 0.33 | 0.33 | 6 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Hexachlorobutadiene | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Hexachlorocyclopentadiene | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Hexachloroethane | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Indeno(1,2,3-cd)pyrene | 0.5 | 0.5 | 5.6 | 8.6 U | 2 U | 0.21 U | 0.18 J | 1.1 U |
| Isophorone | NS | 100 | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| n-Nitroso-di-n-propylamine | NS | NS | NS | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| N-Nitrosodiphenylamine Naphthalene | NS 12 | NS 100 | NS 500 | 8.6 U 8.6 U | 2 U 2 U | 0.21 U 0.21 U | 0.96 U 0.96 U | 1.1 U 1.1 U |
| Nitrobenzene | NS | 3.7 | 69 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Pentachlorophenol | 0.8 | 2.4 | 6.7 | 17 U | 4 U | 0.41 U | 1.9 U | 2.1 U |
| Phenanthrene | 100 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Phenol | 0.33 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.96 U | 1.1 U |
| Pyrene | 100 | 100 | 500 | 8.6 U | 2 U | 0.21 U | 0.32 J | 1.1 U |
| 1,4-Dioxane | 0.1 | 9.8 | 130 | NA | NA | 0.25 U | 1.1 U | 1.3 U |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - New York State Department of Environmental Conservation, Soil Cleanup Objectives (SCOs) (6NYCRR Part 375 and CP-51).

NA - Sample not analyzed for the listed analyte.

NS - No NYSDEC standard exists for this analyte. Values in **bold** indicate the analyte was detected.





Table 3 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Soil for Pesticides and Polychlorinated Biphenyls

| | T A T | | LOCATION: | HFL-SS-101 | HFL-SS-102 | HFL-SS-104 | HFL-SS-105 | HFL-SS-106 |
|---------------------|--------------------|--------------------|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | | SAMPLE ID: | 480-119437-2 0-0.5 | 480-119437-3 0-0.5 | 480-133590-1 0-0.5 | 480-133590-3 0-0.5 | 480-133590-2 0-0.5 |
| | SA | | H (FT. BGS): MPLE DATE: | 6/13/2017 | 6/13/2017 | 4/4/2018 | 4/4/2018 | 0-0.3 4/4/2018 |
| | | SAI | UNITS: | | | | | |
| | Unrestricted | Decidential | Commercial | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results |
| PESTICIDES | | | | | | | | |
| 4,4'-DDD | 0.0033 | 2.6 | 92 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| 4,4'-DDE | 0.0033 | 1.8 | 62 | 0.0016 J | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| 4,4'-DDT | 0.0033 | 1.7 | 47 | 0.0039 J | 0.00085 J | 0.0021 U | 0.0019 U | 0.0021 U |
| Aldrin | 0.005 | 0.019 | 0.68 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| alpha-BHC | 0.02 | 0.097 | 3.4 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| alpha-Chlordane | 0.094 | 0.91 | 24 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| beta-BHC | 0.036 | 0.072 | 3 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| delta-BHC | 0.04 | 100 | 500 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Dieldrin | 0.005 | 0.039 | 1.4 | 0.0012 J | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endosulfan I | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endosulfan II | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endosulfan sulfate | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endrin | 0.014 | 2.2 | 89 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endrin aldehyde | NS | NS | NS | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Endrin ketone | NS | NS | NS | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| gamma-BHC (Lindane) | 0.1 | 0.28 | 9.2 | 0.0042 U | 0.00046 J | 0.0021 U | 0.0019 U | 0.0021 U |
| trans-Chlordane | NS | NS | NS | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Heptachlor | 0.042 | 0.42 | 15 | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Heptachlor epoxide | NS | 0.077 | NS | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Methoxychlor | NS | 100 | NS | 0.0042 U | 0.002 U | 0.0021 U | 0.0019 U | 0.0021 U |
| Toxaphene | NS | NS | NS | 0.042 U | 0.02 U | 0.021 U | 0.019 U | 0.021 U |
| PCBs | | | | | | | | |
| Aroclor-1016 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1221 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1232 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1242 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1248 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1254 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| Aroclor-1260 | NS | NS | NS | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |
| PCBs, Total | 0.1 | 1 | 1 | 0.61 U | 0.25 U | 0.27 U | 0.22 U | 0.28 U |

Notes:

FT. BGS - Feet below ground surface

mg/kg - Milligrams per kilogram.

J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

* - New York State Department of Environmental Conservation, Soil Cleanup Objectives (SCOs) (6NYCRR Part 375 and CP-51).

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected.

Shading indicates result above the corresponding SCO.

 $^{(a)}$ - Criteria applicable to the sum of Endosulfan I, Endosulfan II and Endosulfan Sulfate.



Table 4 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Surface Soil for Metals

| | | SAMPLI | E LOCATION: | HFL-SS-101 | HFL-SS-102 | HFL-SS-104 | HFL-SS-105 | HFL-SS-106 |
|-----------|------------------|-------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | LA | BORATORY | SAMPLE ID: | 480-119437-2 | 480-119437-3 | 480-133590-1 | 480-133590-3 | 480-133590-2 |
| | SA | MPLE DEP | ΓH (FT. BGS): | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| | | SA | MPLE DATE: | 6/13/2017 | 6/13/2017 | 4/4/2018 | 4/4/2018 | 4/4/2018 |
| | | | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| | Unrestricted | | Commercial | | | | | |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results |
| Aluminum | NS | NS | NS | 19,300 | 16,200 | 19,400 | 10,500 | 13,900 |
| Antimony | NS | NS | NS | 4.1 J | 0.79 J | 2 UJ | 1.5 UJ | 1.7 UJ |
| Arsenic | 13 | 16 | 16 | 18.6 | 6.1 | 6.3 | 5.8 | 6.2 |
| Barium | 350 | 350 | 400 | 394 | 103 | 131 J | 83.1 J | 78.6 J |
| Beryllium | 7.2 | 14 | 590 | 0.78 | 0.63 | 0.74 | 0.4 | 0.49 |
| Cadmium | 2.5 | 2.5 | 9.3 | 1.7 J+ | 0.31 J+ | 0.068 J | 0.17 J | 0.28 J- |
| Calcium | NS | NS | NS | 5,610 | 2,990 | 2,810 J | 5,240 J | 3,180 J |
| Chromium | 1 ^(a) | 22 ^(a) | 400 ^(a) | 30.2 | 21.1 | 20.5 J | 12.3 J | 13.6 J |
| Cobalt | NS | 30 | NS | 12.3 | 11.5 | 12.3 | 9.2 | 10.7 |
| Copper | 50 | 270 | 270 | 50.8 | 23.6 | 22.4 | 59.3 | 25 |
| Iron | NS | 2,000 | NS | 139,000 | 25,300 | 28,000 J | 20,700 J | 24,900 J |
| Lead | 63 | 400 | 1,000 | 120 | 25.5 | 25.1 | 164 | 83.4 |
| Magnesium | NS | NS | NS | 5,310 | 6,060 | 6,180 | 6,110 | 4,830 |
| Manganese | 1,600 | 2,000 | 10,000 | 905 | 638 | 725 J | 565 J | 702 J |
| Mercury | 0.18 | 0.81 | 2.8 | 0.38 | 0.055 | 0.05 | 0.15 | 0.037 |
| Nickel | 30 | 140 | 310 | 32.2 | 25.5 | 26.2 | 19.2 | 21.6 |
| Potassium | NS | NS | NS | 3,910 | 3,270 | 2,920 J | 1,740 J | 1,440 J |
| Selenium | 3.9 | 36 | 1,500 | 1.6 U | 4.5 U | 0.62 J | 4.8 U | 0.61 J |
| Silver | 2 | 36 | 1,500 | 1 J | 0.68 U | 0.82 U | 0.72 U | 0.77 U |
| Sodium | NS | NS | NS | 196 J | 116 J | 112 U | 169 U | 66.1 U |
| Thallium | NS | NS | NS | 16.9 U | 6.8 U | 8.2 UJ | 7.2 UJ | 7.7 UJ |
| Vanadium | NS | 100 | NS | 27.7 | 21.3 | 24.8 | 13.9 | 17 |
| Zinc | 109 | 2,200 | 10,000 | 237 | 81.6 | 87.9 | 208 | 91 |

Notes:

FT. BGS - Feet below ground surface

mg/kg - Milligrams per kilogram.

- J Estimated value.
- J- Estimated value; biased low.
- J+ Estimated value; biased high.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- $*- New \ York \ State \ Department \ of \ Environmental \ Conservation, \ Soil \ Cleanup \ Objectives \ (SCOs) \ (6NYCRR \ Part \ 375 \ and \ CP-51).$

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected.

Shading indicates result above the corresponding SCO.

(a) - SCO for Chromium (VI) used.



Table 5 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Soil for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-SS-10 | 01 | HFL-SS- | 102 | HFL-SS- | 104 | HFL-SS- | 105 | HFL-SS- | 106 |
|--|------------|-----|-----------|------|-----------|------|-----------|------|-----------|------|
| LABORATORY SAMPLE ID: | 480-119437 | 7-2 | 480-11943 | 37-3 | 480-13359 | 90-1 | 480-13359 | 90-3 | 480-13359 | 90-2 |
| SAMPLE DEPTH (FT. BGS): | 0-0.5 | | 0-0.5 | | 0-0.5 | | 0-0.5 | | 0-0.5 | |
| SAMPLE DATE: | 6/13/2017 | 7 | 6/13/201 | 17 | 4/4/201 | 8 | 4/4/201 | 8 | 4/4/201 | 8 |
| UNITS: | μg/kg | | μg/kg | | μg/kg | | μg/kg | | μg/kg | |
| ANALYTES | Results | | Results | S | Result | s | Results | s | Result | S |
| Perfluorobutanoic acid (PFBA) | 0.52 | U | 0.23 | J | 0.25 | U | 0.23 | U | 0.27 | |
| Perfluoropentanoic acid (PFPeA) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorohexanoic acid (PFHxA) | 0.87 | | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluoroheptanoic acid (PFHpA) | 0.26 | J | 0.24 | U | 0.084 | J | 0.061 | J | 0.065 | J |
| Perfluorononanoic acid (PFNA) | 0.42 | J | 0.24 | U | 0.072 | J | 0.12 | J | 0.14 | J |
| Perfluorodecanoic acid (PFDA) | 0.27 | J | 0.073 | J | 0.06 | J | 0.076 | J | 0.087 | J |
| Perfluoroundecanoic acid (PFUnA) | 0.48 | J | 0.24 | U | 0.077 | J | 0.089 | J | 0.13 | J |
| Perfluorododecanoic acid (PFDoA) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorotridecanoic acid (PFTriA) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorotetradecanoic acid (PFTeA) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorobutanesulfonic acid (PFBS) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorohexanesulfonic acid (PFHxS) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorooctanesulfonic acid (PFOS) | 2.9 | | 0.5 | | 0.63 | U | 2.1 | | 0.46 | J |
| Perfluorodecanesulfonic acid (PFDS) | 0.52 | U | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorooctane Sulfonamide (FOSA) | 0.52 | UJ | 0.24 | U | 0.25 | U | 0.23 | U | 0.25 | U |
| Perfluorooctanoic acid (PFOA) | 14 | | 1.7 | | 2.9 | | 0.53 | | 0.56 | |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | | NA | | 2.5 | U | 2.3 | U | 2.5 | U |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | | NA | | 2.5 | U | 2.3 | U | 2.5 | U |
| N-ethyl perfluorooctane sulfonamidoacetic acid (N- | NA | | NA | | 2.5 | U | 2.3 | U | 2.5 | U |
| EtFOSAA) | | | | | | | | | | |
| N-methyl perfluorooctane sulfonamido) acetic acid (N-MeFOSAA) | NA | | NA | | 2.5 | U | 2.3 | U | 2.5 | U |

Notes:

FT. BGS - Feet below ground surface.

μg/kg - Micrograms per kilogram.

J - Estimated value.

NA - Sample not analyzed for the listed analyte.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

Per- and polyfluoroalkyl substances (PFAS) soil sampling results were evaluated by comparison to the NYSDOH preliminary Residential Use SCO of 140 μ g/kg developed for a potential site or sites located in the Hoosick Falls area.

Values in **bold** indicate the analyte was detected.



Table 6 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Water for Volatile Organic Compounds

| | E LOCATION: | HFL-WS-102 | HFL-WS-103 | HFL-WS-104 | HFL-WS-105 | HFL-WS-106 | HFL-WS-108 | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS |
|--|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY | | 480-119330-3 | 480-119330-1 | 480-119183-1 | 480-119183-3 | 480-119183-5 | 480-119330-7 | 480-119330-5 | 480-118947-1 | 480-118947-3 | 480-118947-5 | 480-137240-2 | 480-137240-1 |
| SA | MPLE DATE: | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 | 06/11/2018 |
| | UNITS: Class C | μg/L |
| ANALYTES | Value* | Results |
| 1,1,1-Trichloroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2,2-Tetrachloroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethylene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,4-Trichlorobenzene | 5 ^(a) | 1 U | 1 U | 1 UJ | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UJ | 1 UJ | 1 UJ | 1 U | 1 U |
| 1,2-Dichlorobenzene | 5 ^(b) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.31 J | 1 U |
| 1,2-Dichloropropane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichlorobenzene | 5 ^(b) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,4-Dichlorobenzene | 5 ^(b) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Butanone (MEK) | NS | 10 U | 10 UJ | 10 UJ | 10 UJ | 10 U | 10 U |
| 2-Hexanone (MBK) | NS NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| 4-Methyl-2-pentanone (MIBK) | NS NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Acetone (WIBK) | NS NS | 5 J | 10 U | 10 U | 4.4 J | 10 U | 3.2 J | 10 U | 10 UJ | 10 UJ | 10 UJ | 4.9 J | 19 |
| Benzene | 10 | 1 U | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U |
| Bromodichloromethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromoform | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromomethane | NS | 1 UJ | 1 U | 1 U |
| Carbon Disulfide | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon Tetrachloride | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chlorobenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | NS | 1 UJ | 1 U | 1 U |
| Chloroform | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloromethane | NS | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,4-Dioxane | NS | R | R | R | R | R | R | R | R | R | R | 66 J | R |
| cis-1,2-Dichloroethylene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.9 J |
| cis-1,3-Dichloropropene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chlorodibromomethane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane (Freon 12) | NS | 1 UJ | 1 UJ | 1 UJ | 1 U | 1 U | 1 UJ | 1 U | 1 U |
| Ethylbenzene | 17 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dibromoethane (EDB) | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Isopropylbenzene (Cumene) | 2.6 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | NS | 2.5 U | 2.5 UJ | 2.5 UJ | 2.5 UJ | 2.5 U | 2.5 U |
| Methyl tert-Butyl Ether (MTBE) | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methylcyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methylene Chloride | 200 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Styrene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethylene | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Toluene | 100 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,2-Dichloroethylene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethylene | 40 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichlorofluoromethane (Freon 11) | NS | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U |
| Vinyl Chloride | NS | 1 UJ | 1 UJ | 1 U | 1 U | 1 U | 1.6 J | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U |
| Xylene (Total) | 65 ^(c) | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |

Notes:

μg/L - Micrograms per liter.

J - Estimated value.

R - Rejected data point during data validation.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class C water. Most stringent guidance value used.

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected.

(a) - Applies to the sum of 1,2,3-, 1,2,4-, and 1,3,5-Trichlorobenzene.

(b) - Applies to the sum of 1,2-, 1,3-, and 1,4-Dichlorobenzene.

(c) - Criteria for p-Xylene used.



| | Table 7 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Surface Water for Semivolatile Organic Compounds | | | | | | | | | | | | |
|--|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| SAMPLE LOCATION: HFL-WS-102 HFL-WS-103 HFL-WS-104 HFL-WS-105 HFL-WS-106 HFL-WS-108 HFL-WS-109 HFL-WS-111 HFL-WS-112 HFL-WS-113 HFL-WS-114 HFL-WH-V | | | | | | | | | | | HFL-MH-WS | | |
| LABORATORY SA | AMPLE ID: | 480-119330-3 | 480-119330-1 | 480-119183-1 | 480-119183-3 | 480-119183-5 | 480-119330-7 | 480-119330-5 | 480-118947-1 | 480-118947-3 | 480-118947-5 | 480-137240-2 | 480-137240-1 |
| SAMP | LE DATE: | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 | 06/11/2018 |
| | UNITS: | μg/L |
| ANALYTES | Class C Value* | Results |
| 1,1'-Biphenyl | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| Bis(2-chloroisopropyl)ether | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,4,5-Trichlorophenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,4,6-Trichlorophenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,4-Dichlorophenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,4-Dimethylphenol | 1,000 | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,4-Dinitrophenol | 400 | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 UJ | 10 UJ |
| 2,4-Dinitrotoluene | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2,6-Dinitrotoluene | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2-Chloronaphthalene | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2-Chlorophenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| o-Cresol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2-Methylnaphthalene | 4.7 | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 2-Nitroaniline | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| 2-Nitrophenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 3,3'-Dichlorobenzidine | NS | 5 U | 50 U | 5.4 UJ | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 3-Nitroaniline | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| 4,6-Dinitro-2-methylphenol | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| 4-Bromophenyl phenyl ether | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 4-Chloro-3-methylphenol | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 4-Chloroaniline | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 4-Chlorophenylphenyl ether | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| 4-Methylphenol | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| 4-Nitroaniline | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| 4-Nitrophenol | NS | 10 U | 100 U | 11 U | 10 U | 10 U | 10 U | 10 U | 50 U | 50 U | 50 U | 10 U | 10 U |
| Acenaphthene | 5.3 | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| Acenaphthylene | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| Acetophenone | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| Anthracene | 3.8 | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |
| Atrazine | NS | 5 U | 50 U | 5.4 U | 5 U | 5 U | 5.1 U | 5 U | 25 U | 25 U | 25 U | 5 U | 5.2 U |

5 U

5 U

0.68 J

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5 U

5 U 5 U

5 U

5 U

5 U

10 U

5 U

5 II

5 U

5 U 5 UJ

5 U 5 U

5 U

5 U 5 U

10 UJ

0.34 J

0.42 J

$\mu g/L$ - Micrograms per liter.

Benzaldehvde

Benzo(a)anthracene

enzo(b)fluoranthene

Benzo(g,h,i)perylene

enzo(k)fluoranthene

Bis(2-chloroethyl)ether Bis(2-ethylhexyl)phthalate

Butylbenzylphthalate

Dibenz(a,h)anthracene

Di-n-butylphthalate

Di-n-octylphthalate

Dibenzofuran

Fluoranthene

Fluorene

Isophorone

Naphthalene

Phenol

1,4-Dioxane

Vitrobenzene

Pentachlorophenol

Diethylphthalate

Dimethylphthalate

Hexachlorobenzene

Hexachloroethane

Hexachlorobutadiene

Hexachlorocyclopentadiene

N-Nitroso-di-n-propylamine

N-Nitrosodiphenylamine

Indeno(1,2,3-cd)pyrene

Carbazole

Chrysene

Bis(2-chloroethoxy)methane

Benzo(a)pyrene

NS

0.03

0.0012

NS

NS NS

NS

0.54

0.00003

0.01

0.45

0.6

NS

NS

NS

NS

NS

NS

NS

4.6

10 U

5 U

5 U

5 I

J - Estimated value. U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class C water. Most stringent guidance value used.

50 U

100 U

50 U

50 II

50 U

50 II

50 U

50 U

50 U

50 U

50 U

50 U

100 U

50 U

50 U

5.4 U

11 U

5.4 U

5.4 U

5.4 U 5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

5.4 U

11 U

5.4 U

5.4 U

5.4 U

0.85 J

10 U

5 U

5 U

5 U

5 U

5 U

5 U

NA - Sample not analyzed for the listed analyte.

NS - No NYSDEC standard exists for this analyte.



Table 8

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

| | , |
|---|--|
| Summary of Results of Analysis of Surface | Water for Pesticides and Polychlorinated Biphenyls |

| SAMPLE I | OCATION: | HFL-WS-102 | HFL-WS-103 | HFL-WS-104 | HFL-WS-105 | HFL-WS-106 | HFL-WS-108 | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS |
|------------------------------|-------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| LABORATORY S | AMPLE ID: | 480-119330-3 | 480-119330-1 | 480-119183-1 | 480-119183-3 | 480-119183-5 | 480-119330-7 | 480-119330-5 | 480-118947-1 | 480-118947-3 | 480-118947-5 | 480-137240-2 | 480-137240-1 |
| SAM | PLE DATE: | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 | 06/11/2018 |
| | UNITS: | μg/L | μg/L |
| | Class C | | | | | | | | | | | | |
| ANALYTES | Value* | Results | Results |
| PESTICIDES | | | | | | | | | | | | | |
| 4,4'-DDD | $0.000011^{(a)}$ | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDE | 0.000011 ^(a) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDT | 0.000011 ^(a) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Aldrin | 0.001 ^(b) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-BHC | 0.002 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-Chlordane | 0.00002 ^(c) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| beta-BHC | 0.007 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| delta-BHC | 0.008 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Dieldrin | 6.0E-07 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan I | 0.009 ^(d) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan II | 0.009 ^(d) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan sulfate | 0.009 ^(d) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin | 0.002 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin aldehyde | NS | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin ketone | NS | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| gamma-BHC (Lindane) | 0.008 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| trans-Chlordane | 0.00002 ^(c) | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Heptachlor | 0.0002 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Heptachlor epoxide | 0.0003 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Methoxychlor | 0.03 | 0.25 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.052 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Toxaphene | 0.000006 | 2.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.52 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| PCBs | | | | | | | | | | | | | |
| Aroclor-1016 | NS | 0.5 U | 0.5 U |
| Aroclor-1221 | NS | 0.5 U | 0.5 UJ | 0.5 UJ |
| Aroclor-1232 | NS NG | 0.5 U 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 UJ 0.5 U | 0.5 UJ |
| Aroclor-1242 Aroclor-1248 | NS NS | 0.5 U 0.5 U | 0.5 U 0.5 U |
| Aroclor-1248 Aroclor-1254 | NS NS | 0.5 U 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 UJ | 0.5 UJ |
| Aroclor-1254 Aroclor-1260 | NS NS | 0.5 U | 0.5 U |
| Total PCBs | 0.000001 | 0.5 U | 0.5 UJ | 0.5 UJ |
| Notari | 0.000001 | 0.5 | 0.5 | 0.5 | 0.5 0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 03 | 0.5 03 |

Notes:

μg/L - Micrograms per liter.

U - Analyte was not detected at specified quantitation limit.

NS - No NYSDEC standard exists for this analyte.

PCBs - Polychlorinated Biphenyls.



^{* -} NYSDEC Ambient Water Quality Standards and Guidance Values for Class C water. Most stringent guidance value used.

⁽a) - Applies to the sum of 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT.

⁽b) - Applies to the sum of Aldrin and Dieldrin.

⁽c) - Criteria for Chlordane used.

⁽d) - Criteria for Endosulfan used.

Table 9

New York State Department of Environmental Conservation
Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Water for Metals

| | | HFL-WS-102 | HFL-WS-103 | HFL-WS-104 | HFL-WS-105 | HFL-WS-106 | HFL-WS-108 | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS |
|-----------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 480-119330-3 | 480-119330-1 | 480-119183-1 | 480-119183-3 | 480-119183-5 | 480-119330-7 | 480-119330-5 | 480-118947-1 | 480-118947-3 | 480-118947-5 | 480-137240-2 | 480-137240-1 |
| | | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 | 06/11/2018 |
| | | μg/L |
| | Class C | | | | | | | | | | | | |
| ANALYTES | Value* | Results |
| Aluminum | 100 | 24,500 | 63 J | 150 J | 520 | 650 | 200 U | 170 J | 6,800 |
| Antimony | NS | 20 U |
| Arsenic | 150 ^(a) | 24 | 15 U | 54 J- |
| Barium | NS | 350 | 38 | 48 | 48 | 49 | 160 | 210 | 58 | 57 | 58 | 240 | 750 |
| Beryllium | 11** | 1.2 J | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 0.38 J |
| Cadmium | 1.7** | 1.5 J | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 |
| Calcium | NS | 72,000 | 60,100 | 19,700 | 23,800 | 35,500 | 96,900 | 95,200 | 45,500 | 46,100 | 45,900 | 103,000 | 93,100 |
| Chromium | 46** | 24 J+ | 4 U | 4 U | 1 J | 1.1 J | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 8.9 J+ |
| Cobalt | 5 | 27 | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 0.86 J | 5.1 |
| Copper | 6.7** | 53 | 10 U | 22 | 23 | 15 | 10 U | 10 U | 2.6 J | 3 J | 1.8 J | 3.8 J | 20 |
| Iron | 300 | 61,000 | 590 | 160 | 580 | 670 | 410 | 500 | 71 | 500 | 65 | 2,500 | 156,000 |
| Lead | 2.8** | 34 | 4.2 J | 11 | 25 | 9.7 J | 10 U | 3 J | 10 U | 10 U | 10 U | 57 | 26 J+ |
| Magnesium | NS | 18,600 | 11,100 | 5,200 | 5,900 | 6,700 | 19,800 | 19,100 | 13,500 | 14,100 | 14,200 | 27,700 | 18,400 |
| Manganese | NS | 4,700 | 440 | 3.2 J+ | 19 | 29 | 1,400 | 1,200 | 53 | 64 | 55 | 2,100 | 1,600 |
| Mercury | $0.0007^{(a)}$ | 0.2 U |
| Nickel | 40.8** | 45 | 10 U | 1.8 J | 2.7 J | 2.3 J | 2.2 J | 1.6 J | 10 U | 10 U | 10 U | 3.4 J | 13 J- |
| Potassium | NS | 6,400 | 800 | 1,100 | 1,400 | 2,700 | 6,100 | 5,600 | 1,700 | 1,600 | 1,600 | 10,700 | 6,900 |
| Selenium | 4.6 ^(a) | 25 U |
| Silver | $0.1^{(b)}$ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| Sodium | NS | 28,600 | 33,000 | 31,200 | 32,800 | 32,100 | 15,800 | 21,700 | 34,000 | 34,500 | 34,600 | 26,500 | 43,700 |
| Thallium | 8 | 20 U |
| Vanadium | 14 | 35 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 11 |
| Zinc | 64.7 ^(a) ** | 180 | 11 J+ | 48 | 51 | 35 | 10 U | 2.3 U | 5.3 J | 6 J | 2.8 J | 3 J | 260 |

Notes:

μg/L - Micrograms per liter.

- J Estimated value.
- J- Estimated value; biased low.
- J+ Estimated value; biased high.
- U Analyte was not detected at specified quantitation limit.
- * NYSDEC Ambient Water Quality Standards and Guidance Values for Class C water. Most stringent guidance value used.
- NS No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected.

Shading indicates result above the corresponding Class C Guidance Value.

- (a) Value for dissolved form used.
- (b) Value for ionic silver used.
- **Values are calculated based on hardness; value assumes hardness is less than or equal to 75,000 µg/L.



Table 10 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Surface Water for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-WS-102 | HFL-WS-103 | HFL-WS-104 | HFL-WS-105 | HFL-WS-106 | HFL-WS-108 | HFL-WS-109 | HFL-WS-111 | HFL-WS-112 | HFL-WS-113 | HFL-WS-114 | HFL-MH-WS |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY SAMPLE ID: | 480-119330-3 | 480-119330-1 | 480-119183-1 | 480-119183-3 | 480-119183-5 | 480-119330-7 | 480-119330-5 | 480-118947-1 | 480-118947-3 | 480-118947-5 | 480-137240-2 | 480-137240-1 |
| SAMPLE DATE: | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 | 06/11/2018 |
| UNITS: | ng/L |
| ANALYTES | Results |
| Perfluorobutyric Acid (PFBA) | 4.2 | 6.2 | 2.2 | 2.5 J- | 4.5 J- | 18 | 18 | 6.1 | 6.2 | 6 | 43 J | 9.4 |
| Perfluoropentanoic Acid (PFPeA) | 2.4 | 4.3 | 2.1 | 3.1 | 5 | 19 | 18 | 4.9 | 4.8 | 4.7 | 180 U | 12 |
| Perfluorohexanoic Acid (PFHxA) | 4.4 | 8.7 | 6.5 | 7.2 | 9.7 | 120 | 110 | 15 | 15 | 15 | 270 | 65 |
| Perfluoroheptanoic Acid (PFHpA) | 7.4 | 12 | 8.7 | 9.7 | 11 | 140 | 130 | 23 | 21 | 22 | 310 | 83 |
| Perfluoronoanoic Acid (PFNA) | 1.1 J | 1.2 J | 1 J | 1.1 J | 1.5 J | 5.1 | 5.4 | 1.4 J | 1.5 J | 1.5 J | 180 U | 4.8 |
| Perfluorodecanoic Acid (PFDA) | 2.1 U | 0.47 J | 0.59 J | 0.68 J | 0.64 J | 1.7 J | 2.1 J | 1.9 U | 1.9 U | 1.9 U | 180 U | 1.8 U |
| Perfluoroundecanoic Acid (PFUnA) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2.2 U | 1.9 UJ | 1.9 U | 1.9 UJ | 180 U | 1.8 U |
| Perfluorododecanoic Acid (PFDoA) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 0.7 J | 1.9 UJ | 1.9 UJ | 1.9 UJ | 180 U | 1.8 U |
| Perfluorothidecanoic Acid (PFTriA) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 1.3 J | 1.9 U | 1.9 U | 1.9 U | 180 U | 1.8 U |
| Perfluorotetradecanoic Acid (PFTeA) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2.2 U | 1.9 U | 1.9 U | 1.9 U | 180 U | 1.8 U |
| Perfluorobutane Sulfonate (PFBS) | 2.1 U | 1.4 J | 1 J | 1.3 J | 1.6 J | 2.6 | 2.8 | 1.5 J | 1.4 J | 1.4 J | 200 | 2.5 |
| Perfluorohexane Sulfonic Acid (PFHxS) | 1 J | 1.9 J | 0.84 J | 0.97 J | 1.2 J | 5.5 | 5.5 | 1.2 J | 1.2 J | 1.3 J | 180 U | 4.7 |
| Perflouoroheptane Sulfonate (PFHpS) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2.2 U | 1.9 U | 1.9 U | 1.9 U | 180 U | 0.24 J |
| Perfluorooctanesulfonic Acid (PFOS) | 45 | 11 | 3.4 | 5 | 4.1 | 44 | 41 | 4.9 | 8.9 | 4.4 | 150 J | 20 |
| Perfluorodecanesulfonic Acid (PFDS) | 2.1 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2.2 U | 1.9 U | 1.9 U | 1.9 U | 180 U | 1.8 U |
| Perfluorooctane Sulfonamide (PFOSA) | 2.1 UJ | 2 UJ | 1.9 UJ | 1.9 UJ | 2 UJ | 2 UJ | 2.2 UJ | 1.9 UJ | 1.9 UJ | 1.9 UJ | 180 U | 0.32 J |
| Perfluorooctanoic acid (PFOA) | 280 | 390 | 150 | 170 | 190 | 11,000 | 10,000 | 930 | 920 | 910 | 24,000 | 4,700 |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | 1,800 U | 18 U |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | 1,800 U | 18 U |
| N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) | NA | 1,800 U | 4.1 J |
| glycine (N-EtFOSAA) | INA | 1,000 0 | 4.1 J |
| 2-(N-methyl perfluorooctanesulfonamido) acetic acid (N-MeFOSAA) | NA | 1,800 U | 18 U |

Notes:

ng/L - Nanograms per liter.

- J Estimated value.
- J- Estimated value; biased low.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.

For reference only: The USEPA has set a Health Advisory Level of 70 ng/L for PFOA and PFOS in drinking water (individual or combined concentrations).

NA - Sample not analyzed for the listed analyte.



Table 11 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Sediment for Volatile Organic Compounds

| SAMI | PLE LOCATION: | HFL-SD-101 | HFL-SD-102 | HFL-SD-103 | HFL-SD-104 | HFL-SD-105 | HFL-SD-106 | HFL-SD-108 | HFL-SD-109 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | HFL-MH-SD ⁽¹⁾ |
|--|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| LABORATO | RY SAMPLE ID: | 480-119437-4 | 480-119330-4 | 480-119330-2 | 480-119183-2 | 480-119183-4 | 480-119183-6 | 480-119330-8 | 480-119330-6 | 480-118947-2 | 480-118947-4 | 480-118947-6 | 480-137240-3 |
| SAMPLE DI | EPTH (FT. BGS): | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| | SAMPLE DATE: | 6/13/2017 | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 |
| | UNITS: | mg/kg |
| ANALYTES | Class A SGV* | Results |
| 1.1.1-Trichloroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,1,2,2-Tetrachloroethane | < 2.8 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,1,2-Trichloroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,1-Dichloroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,1-Dichloroethylene | < 0.52 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,2,4-Trichlorobenzene | < 35 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0073 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0074 U | 0.0059 U | 0.0039 U | 0.011 UJ | 0.016 UJ | 0.031 UJ | 0.01 U |
| 1,2-Dichlorobenzene | < 0.28 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0075 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,2-Dichloroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0076 U | 0.00088 J | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,2-Dichloropropane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0077 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,3-Dichlorobenzene | < 1.8 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0078 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,4-Dichlorobenzene | < 0.72 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0079 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 2-Butanone (MEK) | NS | 0.027 U | 0.021 UJ | R | 0.045 U | 0.024 U | 0.008 | 0.029 U | 0.019 UJ | 0.073 | 0.096 | 0.23 J | 0.052 U |
| 2-Hexanone (MBK) | NS | 0.027 U | 0.021 U | R | 0.045 U | 0.024 U | 0.0081 U | 0.029 U | 0.019 U | 0.057 U | 0.078 U | 0.15 UJ | 0.052 U |
| 4-Methyl-2-pentanone (MIBK) | NS | 0.027 U | 0.021 U | R | 0.045 U | 0.024 U | 0.0082 U | 0.029 U | 0.019 U | 0.057 U | 0.078 U | 0.15 UJ | 0.052 U |
| Acetone | NS | 0.0087 J | 0.021 UJ | R | 0.045 U | 0.0089 J | 0.0083 | 0.029 U | 0.019 UJ | 0.32 | 0.47 | 1.1 J | 0.034 J |
| Benzene | < 0.53 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0084 U | 0.0059 U | 0.0039 U | 0.0021 J | 0.016 U | 0.031 UJ | 0.01 U |
| Bromodichloromethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0085 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Bromoform | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0086 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Bromomethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 UJ | 0.0048 UJ | 0.0087 U | 0.0059 UJ | 0.0039 U | 0.011 UJ | 0.016 UJ | 0.031 UJ | 0.01 U |
| Carbon Disulfide | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0088 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Carbon Tetrachloride | < 1.07 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0089 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Chlorobenzene | < 0.2 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.009 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Chloroethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 UJ | 0.0048 UJ | 0.0091 UJ | 0.0059 UJ | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Chloroform | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0092 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Chloromethane | NS | 0.0054 UJ | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0093 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,4-Dioxane | NS | R | R | R | R | R | R | R | R | R | R | R | R |
| cis-1,2-Dichloroethylene | < 1.2 ^(a) | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0017 J | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| cis-1,3-Dichloropropene | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Cyclohexane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 UJ | 0.016 UJ | 0.031 UJ | 0.01 U |
| Chlorodibromomethane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Dichlorodifluoromethane (Freon 12) | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 UJ | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Ethylbenzene | < 0.43 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| 1,2-Dibromoethane (EDB) | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Isopropylbenzene (Cumene) | < 0.21 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Methyl acetate | NS | 0.027 U | 0.021 U | R | 0.045 U | 0.024 U | 0.036 U | 0.029 U | 0.019 U | 0.057 U | 0.078 U | 0.15 UJ | 0.052 U |
| Methyl tert-Butyl Ether (MTBE) | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Methylcyclohexane | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Methylene Chloride | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Styrene | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Tetrachloroethylene | < 16 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Toluene | < 0.93 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.00068 J | 0.0059 U | 0.00032 J | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| trans-1,2-Dichloroethylene | < 1.2 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| trans-1,3-Dichloropropene | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Trichloroethylene | < 1.8 | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Trichlorofluoromethane (Freon 11) | NS | 0.0054 U | 0.0041 U | R | 0.0089 UJ | 0.0048 UJ | 0.0072 U | 0.0059 U | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Vinyl Chloride | NS | 0.0054 U | 0.0041 U | R | 0.0089 U | 0.0048 U | 0.0072 U | 0.00082 J | 0.0039 U | 0.011 U | 0.016 U | 0.031 UJ | 0.01 U |
| Xylene (Total) | < 0.48 ^(b) | 0.011 U | 0.0082 U | R | 0.018 U | 0.0096 U | 0.014 U | 0.012 U | 0.0077 U | 0.023 U | 0.031 U | 0.061 UJ | 0.021 U |
| Notes: | | | | - | | | | | | | | | |

- FT. BGS Feet below ground surface.
- mg/kg Milligrams per kilogram.
- J Estimated value.
- R Rejected data point during data validation.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- NS No NYSDEC standard exists for this analyte.

- $*- Sediment\ Guidance\ Values\ from\ NYSDEC\ "Screening\ and\ Assessment\ of\ Contaminated\ Sediment",\ June\ 24,\ 2014.$
- (a) Criteria for trans-1,2-Dichloroethene used.
- (b) Criteria for m-Xylene used; lowest of all Xylene standards.
- (1) Results for sample HFL-MH-SD are not compared to NYSDEC Sediment Guidance Values as the sediment sample location is within a manhole and is not readily accessible to fish and wildlife.



Table 12 New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Sediment for Semivolatile Organic Compounds

| Summary of Results of Analysis of Sediment for Semivolatile Organic Compounds | | | | | | | | | | | | | |
|---|-----------------|----------------|------------------|------------------|-------------------|------------------|----------------|----------------|--------------|----------------|----------------|----------------|--------------------------|
| SAM | PLE LOCATION: | HFL-SD-101 | HFL-SD-102 | HFL-SD-103 | HFL-SD-104 | HFL-SD-105 | HFL-SD-106 | HFL-SD-108 | HFL-SD-109 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | HFL-MH-SD ⁽¹⁾ |
| | ORY SAMPLE ID: | 480-119437-4 | 480-119330-4 | 480-119330-2 | 480-119183-2 | 480-119183-4 | 480-119183-6 | 480-119330-8 | 480-119330-6 | 480-118947-2 | 480-118947-4 | 480-118947-6 | 480-137240-3 |
| SAMPLE D | EPTH (FT. BGS): | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| | SAMPLE DATE: | 6/13/2017 | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 |
| ANALYTES | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| | Class A SGV* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| 1,1'-Biphenyl Bis(2-chloroisopropyl)ether | NS NS | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U 1.1 U | 2.7 U 2.7 U | 1.2 U 1.2 U | 1 U 1 U | 5.4 U 5.4 U | 7.2 U 7.2 U | 13 UJ 13 UJ | 0.36 U 0.36 UJ |
| 2,4,5-Trichlorophenol | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2,4,6-Trichlorophenol | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2,4-Dichlorophenol | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2,4-Dimethylphenol | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2,4-Dinitrophenol | NS | 21 U | 2 U | 2.2 U | 2.7 U | 11 U | 26 U | 11 U | 9.9 U | 53 U | 70 U | 120 UJ | 3.5 U |
| 2,4-Dinitrotoluene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2,6-Dinitrotoluene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2-Chloronaphthalene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 2-Chlorophenol | NS NC | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U 1 U | 5.4 U | 7.2 U 7.2 U | 13 UJ 13 UJ | 0.36 U 0.36 U |
| o-cresol 2-Methylnaphthalene | NS NS | 2.2 U 2.2 U | 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U 1.1 U | 2.7 U 2.7 U | 1.2 U 1.2 U | 1 U 1 U | 5.4 U 5.4 U | 7.2 U | 13 UJ | 0.36 U 0.36 U |
| 2-Nitroaniline | NS NS | 4.2 U | 0.2 U | 0.43 U | 0.28 U | 2.1 U | 5.2 U | 2.3 U | 2 U | 10 U | 14 U | 24 UJ | 0.30 U |
| 2-Nitrophenol | NS NS | 2.2 U | 0.39 U | 0.43 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.7 U |
| 3,3'-Dichlorobenzidine | NS NS | 4.2 U | 0.39 U | 0.43 U | 0.54 U | 2.1 U | 5.2 U | 2.3 U | 2 U | 10 U | 14 U | 24 UJ | 0.7 U |
| 3-Nitroaniline | NS | 4.2 U | 0.39 U | 0.43 U | 0.54 U | 2.1 U | 5.2 U | 2.3 U | 2 U | 10 U | 14 U | 24 UJ | 0.7 U |
| 4,6-Dinitro-2-methylphenol | NS | 4.2 UJ | 0.39 U | 0.43 U | 0.54 U | 2.1 U | 5.2 U | 2.3 U | 2 U | 10 U | 14 U | 24 UJ | 0.7 U |
| 4-Bromophenyl phenyl ether | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 4-Chloro-3-methylphenol | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 4-Chloroaniline | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 4-Chlorophenylphenyl ether | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| 4-Methylphenol | NS NC | 4.2 U 4.2 U | 0.39 U 0.39 U | 0.43 U | 0.54 U 0.54 U | 2.1 U 2.1 U | 5.2 U 5.2 U | 2.3 U 2.3 U | 2 U 2 U | 10 U | 14 U 14 U | 24 UJ | 0.7 U 0.7 U |
| 4-Nitroaniline 4-Nitrophenol | NS NS | 4.2 U 4.2 U | 0.39 U | 0.43 U 0.43 U | 0.54 U 0.54 U | 2.1 U 2.1 U | 5.2 U 5.2 U | 2.3 U 2.3 U | 2 U 2 U | 10 U 10 U | 14 U | 24 UJ 24 UJ | 0.7 U 0.7 UJ |
| Acenaphthene | NS NS | 2.2 U | 0.39 U | 0.43 U 0.22 U | 0.34 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.7 UJ |
| Acenaphthylene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Acetophenone | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Anthracene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Atrazine | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 UJ |
| Benzaldehyde | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Benzo(a)anthracene | NS | 2.2 U | 0.2 U | 0.22 U | 0.044 J | 0.18 J | 2.7 U | 1.2 U | 0.12 J | 5.4 U | 7.2 U | 13 UJ | 0.1 J |
| Benzo(a)pyrene | NS | 2.2 U | 0.2 U | 0.22 U | 0.048 J | 0.18 J | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.11 J |
| Benzo(b)fluoranthene Benzo(g,h,i)perylene | NS NS | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.074 J 0.28 U | 0.24 J 0.15 J | 2.7 U 2.7 U | 1.2 U 1.2 U | 1 U 1 U | 5.4 U 5.4 U | 7.2 U 7.2 U | 13 UJ 13 UJ | 0.15 J 0.36 U |
| Benzo(k)fluoranthene | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.055 J |
| Bis(2-chloroethoxy)methane | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Bis(2-chloroethyl)ether | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Bis(2-ethylhexyl)phthalate | < 360 | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Butylbenzylphthalate | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Caprolactam | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Carbazole | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Chrysene | NS NC | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.091 J |
| Dibenz(a,h)anthracene Di-n-butylphthalate | NS NS | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U 1.1 U | 2.7 U 2.7 U | 1.2 U 1.2 U | 1 U 1 U | 5.4 U 5.4 U | 7.2 U 7.2 U | 13 UJ 13 UJ | 0.36 U 0.36 U |
| Di-n-octylphthalate | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Dibenzofuran | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Diethylphthalate | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Dimethylphthalate | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Fluoranthene | NS | 2.2 U | 0.2 U | 0.22 U | 0.046 J | 0.4 J | 2.7 U | 1.2 U | 0.17 J | 5.4 U | 7.2 U | 13 UJ | 0.19 J |
| Fluorene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Hexachlorobenzene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Hexachlorogualenentadione | < 1.2 | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 UJ |
| Hexachlorocyclopentadiene Hexachloroethane | < 0.81 NS | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U 1.1 U | 2.7 U 2.7 U | 1.2 U 1.2 U | 1 U 1 U | 5.4 U 5.4 U | 7.2 U 7.2 U | 13 UJ 13 UJ | 0.36 U 0.36 U |
| Indeno(1,2,3-cd)pyrene | NS NS | 2.2 U 2.2 U | 0.2 U 0.2 U | 0.22 U 0.22 U | 0.28 U 0.28 U | 1.1 U 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U 5.4 U | 7.2 U | 13 UJ | 0.36 U 0.36 U |
| Isophorone | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| N-Nitroso-di-n-propylamine | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| N-Nitrosodiphenylamine | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Naphthalene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Nitrobenzene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Pentachlorophenol | < 14 | 4.2 U | 0.39 U | 0.43 U | 0.54 U | 2.1 U | 5.2 U | 2.3 U | 2 U | 10 U | 14 U | 24 UJ | 0.7 U |
| Phenanthrene | NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 0.25 J | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.08 J |
| Phenol | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.28 U | 1.1 U | 2.7 U | 1.2 U | 1 U | 5.4 U | 7.2 U | 13 UJ | 0.36 U |
| Pyrene | NS NS | 2.2 U | 0.2 U | 0.22 U | 0.056 J | 0.43 J | 2.7 U | 1.2 U | 0.16 J | 5.4 U | 7.2 U | 13 UJ | 0.19 J |
| 1,4-Dioxane | NS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.42 UJ |

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram. J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - Sediment Guidance Values from NYSDEC "Screening and Assessment of Contaminated Sediment", June 24, 2014.

NA - Sample not analyzed for the listed analyte.

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected. (1) - Results for sample HFL-MH-SD are not compared to NYSDEC Sediment Guidance Values as the sediment sample location is within a manhole and is not readily accessible to fish and wildlife.



Table 13

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Sediment for Pesticides and Polychlorinated Biphenyls

| SAMPLE | LOCATION: | HFL-SD-101 | HFL-SD-102 | HFL-SD-103 | HFL-SD-104 | HFL-SD-105 | HFL-SD-106 | HFL-SD-108 | HFL-SD-109 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | HFL-MH-SD ⁽¹⁾ |
|---------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| LABORATORY | SAMPLE ID: | 480-119437-4 | 480-119330-4 | 480-119330-2 | 480-119183-2 | 480-119183-4 | 480-119183-6 | 480-119330-8 | 480-119330-6 | 480-118947-2 | 480-118947-4 | 480-118947-6 | 480-137240-3 |
| SAMPLE DEPT | H (FT. BGS): | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| SAN | MPLE DATE: | 6/13/2017 | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 |
| | UNITS: | mg/kg |
| | Class A | | | | | | | | | | | | |
| ANALYTES | SGV* | Results |
| Pesticides | | | | | | | | | | | | | |
| 4,4'-DDD | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.00069 J | 0.013 U | 0.00077 J | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| 4,4'-DDE | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.00093 J | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| 4,4'-DDT | < 0.044 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.0057 J | 0.0016 J | 0.002 U | 0.016 | 0.15 U | 0.25 UJ | 0.0036 U |
| Aldrin | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.0033 J | 0.15 U | 0.25 UJ | 0.0036 U |
| alpha-BHC | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| alpha-Chlordane | < 0.068 ^(a) | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| beta-BHC | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.00066 J | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| delta-BHC | NS | 0.0021 U | 0.0004 J | 0.0022 U | 0.0028 U | 0.00051 J | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Dieldrin | < 0.18 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Endosulfan I | < 0.001 ^(b) | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Endosulfan II | < 0.001 ^(b) | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Endosulfan sulfate | $< 0.001^{(b)}$ | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Endrin | < 0.09 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Endrin aldehyde | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.0065 J | 0.15 U | 0.25 UJ | 0.001 J |
| Endrin ketone | NS | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| gamma-BHC (Lindane) | < 0.047 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.00051 J | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| trans-Chlordane | < 0.068 ^(a) | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Heptachlor | < 0.075 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Heptachlor epoxide | < 0.015 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.002 U | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Methoxychlor | < 0.059 | 0.0021 U | 0.002 U | 0.0022 U | 0.0028 U | 0.0022 U | 0.013 U | 0.0023 U | 0.0018 J | 0.011 U | 0.15 U | 0.25 UJ | 0.0036 U |
| Toxaphene | < 0.006 | 0.021 U | 0.02 U | 0.022 U | 0.028 U | 0.022 U | 0.13 U | 0.023 U | 0.02 U | 0.11 U | 1.5 U | 2.5 UJ | 0.036 U |
| PCBS | | | | | | | | | | | | | |
| Aroclor-1016 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Aroclor-1221 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Aroclor-1232 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 UJ |
| Aroclor-1242 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Aroclor-1248 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Aroclor-1254 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Aroclor-1260 | NS | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 U |
| Total PCBs | < 0.1 | 0.24 U | 0.21 U | 0.28 U | 0.33 U | 0.25 U | 0.31 U | 0.28 U | 0.23 U | 0.45 U | 0.69 U | 1 UJ | 0.46 UJ |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - Sediment Guidance Values from NYSDEC "Screening and Assessment of Contaminated Sediment", June 24, 2014.

PCBs - Polychlorinated Biphenyls.

NS - No NYSDEC standard exists for this analyte.

Values in \boldsymbol{bold} indicate the analyte was detected.

(a) - Criteria for Chlordane used.

(b) - Criteria for Endosulfan used.



^{(1) -} Results for sample HFL-MH-SD are not compared to NYSDEC Sediment Guidance Values as the sediment sample location is within a manhole and is not readily accessible to fish and wildlife.

Table 14

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Sediment for Metals

| | | SAMPLE | LOCATION: | HFL-SD-101 | HFL-SD-102 | HFL-SD-103 | HFL-SD-104 | HFL-SD-105 | HFL-SD-106 | HFL-SD-108 | HFL-SD-109 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | HFL-MH-SD ⁽¹⁾ |
|-----------|---------|-------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| | L | ABORATORY | | 480-119437-4 | 480-119330-4 | 480-119330-2 | 480-119183-2 | 480-119183-4 | 480-119183-6 | 480-119330-8 | 480-119330-6 | 480-118947-2 | 480-118947-4 | 480-118947-6 | 480-137240-3 |
| | | SAMPLE DEPT | | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| | | SA | MPLE DATE: | 6/13/2017 | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 |
| | | | UNITS: | mg/kg |
| | Class A | Class B | Class C | | | | | | | | | | | | |
| ANALYTES | SGV* | SGV* | SGV* | Results |
| Aluminum | NS | NS | NS | 19,100 | 14,500 | 11,100 | 8,620 | 22,900 | 11,900 | 15,200 | 11,400 | 17,800 | 27,900 | 32,200 J | 11,700 |
| Antimony | NS | NS | NS | 1 J | 0.62 J | 18.2 U | 24.9 U | 18.3 U | 0.87 J | 0.88 J | 0.74 J | 28.2 UJ | 39.1 UJ | 67.7 UJ | 33.6 UJ |
| Arsenic | < 10 | 10-33 | > 33 | 5.6 | 6.2 | 4.8 | 9.6 J- | 10.3 | 11 J- | 3.8 | 3.3 | 8 | 9.8 | 14.8 J | 8.9 |
| Barium | NS | NS | NS | 142 | 103 | 88.9 | 188 | 365 | 176 | 114 | 107 | 170 | 278 | 340 J | 301 |
| Beryllium | NS | NS | NS | 0.79 | 0.61 | 0.58 | 0.68 | 1.1 | 0.77 | 0.65 | 0.47 | 0.78 | 1.2 | 1.4 J | 0.55 |
| Cadmium | < 1 | 1-5 | > 5 | 0.31 J+ | 0.2 J | 0.36 J+ | 0.87 | 0.62 J+ | 1.1 J+ | 0.34 J+ | 0.28 J+ | 1.4 J+ | 1.4 J+ | 1.4 J | 0.9 UJ |
| Calcium | NS | NS | NS | 5,620 | 1,820 | 1,620 | 2,370 | 1,760 | 2,440 | 1,710 | 2,070 | 4,740 | 5,910 | 13,600 J | 4,300 |
| Chromium | < 43 | 43-110 | > 110 | 20.1 | 15.9 | 13.4 | 16.5 | 24.1 | 22.4 | 16 | 18.3 | 24.6 | 33.4 | 36.5 J | 16.1 |
| Cobalt | NS | NS | NS | 13.7 | 11.2 | 8.5 | 7.7 | 21.3 | 10.1 | 10.6 | 8.7 | 12.5 | 15.4 | 17.4 J | 11.1 |
| Copper | < 32 | 32-150 | > 150 | 30.5 | 22.6 | 19.2 | 102 | 35.1 | 93.6 | 19.6 | 25.7 | 71.1 | 72 | 71.7 J | 26.7 |
| Iron | NS | NS | NS | 27,700 | 24,800 | 18,800 | 17,200 | 33,300 | 30,100 | 18,300 | 20,300 | 27,400 | 41,000 | 46,800 J | 169,000 |
| Lead | < 36 | 36-130 | > 130 | 18.4 | 13.3 | 11.6 | 354 | 45.4 | 542 | 24.3 | 26.3 | 147 | 137 | 93.7 J | 35 J+ |
| Magnesium | NS | NS | NS | 6,860 | 5,380 | 4,200 | 1,340 | 6,420 | 3,710 | 4,090 | 3,950 | 5,310 | 7,440 | 8,780 J | 5,560 |
| Manganese | NS | NS | NS | 482 | 502 | 344 | 199 | 1,560 | 415 | 414 | 479 | 544 | 888 | 2,500 J | 1,010 |
| Mercury | < 0.2 | 0.2-1 | >1 | 0.058 | 0.019 J | 0.013 J | 2.7 | 0.58 | 0.31 | 0.06 | 0.061 | 0.15 | 0.2 | 0.11 J | 0.046 |
| Nickel | < 23 | 23-49 | > 49 | 29.3 | 25.9 | 21.6 | 21.1 | 45.6 | 25.2 | 22.7 | 20.3 | 31.9 | 41.6 | 45.7 J | 26.4 |
| Potassium | NS | NS | NS | 4,110 | 2,870 | 2,360 | 989 | 4,980 | 2,070 | 2,350 | 2,230 | 3,780 | 5,650 | 7,090 J | 2,130 |
| Selenium | NS | NS | NS | 1.3 J | 4.2 U | 4.8 U | 6.6 UJ | 4.9 UJ | 1.1 J | 0.85 J | 4.7 U | 7.5 U | 10.4 U | 18.1 UJ | 9 U |
| Silver | < 1 | 1-2.2 | > 2.2 | 0.84 U | 0.63 U | 0.73 U | 1 U | 0.73 U | 0.95 U | 0.75 U | 0.71 U | 1.1 U | 1.6 U | 2.7 UJ | 2.7 U |
| Sodium | NS | NS | NS | 121 J | 84.6 J | 104 J | 321 | 183 | 169 J | 82.6 J | 76.6 J | 167 J | 290 J | 431 J | 89.7 J |
| Thallium | NS | NS | NS | 8.4 U | 6.3 U | 7.3 U | 10 UJ | 7.3 UJ | 9.5 UJ | 7.5 U | 7.1 U | 11.3 U | 15.6 U | 27.1 UJ | 13.4 UJ |
| Vanadium | NS | NS | NS | 25.5 | 19.6 | 16.7 | 22.5 | 29 | 23.5 | 22.9 | 15 | 32 | 42.5 | 47 J | 17.9 J+ |
| Zinc | < 120 | 120-460 | > 460 | 75.3 | 64 | 56 | 318 | 107 | 393 | 89.1 | 98.9 | 357 | 361 | 336 J | 273 |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

- J Estimated value.
- J- Estimated value; biased low.
- J+ Estimated value; biased high.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- * Sediment Guidance Values from NYSDEC "Screening and Assessment of Contaminated Sediment", June 24, 2014.

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the analyte was detected.

Shading indicates result is within limits of corresponding SGV for classification of sediment. Results meeting Class A SGVs are not shaded.

(1) - Results for sample HFL-MH-SD are not compared to NYSDEC Sediment Guidance Values as the sediment sample location is within a manhole and is not readily accessible to fish and wildlife.



Table 15

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Sediment for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-SD-101 | HFL-SD-102 | HFL-SD-103 | HFL-SD-104 | HFL-SD-105 | HFL-SD-106 | HFL-SD-108 | HFL-SD-109 | HFL-SD-111 | HFL-SD-112 | HFL-SD-113 | HFL-MH-SD ⁽¹⁾ |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| LABORATORY SAMPLE ID: | 480-119437-4 | 480-119330-4 | 480-119330-2 | 480-119183-2 | 480-119183-4 | 480-119183-6 | 480-119330-8 | 480-119330-6 | 480-118947-2 | 480-118947-4 | 480-118947-6 | 480-137240-3 |
| SAMPLE DEPTH (FT. BGS): | | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 | 0-0.5 |
| SAMPLE DATE: | 6/13/2017 | 6/9/2017 | 6/9/2017 | 6/7/2017 | 6/7/2017 | 6/7/2017 | 6/9/2017 | 6/9/2017 | 6/2/2017 | 6/2/2017 | 6/2/2017 | 06/11/2018 |
| UNITS: | μg/kg |
| ANALYTES | Results |
| Perfluorobutyric Acid (PFBA) | 0.26 U | 0.41 | 0.27 U | 2.1 | 8.2 | 5.8 | 0.32 | 0.24 U | 0.44 U | 0.6 U | 1 UJ | 0.07 J |
| Perfluoropentanoic Acid (PFPeA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.24 U | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorohexanoic Acid (PFHxA) | 0.13 J | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.22 J | 0.25 | 0.29 J | 0.29 J | 0.72 J | 0.21 J |
| Perfluoroheptanoic Acid (PFHpA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.21 J | 0.14 J | 0.44 U | 0.6 U | 1 UJ | 0.16 J |
| Perfluoronoanoic Acid (PFNA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.12 J | 0.44 U | 0.6 U | 1 UJ | 0.098 J |
| Perfluorodecanoic Acid (PFDA) | 0.084 J | 0.24 U | 0.27 U | 0.13 J | 0.27 U | 0.32 U | 0.17 J | 0.2 J | 0.44 U | 0.6 U | 1 UJ | 0.19 J |
| Perfluoroundecanoic Acid (PFUnA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.15 J | 0.32 U | 0.23 J | 0.24 | 0.87 | 1 | 1.7 J | 0.42 U |
| Perfluorododecanoic Acid (PFDoA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.26 | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorothidecanoic Acid (PFTriA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.19 J | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorotetradecanoic Acid (PFTeA) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.12 J | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorobutane Sulfonate (PFBS) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.24 U | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorohexane Sulfonic Acid (PFHxS) | 0.26 U | 0.24 U | 0.27 U | 0.26 J | 0.27 U | 0.32 U | 0.28 U | 0.24 U | 0.44 U | 0.45 J | 0.71 J | 0.42 U |
| Perflouoroheptane Sulfonate (PFHpS) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.24 U | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorooctanesulfonic Acid (PFOS) | 2 | 0.24 U | 0.27 U | 0.66 | 0.33 | 0.37 | 1.6 | 0.95 | 0.61 | 0.98 | 1.8 J | 2.7 |
| Perfluorodecanesulfonic Acid (PFDS) | 0.26 U | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.28 U | 0.15 J | 0.44 U | 0.6 U | 1 UJ | 0.42 U |
| Perfluorooctane Sulfonamide (PFOSA) | 0.26 UJ | 0.24 U | 0.27 U | 0.34 U | 0.27 U | 0.32 U | 0.12 J | 0.16 J | 0.44 UJ | 0.6 UJ | 1 UJ | 0.24 J |
| Perfluorooctanoic acid (PFOA) | 6.6 J- | 1.6 | 0.5 | 2.8 | 2.6 | 1.5 | 20 | 12 | 4.6 | 5 | 11 | 20 |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | 4.2 U |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | 4.2 U |
| N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine | | | | | | | | | | | | |
| (N-EtFOSAA) | NA | 0.92 J |
| 2-(N-methyl perfluorooctanesulfonamido) acetic acid | | | | | | | | | | | | |
| (N-MeFOSAA) | NA | 4.2 U |

Notes:

FT. BGS - Feet below ground surface.

 $\mu g/kg$ - Micrograms per kilogram.

- J Estimated value.
- J- Estimated value; biased low.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.

Per- and polyfluoroalkyl substances (PFAS) sediment sampling results were evaluated by comparison to the NYSDOH preliminary Residential Use SCO of 140 µg/kg developed for a potential site or sites located in the Hoosick Falls area. Values in **bold** indicate the analyte was detected.

(1) - Results for sample HFL-MH-SD are not compared to NYSDEC Sediment Guidance Values as the sediment sample location is within a manhole and is not readily accessible to fish and wildlife.



Table 16 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Subsurface Soil for Volatile Organic Compounds

| | | SAMPLE | LOCATION: | HFL-MW-101 | HFL-MW-101B | HFL-MW-103 | HFL-MW-104 | HFL-MW-105 | HFL-MW-106 |
|--|--------------|-------------|---------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | LA | BORATORY | SAMPLE ID: | 480-118425-1 | 480-133189-1 | 480-118514-1 | 480-133608-1 | 480-134080-1 | 480-134613-1 |
| | SA | AMPLE DEPT | TH (FT. BGS): | 16-20 | 48-50 | 6-10 | 9-11 | 22-24 | 19-21 |
| | | SA | MPLE DATE: | 5/23/2017 | 3/27/2018 | 5/24/2017 | 4/4/2018 | 4/11/2018 | 4/20/2018 |
| | | | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| | Unrestricted | Residential | Commercial | | | | | | |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results | Results |
| 1,1,1-Trichloroethane | 0.68 | 100 | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,1,2,2-Tetrachloroethane | NS | 35 | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 UJ | 0.0036 U |
| 1,1,2-Trichloroethane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane (Freon 113) | NS | 100 | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,1-Dichloroethane | 0.27 | 19 | 240 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,1-Dichloroethylene | 0.33 | 100 | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,2,4-Trichlorobenzene | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | NS | NS | NS | 0.0045 U | 0.0044 UJ | 0.0044 U | 0.0049 U | 0.0047 UJ | 0.0036 U |
| 1,2-Dichlorobenzene | 1.1 | 100 | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,2-Dichloroethane | 0.02 | 2.3 | 30 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,2-Dichloropropane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,3-Dichlorobenzene | 2.4 | 17 | 280 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 130 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 2-Butanone (MEK) | 0.12 | 100 | 500 | 0.023 U | 0.022 UJ | 0.022 U | 0.025 U | 0.023 UJ | 0.018 U |
| 2-Hexanone (MBK) | NS | NS | NS | 0.023 U | 0.022 UJ | 0.022 U | 0.025 U | 0.023 U | 0.018 U |
| 4-Methyl-2-pentanone (MIBK) | NS | NS | NS | 0.023 U | 0.022 UJ | 0.022 U | 0.025 U | 0.023 U | 0.018 U |
| Acetone | 0.05 | 100 | 500 | 0.023 U | 0.005 J | 0.022 U | 0.025 U | 0.023 U | 0.0065 J |
| Benzene | 0.06 | 2.9 | 44 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Bromodichloromethane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Bromoform | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Bromomethane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Carbon Disulfide | NS | 100 | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Carbon Tetrachloride | 0.76 | 1.4 | 22 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Chlorobenzene | 1.1 | 100 | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Chloroethane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Chloroform | 0.37 | 10 | 350 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Chloromethane | NS | NS | NS | 0.0045 U | 0.0044 UJ | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,4-Dioxane | 0.1 | 9.8 | 130 | R | R | R | R | R | R |
| cis-1,2-Dichloroethylene | 0.25 | 59 | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| cis-1,3-Dichloropropene | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Cyclohexane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Chlorodibromomethane | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Dichlorodifluoromethane (Freon 12) | NS | NS | NS | 0.0045 U | 0.0044 UJ | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Ethylbenzene | 1 | 30 | 390 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| 1,2-Dibromoethane (EDB) | NS | NS | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Isopropylbenzene (Cumene) | NS | 100 | NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Methyl acetate | NS 0.02 | NS | NS 500 | 0.023 U | 0.022 UJ | 0.022 U | 0.025 U | 0.023 U | 0.018 U |
| Methyl tert-Butyl Ether (MTBE) | 0.93 | 62 NC | 500 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Methylcyclohexane Methylene Chloride | NS 0.05 | NS 51 | NS 500 | 0.0045 U 0.0045 U | 0.0044 U 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U 0.0036 U |
| Methylene Chloride Styrene | 0.05 NS | 51 NS | 500 NS | 0.0045 U 0.0045 U | 0.0044 U 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U 0.0036 U |
| Styrene Tetrachloroethylene | | NS 5.5 | NS 150 | 0.0045 U 0.0045 U | 0.0044 U 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U 0.0036 U |
| Toluene | 1.3 0.7 | 100 | 500 | 0.0045 U 0.0045 U | 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U |
| trans-1,2-Dichloroethylene | 0.7 | 100 | 500 | 0.0045 U | 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U |
| trans-1,2-Dichloropetnylene trans-1,3-Dichloropropene | 0.19 NS | NS | NS NS | 0.0045 U | 0.0044 U | 0.0044 U 0.0044 U | 0.0049 U 0.0049 U | 0.0047 U 0.0047 U | 0.0036 U |
| Trichloroethylene | 0.47 | 10 | 200 | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Trichlorofluoromethane (Freon 11) | NS | NS | NS NS | 0.0045 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Vinyl Chloride | 0.02 | 0.21 | 13 | 0.0045 U | 0.0044 UJ | 0.0044 U | 0.0049 U | 0.0047 U | 0.0036 U |
| Xylene (Total) | 0.02 | 100 | 500 | 0.0043 U | 0.0044 U | 0.0044 U | 0.0049 U | 0.0047 U | 0.0030 U |
| Notes: | 0.20 | 100 | 550 | 0.007 | 0.0007 | 0.0000 | 0.0077 | 0.0074 0 | 0.0072 |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.



J - Estimated value.

R - Rejected data point during data validation.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

 $^{*-} New York \ State \ Department \ of \ Environmental \ Conservation, \ Soil \ Cleanup \ Objectives \ (SCOs) \ (6NYCRR \ Part \ 375 \ and \ CP-51).$

NS - No NYSDEC standard exists for this analyte.

Table 17 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Subsurface Soil for Semivolatile Organic Compounds

| | | SAMPLE | LOCATION: | HFL-MW-101 | HFL-MW-101B | HFL-MW-103 | HFL-MW-104 | HFL-MW-105 | HFL-MW-106 |
|--|-------------|-------------|----------------------|-------------------------|------------------|-----------------|------------------|------------------|------------------|
| | | BORATORY | SAMPLE ID: | 480-118425-1 | 480-133189-1 | 480-118514-1 | 480-133608-1 | 480-134080-1 | 480-134613-1 |
| | SA | | H (FT. BGS): | 16-20 | 48-50 | 6-10 | 9-11 | 22-24 | 19-21 |
| | | SAI | MPLE DATE: | 5/23/2017 | 3/27/2018 | 5/24/2017 | 4/4/2018 | 4/11/2018 | 4/20/2018 |
| | Unrestricte | Residential | UNITS: Commercial | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANALYTES | d Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results | Results |
| 1,1'-Biphenyl | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2,2'-Oxybis(1-chloropropane) | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 UJ | 0.19 U |
| 2,4,5-Trichlorophenol | NS | 100 | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2,4,6-Trichlorophenol | NS NS | NS 100 | NS NS | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| 2,4-Dichlorophenol 2,4-Dimethylphenol | NS NS | NS | NS NS | 0.2 U | 0.22 U | 2.1 U 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2,4-Dinitrophenol | NS | 100 | NS | 2 U | 2.2 U | 20 U | 2.3 U | 2.1 U | 1.9 U |
| 2,4-Dinitrotoluene | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2,6-Dinitrotoluene | NS | 1.03 | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2-Chloronaphthalene | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2-Chlorophenol | NS | 100 | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2-Methylphenol | 0.33 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 2-Methylnaphthalene 2-Nitroaniline | NS NS | 0.41 NS | NS NS | 0.2 U 0.39 U | 0.22 U 0.43 U | 2.1 U 4.1 U | 0.24 U 0.47 U | 0.21 U 0.41 U | 0.19 U 0.37 U |
| 2-Nitroannine 2-Nitrophenol | NS NS | NS NS | NS NS | 0.39 U 0.2 U | 0.43 U 0.22 U | 2.1 U | 0.47 U 0.24 U | 0.41 U 0.21 U | 0.37 U 0.19 U |
| 3,3'-Dichlorobenzidine | NS | NS | NS | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| 3-Nitroaniline | NS | NS | NS | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| 4,6-Dinitro-2-methylphenol | NS | NS | NS | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| 4-Bromophenyl-phenylether | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 4-Chloro-3-methylphenol | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| 4-Chloroaniline | NS NC | 100 | NS NS | 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U | 0.21 U 0.21 U | 0.19 U |
| 4-Chlorophenyl-phenyl ether 4-Methylphenol | NS 0.33 | NS 34 | 500 | 0.2 U 0.39 U | 0.22 U 0.43 U | 2.1 U 4.1 U | 0.24 U 0.47 U | 0.21 U 0.41 U | 0.19 U 0.37 U |
| 4-Nitroaniline | NS | NS | NS | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| 4-Nitrophenol | NS | NS | NS | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| Acenaphthene | 20 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Acenaphthylene | 100 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Acetophenone | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Anthracene | 100 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Atrazine Benzaldehyde | NS NS | NS NS | NS NS | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 UJ | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| Benzo(a)anthracene | 1 | 1 | 5.6 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Benzo(a)pyrene | 1 | 1 | 1 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Benzo(b)fluoranthene | 1 | 1 | 5.6 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Benzo(g,h,i)perylene | 100 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Benzo(k)fluoranthene | 0.8 | 1 | 56 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Bis(2-chloroethoxy)methane | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Bis(2-chloroethyl) ether | NS NS | NS 50 | NS NS | 0.2 U 0.095 J | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| Bis(2-ethylhexyl)phthalate Butylbenzylphthalate | NS NS | 100 | NS NS | 0.095 J 0.2 U | 0.22 U | 2.1 U | 0.24 U 0.24 U | 0.21 U | 0.19 U 0.19 U |
| Caprolactam | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Carbazole | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Chrysene | 1 | 1 | 56 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Dibenz(a,h)anthracene | 0.33 | 0.33 | 0.56 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Di-n-butylphthalate | NS | 100 | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Di-n-octylphthalate | NS 7 | 100 | NS 350 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Dibenzofuran Diethyl phthalate | NS | 14 100 | NS NS | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| Dimethylphthalate | NS NS | 100 | NS NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Fluoranthene | 100 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Fluorene | 30 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Hexachlorobenzene | 0.33 | 0.33 | 6 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Hexachlorobutadiene | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Hexachlorocyclopentadiene | NS NC | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Hexachloroethane | NS 0.5 | NS 0.5 | NS 5.6 | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| Indeno(1,2,3-cd)pyrene Isophorone | NS | 100 | S.6 NS | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U 0.19 U |
| n-Nitroso-di-n-propylamine | NS NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| N-Nitrosodiphenylamine | NS | NS | NS | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Naphthalene | 12 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Nitrobenzene | NS | 3.7 | 69 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Pentachlorophenol | 0.8 | 2.4 | 6.7 | 0.39 U | 0.43 U | 4.1 U | 0.47 U | 0.41 U | 0.37 U |
| Phenanthrene | 100 | 100 | 500 | 0.2 U | 0.22 U | 2.1 U | 0.24 U | 0.21 U | 0.19 U |
| Phenol | 0.33 100 | 100 100 | 500 500 | 0.2 U 0.2 U | 0.22 U 0.22 U | 2.1 U | 0.24 U 0.24 U | 0.21 U 0.21 U | 0.19 U |
| Pyrene 1,4-Dioxane | 0.1 | 9.8 | 130 | 0.2 U NA | 0.22 U 0.26 U | 2.1 U NA | 0.24 U 0.28 U | 0.21 U 0.25 U | 0.19 U 0.22 U |
| Notes: | 0.1 | 7.0 | 130 | INM | 0.20 U | INA | U.20 U | U.23 U | U.22 U |

Notes



FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

I - Estimated value

U - Analyte was not detected at specified quantitation limit.

^{* -} New York State Department of Environmental Conservation, Soil Cleanup Objectives (SCOs) (6NYCRR Part 375 and CP-51).

NA - Sample not analyzed for the listed analyte.

NS - No NYSDEC standard exists for this analyte.

Table 18

New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Subsurface Soil for Pesticides and Polychlorinated Biphenyls

| | | SAMPLE | LOCATION: | HFL-MW-101 | HFL-MW-101B | HFL-MW-103 | HFL-MW-104 | HFL-MW-105 | HFL-MW-106 |
|---------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | LAF | BORATORY | SAMPLE ID: | 480-118425-1 | 480-133189-1 | 480-118514-1 | 480-133608-1 | 480-134080-1 | 480-134613-1 |
| | SA | MPLE DEPT | H (FT. BGS): | 16-20 | 48-50 | 6-10 | 9-11 | 22-24 | 19-21 |
| | | | MPLE DATE: | 5/23/2017 | 3/27/2018 | 5/24/2017 | 4/4/2018 | 4/11/2018 | 4/20/2018 |
| | | | UNITS: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| | Unrestricted | Residential | Commercial | | | | | | |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | Results | Results | Results | Results | Results |
| Pesticides | | | | | | | | | |
| 4,4'-DDD | 0.0033 | 2.6 | 92 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| 4,4'-DDE | 0.0033 | 1.8 | 62 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| 4,4'-DDT | 0.0033 | 1.7 | 47 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Aldrin | 0.005 | 0.019 | 0.68 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| alpha-BHC | 0.02 | 0.097 | 3.4 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| alpha-Chlordane | 0.094 | 0.91 | 24 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| beta-BHC | 0.036 | 0.072 | 3 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| delta-BHC | 0.04 | 100 | 500 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Dieldrin | 0.005 | 0.039 | 1.4 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endosulfan I | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endosulfan II | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endosulfan sulfate | 2.4 ^(a) | 4.8 ^(a) | 200 ^(a) | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endrin | 0.014 | 2.2 | 89 | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endrin aldehyde | NS | NS | NS | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Endrin ketone | NS | NS | NS | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| gamma-BHC (Lindane) | 0.1 | 0.28 | 9.2 | 0.002 U | 0.0022 U | 0.0052 J | 0.0024 U | 0.0021 U | 0.0019 U |
| trans-Chlordane | NS | NS | NS | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Heptachlor | 0.042 | 0.42 | 15 | 0.002 U | 0.0022 U | 0.0057 J | 0.0024 U | 0.0021 U | 0.0019 U |
| Heptachlor epoxide | NS | 0.077 | NS | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Methoxychlor | NS | 100 | NS | 0.002 U | 0.0022 U | 0.02 U | 0.0024 U | 0.0021 U | 0.0019 U |
| Toxaphene | NS | NS | NS | 0.02 U | 0.022 U | 0.2 UJ | 0.024 U | 0.021 U | 0.019 U |
| PCBs | | | | | | | | | |
| Aroclor-1016 | NS | NS | NS | 0.25 U | 0.32 U | 0.27 U | 0.34 U | 0.25 U | 0.22 U |
| Aroclor-1221 | NS | NS | NS | 0.25 U | 0.32 UJ | 0.27 U | 0.34 U | 0.25 U | 0.22 U |
| Aroclor-1232 | NS | NS | NS | 0.25 U | 0.32 UJ | 0.27 U | 0.34 U | 0.25 U | 0.22 UJ |
| Aroclor-1242 | NS | NS | NS | 0.25 U | 0.32 UJ | 0.27 U | 0.34 U | 0.25 U | 0.22 UJ |
| Aroclor-1248 | NS | NS | NS | 0.25 U | 0.32 U | 4.8 | 0.34 U | 0.25 U | 0.22 U |
| Aroclor-1254 | NS | NS | NS | 0.25 U | 0.32 U | 0.27 U | 0.34 U | 0.25 U | 0.22 U |
| Aroclor-1260 | NS | NS | NS | 0.25 U | 0.32 U | 0.27 U | 0.34 U | 0.25 U | 0.22 U |
| PCBs, Total | 0.1 | 1 | 1 | 0.25 U | 0.32 U | 4.8 | 0.34 U | 0.25 U | 0.22 U |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

J - Estimated value.

U - Analyte was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - New York State Department of Environmental Conservation, Soil Cleanup Objectives (SCOs) (6NYCRR Part 375 and CP-51).

NS - No NYSDEC standard exists for this analyte.

PCBs - Polychlorinated Biphenyls.

Values in \boldsymbol{bold} indicate the analyte was detected.

Shading indicates result above the corresponding SCO.

 $^{(a)}$ - Criteria applicable to the sum of endosulfan I, endosulfan II and endosulfan sulfate.



Table 19 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Subsurface Soil for Metals

| | | SAMPLE | E LOCATION: | HFL-MW- | 101 | HFL-MW-1 | 01B | HFL-MW- | -103 | HFL-MW- | 104 | HFL-MW- | 105 | HFL-MW | V-106 |
|-----------|------------------|-------------------|--------------------|-----------|------|-----------|-----|----------|------|-----------|---------------|-----------|---------------|----------|-------|
| | LA | BORATORY | SAMPLE ID: | 480-11842 | 25-1 | 480-13318 | 9-1 | 480-1185 | 14-1 | 480-13360 | 08-1 | 480-13408 | 30-1 | 480-1346 | 513-1 |
| | SA | MPLE DEP | ΓH (FT. BGS): | 16-20 | | 48-50 | | 6-10 | | 9-11 | | 22-24 | | 19-21 | 1 |
| | | SA | MPLE DATE: | 5/23/201 | 7 | 3/27/201 | 8 | 5/24/20 | 17 | 4/4/201 | 8 | 4/11/20 | 18 | 4/20/20 | 018 |
| | | | UNITS: | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/k | g |
| | Unrestricted | Residential | Commercial | | | | | | | | | | | | |
| ANALYTES | Use SCO* | Use SCO* | Use SCO* | Results | S | Results | ; | Result | s | Results | S | Result | s | Resul | ts |
| Aluminum | NS | NS | NS | 11,700 | | 26,200 | | 14,700 | | 15,100 | | 13,500 | | 15,800 | |
| Antimony | NS | NS | NS | 17.9 | U | 20.6 | UJ | 18.6 | U | 22.8 | UJ | 18.6 | UJ | 16.2 | UJ |
| Arsenic | 13 | 16 | 16 | 4.3 | J- | 10.5 | | 9 | J- | 8.1 | | 5.2 | | 4.9 | |
| Barium | 350 | 350 | 400 | 108 | | 288 | | 157 | | 94.7 | $\mathbf{J}+$ | 80.7 | $\mathbf{J}+$ | 121 | |
| Beryllium | 7.2 | 14 | 590 | 0.59 | | 1.4 | | 0.73 | | 0.61 | | 0.71 | | 0.73 | |
| Cadmium | 2.5 | 2.5 | 9.3 | 0.2 | J | 0.19 | J | 0.17 | J | 0.061 | J | 0.083 | J | 0.064 | J |
| Calcium | NS | NS | NS | 14,200 | | 4,250 | | 1,740 | | 22,800 | $\mathbf{J}+$ | 9,470 | $\mathbf{J}+$ | 1,080 | |
| Chromium | 1 ^(a) | 22 ^(a) | 400 ^(a) | 13.8 | | 32.4 | | 17.3 | | 17.1 | | 16.2 | | 19.7 | |
| Cobalt | NS | 30 | NS | 7.9 | | 19.2 | | 12.3 | | 12.4 | | 10.8 | | 9 | |
| Copper | 50 | 270 | 270 | 15.9 | | 39.4 | | 26.5 | | 23.8 | | 24.7 | | 19.9 | |
| Iron | NS | 2,000 | NS | 17,700 | | 37,300 | | 25,500 | | 26,400 | | 25,200 | | 21,300 | |
| Lead | 63 | 400 | 1,000 | 10.1 | | 27.2 | | 15.5 | | 13.9 | | 12.2 | | 10.6 | |
| Magnesium | NS | NS | NS | 7,420 | | 9,650 | | 5,020 | | 11,400 | J+ | 7,110 | J+ | 5,150 | |
| Manganese | 1,600 | 2,000 | 10,000 | 427 | | 604 | | 1,120 | | 434 | | 564 | | 415 | |
| Mercury | 0.18 | 0.81 | 2.8 | 0.015 | J | 0.043 | | 0.025 | | 0.016 | J | 0.012 | J | 0.018 | J |
| Nickel | 30 | 140 | 310 | 17.8 | | 41.5 | | 28.2 | | 26.3 | | 26.8 | | 20 | |
| Potassium | NS | NS | NS | 3,230 | | 6,720 | | 3,410 | | 3,130 | $\mathbf{J}+$ | 2,700 | $\mathbf{J}+$ | 5,210 | |
| Selenium | 3.9 | 36 | 1,500 | 4.8 | U | 5.5 | U | 5 | U | 6.1 | U | 5 | U | 4.3 | U |
| Silver | 2 | 36 | 1,500 | 0.72 | U | 0.83 | U | 0.74 | U | 0.91 | U | 0.74 | U | 0.65 | U |
| Sodium | NS | NS | NS | 80.2 | J | 191 | J | 118 | J | 213 | U | 174 | U | 90 | J |
| Thallium | NS | NS | NS | 7.2 | UJ | 8.3 | U | 7.4 | UJ | 9.1 | UJ | 7.4 | UJ | 6.5 | U |
| Vanadium | NS | 100 | NS | 19.4 | | 40.1 | | 22.9 | | 19.5 | | 19.8 | | 28.2 | |
| Zinc | 109 | 2,200 | 10,000 | 43.3 | | 105 | | 66.4 | | 72.9 | | 70.6 | | 55.7 | |

Notes:

FT. BGS - Feet below ground surface.

mg/kg - Milligrams per kilogram.

- J Estimated value.
- J- Estimated value; biased low.
- J+ Estimated value; biased high.
- U Analyte was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- $*- New\ York\ State\ Department\ of\ Environmental\ Conservation,\ Soil\ Cleanup\ Objectives\ (SCOs)\ (6NYCRR\ Part\ 375\ and\ CP-51).$
- NS No NYSDEC standard exists for this analyte.

Values in \boldsymbol{bold} indicate the analyte was detected.

Shading indicates result above the corresponding SCO.

(a) - SCO for Chromium (VI) used.



Table 20 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Subsurface Soil for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-MW-101 | HFL-MW-101B | HFL-MW-103 | HFL-MW-104 | HFL-MW-105 | HFL-MW-106 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY SAMPLE ID: | 480-118425-1 | 480-133189-1 | 480-118514-1 | 480-133608-1 | 480-134080-1 | 480-134613-1 |
| SAMPLE DEPTH (FT. BGS): | 16-20 | 48-50 | 6-10 | 9-11 | 22-24 | 19-21 |
| SAMPLE DATE: | 5/23/2017 | 3/27/2018 | 5/24/2017 | 4/4/2018 | 4/11/2018 | 4/20/2018 |
| UNITS: | μg/kg | μg/kg | μg/kg | μg/kg | μg/kg | μg/kg |
| ANALYTES | Results | Results | Results | Results | Results | Results |
| Perfluorobutanoic acid (PFBA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluoropentanoic acid (PFPeA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorohexanoic acid (PFHxA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluoroheptanoic acid (PFHpA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorononanoic acid (PFNA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorodecanoic acid (PFDA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluoroundecanoic acid (PFUnA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorododecanoic acid (PFDoA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorotridecanoic acid (PFTriA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorotetradecanoic acid (PFTeA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorobutanesulfonic acid (PFBS) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorohexanesulfonic acid (PFHxS) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluoroheptanesulfonic acid (PFHpS) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorooctanesulfonic acid (PFOS) | 0.25 U | 0.66 U | 0.25 U | 0.71 U | 0.63 U | 0.57 U |
| Perfluorodecanesulfonic acid (PFDS) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorooctane Sulfonamide (FOSA) | 0.25 U | 0.26 U | 0.25 U | 0.29 U | 0.25 U | 0.23 U |
| Perfluorooctanoic acid (PFOA) | 1.6 | 0.3 | 0.36 | 0.46 | 0.23 J | 0.33 |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | NA | NA | 2.9 U | 2.5 U | 2.3 U |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | NA | NA | 2.9 U | 2.5 U | 2.3 U |
| N-ethyl perfluorooctane sulfonamidoacetic acid | NA | NA | NA | 2.9 U | 2.5 U | 2.3 U |
| (N-EtFOSAA) | | | | | | |
| N-methyl perfluorooctane sulfonamido) acetic acid (N-MeFOSAA) | NA | NA | NA | 2.9 U | 2.5 U | 2.3 U |

Notes:

FT. BGS - Feet below ground surface.

μg/kg - Micrograms per kilogram.

U - Analyte was not detected at specified quantitation limit.

Per- and polyfluoroalkyl substances (PFAS) soil sampling results were evaluated by comparison to the NYSDOH preliminary Residential Use SCO of 140 μ g/kg developed for a potential site or sites located in the Hoosick Falls area.

NA - Sample not analyzed for the listed analyte.



J - Estimated value.

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Volatile Organic Compounds

| SAMP | SAMPLE LOCATION: | | FL-GW-PW1 HFL-MW-001B | | | HFIN | /W-002 | HFIN | MW-004 | HFL-N | MW-101 | HFL-MW-101B | HFL-MW-101C |
|--|---------------------|---------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | RY SAMPLE ID: | | 480-137103-15 | 480-119270-4 | 480-137103-1 | 480-119270-5 | 480-137103-2 | 480-119270-6 | 480-137103-3 | 480-119270-1 | 480-137103-4 | 480-137103-5 | 480-137103-6 |
| | AMPLE DATE | | 06/06/2018 | 6/8/2017 | 06/06/2018 | 6/8/2017 | 06/07/2018 | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 |
| | UNITS | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| ANALYTES | Class GA Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| 1,1,1-Trichloroethane | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| 1,1,2,2-Tetrachloroethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane (Freon 113) | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,4-Trichlorobenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.04 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichlorobenzene | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | 0.6 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichlorobenzene | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,4-Dichlorobenzene | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Butanone (MEK) | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| 2-Hexanone (MBK) | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 UJ | 5 U | 5 U | 5 U |
| 4-Methyl-2-pentanone (MIBK) | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Acetone | 50 | 10 U | 10 UJ | 10 U | 4.5 J | 10 U | 10 U | 10 U |
| Benzene | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromodichloromethane | 50 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromoform | 50 | 1 U | 1 U | 1 U | 1 UJ | 1 UJ | 1 UJ |
| Bromomethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| Carbon Disulfide | 60 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.27 J | 1 U |
| Carbon Tetrachloride | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| Chlorobenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| Chloroform | 7 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloromethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,4-Dioxane | 0.35 ^(a) | R | R | R | R | R | 160 J | R | R | R | R | R | R |
| cis-1,2-Dichloroethylene | 5 | 1 U | 1.2 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| cis-1,3-Dichloropropene | 0.4 ^(b) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chlorodibromomethane | 50 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane (Freon 12) | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| Ethylbenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dibromoethane (EDB) | 0.0006 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Isopropylbenzene (Cumene) | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | NS | 2.5 UJ | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U |
| Methyl tert-Butyl Ether (MTBE) | 10 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methylcyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methylene Chloride | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Styrene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Toluene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,2-Dichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | 0.4 ^(b) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichlorofluoromethane (Freon 11) | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U |
| Vinyl Chloride | 2 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1.8 | 1 U | 1 U |
| Xylene (Total) | 5 ^(c) | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |

Notes:

 $\mu g/L$ - Micrograms per liter.

- J Estimated value.
- R Rejected data point during data validation.
- U Compound was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- * NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
- NS No NYSDEC standard exists for this analyte.
- Values in **bold** indicate the compound was detected.

Shading indicates result is above the corresponding Class GA Value.

- (a) NYSDEC screening level for 1,4-Dioxane.
- ^(b) Criteria applicable to the sum of the cis and trans isomers.
- $(c) There is no \ Standard \ or \ Guidance \ Value \ for \ Xylene \ (Total). \ The \ Standard \ for \ o-Xylene, \ m-Xylene, \ and \ p-Xylene \ is \ 5 \ \mu g/L.$



Table 21 (continued)

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Volatile Organic Compounds

| SAMPI E | LOCATION: | HEI " | /W-102 | HEI "Y | 1W-103 | HFL-MW-104 | HFL-MW-104C | HFL-MW-105 | HFL-MW-105C | HFL-MW-106 | HFL-MW-106C | |
|--|-------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|--|
| LABORATORY | | 480-119270-2 | 480-137103-7 | 480-119270-3 | 480-137103-8 | 480-137103-9 | 480-137103-10 | 480-137103-11 | 480-137103-12 | 480-137103-13 | 480-137103-14 | |
| | MPLE DATE: | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 | 06/05/2018 | 06/05/2018 | 06/05/2018 | 06/06/2018 | |
| 5.2 | UNITS: | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | |
| | Class GA | 1.0 | 10 | 1.0 | 1.0 | 1.6 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | |
| ANALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | |
| 1,1,1-Trichloroethane | 5 | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,1,2,2-Tetrachloroethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,1,2-Trichloroethane | 1 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U 1 U | 1 U | 1 U | 1 U 1 U | |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane (Freon 113) 1,1-Dichloroethane | 5 | 1 U 1 U | 1 U 1 U | 1 U 1 U | 1 U 1 U | 1 U | |
| 1,1-Dichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2,4-Trichlorobenzene | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.04 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2-Diolono-5-emolopropane (BBCI) | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2-Dichloroethane | 0.6 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2-Dichloropropane | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,3-Dichlorobenzene | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,4-Dichlorobenzene | 3 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 2-Butanone (MEK) | 50 | 10 U | 10 U | 10 U | 10 U | 10 U | |
| 2-Hexanone (MBK) | 50 | 5 U | 5 U | 5 UJ | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | |
| 4-Methyl-2-pentanone (MIBK) | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | |
| Acetone | 50 | 6.6 J | 10 U | 10 UJ | 10 U | 10 U | 10 U | 10 UJ | 10 UJ | 10 U | 10 UJ | |
| Benzene | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Bromodichloromethane | 50 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Bromoform | 50 | 1 U | 1 UJ | 1 U | 1 UJ | 1 UJ | 1 UJ | 1 U | 1 U | 1 UJ | 1 U | |
| Bromomethane | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Carbon Disulfide | 60 | 1 U | 1 U | 1 U | 1 U | 1 U | 0.68 J | 1 U | 0.39 J | 1 U | 0.3 J | |
| Carbon Tetrachloride | 5 | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chlorobenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chloroethane | 5 | 1 U | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chloroform | 7 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chloromethane | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,4-Dioxane | 0.35 ^(a) | R | R | R | R | R | R | R | R | R | R | |
| cis-1,2-Dichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| cis-1,3-Dichloropropene | $0.4^{(b)}$ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Cyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chlorodibromomethane | 50 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Dichlorodifluoromethane (Freon 12) | 5 | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Ethylbenzene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2-Dibromoethane (EDB) | 0.0006 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Isopropylbenzene (Cumene) | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Methyl acetate | NS | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | |
| Methyl tert-Butyl Ether (MTBE) | 10 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Methylcyclohexane | NS | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Methylene Chloride | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Styrene Tetrachloroethylone | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Tetrachloroethylene Toluene | 5 | 1 U 1 U | 1 U | 1 U 1 U | 1 U | 1 U 1 U | 1 U 1 U | 1 U | 1 U | 1 U 1 U | 1 U 1 U | |
| | 5 | 1 U | 1 U | 1 U | 1 U | | 1 U | 1 U | 1 U | | | |
| trans-1,2-Dichloroethylene trans-1,3-Dichloropropene | 5 0.4 ^(b) | 1 U 1 U | 1 U 1 U | 1 U | 1 U 1 U | 1 U 1 U | 1 U | 1 U 1 U | 1 U 1 U | 1 U 1 U | 1 U 1 U | |
| * * | | | | 1 1 | | | | | | | | |
| Trichloroethylene | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Trichlorofluoromethane (Freon 11) | 5 | 1 UJ | 1 U | 1 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Vinyl Chloride | 2 5(c) | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Xylene (Total) | 5 ^(c) | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | |

Notes:

 $\mu g/L$ - Micrograms per liter.

- J Estimated value.
- R Rejected data point during data validation.
- U Compound was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- * NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
- NS No NYSDEC standard exists for this analyte.

Values in **bold** indicate the compound was detected.

Shading indicates result is above the corresponding Class GA Value.

- (a) NYSDEC screening level for 1,4-Dioxane.
- ^(b) Criteria applicable to the sum of the cis and trans isomers.
- (c) There is no Standard or Guidance Value for Xylene (Total). The Standard for o-Xylene, m-Xylene, and p-Xylene is 5 μ g/L.



Table 22 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY Summary of Results of Analysis of Groundwater and Leachate for Semivolatile Organic Compounds

| | SAMPLE LOCATION: | HFL-G | W-PW1 | HFL-M | fW-001B | HFL-M | IW-002 | HFL-N | IW-004 | HFL-N | MW-101 | HFL-MW-101B | HFL-MW-101C | HFL-N | MW-102 | HFL-N | MW-103 | HFL-MW-104 | HFL-MW-104 |
|--|------------------------|-------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|--------------------|--------------------|----------------------|--------------------|------------------|--------------------|--------------------|--------------------|
| | LABORATORY SAMPLE ID: | 480-119437-1 | 480-137103-15 | 480-119270-4 | 480-137103-1 | 480-119270-5 | 480-137103-2 | 480-119270-6 | 480-137103-3 | 480-119270-1 | 480-137103-4 | 480-137103-5 | 480-137103-6 | 480-119270-2 | 480-137103-7 | 480-119270-3 | 480-137103-8 | 480-137103-9 | 480-137103-1 |
| | SAMPLE DATE: UNITS: | 6/13/2017 μg/L | 06/06/2018 μg/L | 6/8/2017 µg/L | 06/06/2018 μg/L | 6/8/2017 μg/L | 06/07/2018 μg/L | 6/8/2017 μg/L | 06/07/2018 μg/L | 6/7/2017 µg/L | 06/06/2018 μg/L | 06/06/2018 μg/L | 06/06/2018 μg/L | 6/8/2017 μg/L | 06/07/2018 μg/L | 6/7/2017 µg/L | 06/06/2018 μg/L | 06/06/2018 μg/L | 06/06/2018 μg/L |
| | Class GA | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| NALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| ,1'-Biphenyl ,2'-Oxybis(1-chloropropane) | 5 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| ,4,5-Trichlorophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| ,4,6-Trichlorophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| ,4-Dichlorophenol | 5 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| ,4-Dimethylphenol | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| ,4-Dinitrophenol | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| ,4-Dinitrotoluene | 5 | 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U |
| ,6-Dinitrotoluene -Chloronaphthalene | 10 | 5 U 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U |
| -Chlorophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 T |
| -Methylphenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 T |
| -Methylnaphthalene | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| -Nitroaniline | 5 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| -Nitrophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| ,3'-Dichlorobenzidine | 5 | 5 U | 5 U | 5 UJ | 5 U | 5 U | 5 U | 5 UJ | 5 U | 5 UJ | 5 U | 5 U | 5 L |
| -Nitroaniline | 5 | 10 U | 10 U 10 U | 10 U 10 U | 10 U | 10 U | 10 U 10 U | 10 U | 10 U | 10 U 10 U | 10 U 10 U | 10 U 10 U | 10 U 10 U | 10 U | 10 U | 10 U 10 U | 10 U | 10 U | 10 U |
| ,6-Dinitro-2-methylphenol | T ^(a) | 10 U 5 U | 10 U 5 U | 5 U | 10 U 5 U | 10 U 5 U | 10 U | 10 U 5 U | 10 U 5 U | 5 U | 10 U | | 5 U | 10 U 5 U | 10 U 5 U | 5 U | 10 U 5 U | 10 U | |
| -Bromophenyl-phenylether -Chloro-3-methylphenol | NS 1(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U 5 U | 5 U 5 U |
| -Chloroaniline | 5 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| -Chlorophenyl-phenyl ether | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| -Methylphenol | NS | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| -Nitroaniline | 5 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 L |
| -Nitrophenol | 1 ^(a) | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| cenaphthene | 20 NS | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| cenaphthylene cetophenone | NS NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| anthracene | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| atrazine | 7.5 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| Benzaldehyde | NS 0.002 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| Senzo(a)anthracene Senzo(a)pyrene | 0.002 ND | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| denzo(b)fluoranthene | 0.002 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| Senzo(g,h,i)perylene | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| enzo(k)fluoranthene | 0.002 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 L |
| sis(2-chloroethoxy)methane sis(2-chloroethyl) ether | 5 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U |
| sis(2-ethylhexyl)phthalate | 5 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Sutylbenzylphthalate | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Caprolactam | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Carbazole | NS 0.002 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 L |
| Chrysene Dibenz(a,h)anthracene | 0.002 NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U |
| Pi-n-butylphthalate | 50 | 0.33 J | 5 U | 0.46 J | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 0.35 |
| Di-n-octylphthalate | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Dibenzofuran | NS 50 | 10 U | 10 U 5 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U |
| Diethyl phthalate Dimethylphthalate | 50 50 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 0.72 J 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U |
| luoranthene | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 t |
| luorene | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 1 |
| exachlorobenzene | 0.04 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 1 |
| exachlorobutadiene | 0.5 | 5 UJ 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 |
| exachlorocyclopentadiene exachloroethane | 5 | 5 U 5 U | 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 5 |
| deno(1,2,3-cd)pyrene | 0.002 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 1 |
| ophorone | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 1 |
| Nitroso-di-n-propylamine | NS 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 |
| -Nitrosodiphenylamine aphthalene | 50 10 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 5 |
| trobenzene | 0.4 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 |
| entachlorophenol | 1 ^(a) | 10 U | 10 UJ | 10 U | 10 UJ | 10 U | 10 UJ | 10 U | 10 UJ | 10 U | 10 UJ | 10 UJ | 10 UJ | 10 U | 10 UJ | 10 U | 10 UJ | 10 UJ | 10 U |
| henanthrene | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 |
| henol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 |
| yrene | 50 | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 |
| 1-Dioxane | 0.35 ^(b) | NA | 0.74 | NA | 0.2 U | NA | 180 J+ | NA | 0.51 | NA | 1.9 | 0.8 | 0.19 J | NA | 6.7 | NA | 0.2 U | 0.21 | 0.2 |

Notes: μg/L - Micrograms per liter. J - Estimated value.

J+ - Estimated value; biased high.
U - Compound was not detected at specified quantitation limit.

UJ - Estimated non-detect.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

NA - Sample not analyzed for the listed analyte.

NS - No NYSDEC standard exists for this analyte.

ND - A non-detectable concentration by the approved analytical method specified in Section 700.3 of the NYCRR Water Quality Regulations.

Values in **bold** indicate the compound was detected.

(a) - Criteria applicable to total phenolics. (b) - NYSDEC screening level for 1,4-Dioxane.

Shading indicates result is above the corresponding Class GA Value.



Table 22 (continued)

Page 2 of 2

New York State Department of Environmental Conservation
Hoosick Falls Landfill - Hoosick Falls, NY
Summary of Results of Analysis of Groundwater and Leachate for Semivolatile Organic Compounds

| CAMPLE | LOCATION | | | TIEL NOV 100 | |
|--|---------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
| SAMPLE LABORATORY | E LOCATION: SAMPLE ID: | HFL-MW-105 480-137103-11 | HFL-MW-105C 480-137103-12 | HFL-MW-106 480-137103-13 | HFL-MW-106C 480-137103-14 |
| | MPLE DATE: | 06/05/2018 | 06/05/2018 | 06/05/2018 | 06/06/2018 |
| | UNITS: | μg/L | μg/L | μg/L | μg/L |
| ANALYTES | Class GA Value* | Results | Results | Results | Results |
| ANALYTES 1,1'-Biphenyl | 5 | 5 U | 5 U | 5 U | 5 U |
| 2,2'-Oxybis(1-chloropropane) 2,4,5-Trichlorophenol | 5 | 5 U | 5 U | 5 U | 5 U |
| 2,4,5-Trichlorophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 2,4,6-Trichlorophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 2,4-Dichlorophenol | 5 50 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| 2.4-Dinietrophenol | 10 | 10 U | 10 U | 10 U | 10 U |
| 2,4-Dinitrotoluene | 5 | 5 U | 5 U | 5 U | 5 U |
| 2,6-Dinitrotoluene | 5 | 5 U | 5 U | 5 U | 5 U |
| 2.4.6-Trichlorophenol 2.4-Dichlorophenol 2.4-Dimethylphenol 2.4-Dimitrophenol 2.4-Dimitrotoluene 2.6-Dimitrotoluene 2-Chloronaphthalene 2-Chlorophenol | 10 | 5 U | 5 U | 5 U | 5 U |
| 2-Chiorophenol 2-Methylphenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 2-Methylphenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 2-Methylnaphthalene 2-Nitroaniline | NS 5 | 5 U 10 U | 5 U 10 U | 5 U 10 U | 5 U 10 U |
| 2-Nitrophenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 3,3'-Dichlorobenzidine | 5 | 5 U | 5 U | 5 U | 5 U |
| 3-Nitroaniline | 5 | 10 U | 10 U | 10 U | 10 U |
| 4,6-Dinitro-2-methylphenol | 1 ^(a) | 10 U | 10 U | 10 U | 10 U |
| 2-Methylphenol 2-Methylnaphthalene 2-Nitroaniline 2-Nitrophenol 3,3'-Dichlorobenzidine 3-Nitroaniline 4,6-Dinitro-2-methylphenol 4-Bromophenyl-phenylether 4-Chloro-3-methylphenol 4-Chloroaniline 4-Chlorophenyl-phenyl ether 4-Methylphenol 4-Nitroaniline 4-Nitrophenol Acenaphthene | NS | 5 U | 5 U | 5 U | 5 U |
| 4-Chloro-3-methylphenol | 1 ^(a) | 5 U | 5 U | 5 U | 5 U |
| 4-Chloroaniline | 5 | 5 U | 5 U | 5 U | 5 U |
| 4-Chlorophenyl-phenyl ether 4 Mathylphenyl | NS NS | 5 U 10 U | 5 U 10 U | 5 U 10 U | 5 U 10 U |
| 4-Nitroaniline | 5 | 10 U | 10 U | 10 U | 10 U |
| 4-Nitrophenol | 1 ^(a) | 10 U | 10 U | 10 U | 10 U |
| Acenaphthene | 20 | 5 U | 5 U | 5 U | 5 U |
| Acenaphthylene | NS | 5 U | 5 U | 5 U | 5 U |
| Actophenone | NS 50 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| 4-Nitrophenol Acenaphthene Acenaphthylene Acetophenone Anthracene Atrazine Benzaldehyde Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Bis(2-chloroethoxy)methane Bis(2-chloroethy) ether Bis(2-ethylhexyl)phthalate Butylbenzylphthalate Caprolactam Carbazole Chrysene Dibenz(a,h)anthracene Di-n-butylphthalate Di-n-octylphthalate | 7.5 | 5 U | 5 U | 5 U | 5 U |
| Benzaldehyde | NS | 5 U | 5 U | 5 U | 5 U |
| Benzo(a)anthracene | 0.002 | 5 U | 5 U | 5 U | 5 U |
| Benzo(a)pyrene | ND | 5 U | 5 U | 5 U | 5 U |
| Benzo(a h i)perylene | 0.002 NS | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| Benzo(k)fluoranthene | 0.002 | 5 U | 5 U | 5 U | 5 U |
| Bis(2-chloroethoxy)methane | 5 | 5 U | 5 U | 5 U | 5 U |
| Bis(2-chloroethyl) ether | 1 | 5 U | 5 U | 5 U | 5 U |
| Bis(2-ethylhexyl)phthalate | 5 | 5 U | 5 U | 5 U | 5 U |
| Caprolactam | 50 NS | 5 U 5 U | 5 U 44 | 5 U 5 U | 5 U 5 U |
| Carbazole | NS | 5 U | 5 U | 5 U | 5 U |
| Chrysene | 0.002 | 5 U | 5 U | 5 U | 5 U |
| Dibenz(a,h)anthracene | NS | 5 U | 5 U | 5 U | 5 U |
| Di-n-butylphthalate | 50 50 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| Dibenzofuran | NS | 10 U | 10 U | 10 U | 10 U |
| Dietilyi pittiaiate | 50 | 5 U | 1.9 J | 5 U | 5 U |
| Dimethylphthalate | 50 | 5 U | 5 U | 5 U | 5 U |
| Fluoranthene Fluorene | 50 | 5 U | 5 U | 5 U | 5 U |
| riuorene Hexachlorobenzene | 50 0.04 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| Hexachlorobutadiene | 0.5 | 5 U | 5 U | 5 U | 5 U |
| Hexachlorocyclopentadiene | 5 | 5 U | 5 U | 5 U | 5 U |
| Hexachloroethane | 5 | 5 U | 5 U | 5 U | 5 U |
| Hexachlorobenzene Hexachlorocyclopentadiene Hexachlorocyclopentadiene Hexachlorocyclopentadiene Hexachlorocyclopentadiene Indeno(1,2,3-cd)pyrene Isophorone | 0.002 50 | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| isopiorone n-Nitroso-di-n-propylamine N-Nitrosodiphenylamine Naphthalene Nitrobenzene Pentachlorophenol | NS NS | 5 U | 5 U | 5 U | 5 U |
| N-Nitrosodiphenylamine | 50 | 5 U | 5 U | 5 U | 5 U |
| Naphthalene | 10 | 5 U | 5 U | 5 U | 5 U |
| Nitrobenzene | 0.4 | 5 U | 5 U | 5 U | 5 U |
| remacmorophenoi | 1 ^(a) | 10 UJ | 10 UJ | 10 UJ | 10 UJ |
| Phenanthrene Phenol | 50 1 ^(a) | 5 U 5 U | 5 U 5 U | 5 U 5 U | 5 U 5 U |
| Pyrene | 50 | 5 U | 5 U | 5 U | 5 U |
| 1,4-Dioxane | 0.35 ^(b) | 0.16 J | 0.2 U | 0.2 U | 0.2 U |
| Note: | 0.55 | | | | |

- μg/L Micrograms per liter. J Estimated value.

- J+ Estimated value; biased high.
 U Compound was not detected at specified quantitation limit.
- UJ Estimated non-detect.
- * NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.
- NA Sample not analyzed for the listed analyte.
- NS No NYSDEC standard exists for this analyte.
- ND A non-detectable concentration by the approved analytical method specified in Section 700.3 of the NYCRR Water Quality Regulations.
- Values in **bold** indicate the compound was detected.
- Shading indicates result is above the corresponding Class GA Value. (a) - Criteria applicable to total phenolics.
- (b) NYSDEC screening level for 1,4-Dioxane.



Table 23
New York State Department of Environmental Conservation
Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Pesticides and Polychlorinated Biphenyls

| SAMPLE L | OCATION: | HFL-G | GW-PW1 | HFL-M | W-001B | HFL-N | 1W-002 | HFL-N | 1W-004 | HFL-N | MW-101 | HFL-MW-101B | HFL-MW-101C |
|---------------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY S. | AMPLE ID: | 480-119437-1 | 480-137103-15 | 480-119270-4 | 480-137103-1 | 480-119270-5 | 480-137103-2 | 480-119270-6 | 480-137103-3 | 480-119270-1 | 480-137103-4 | 480-137103-5 | 480-137103-6 |
| SAMI | PLE DATE: | 6/13/2017 | 06/06/2018 | 6/8/2017 | 06/06/2018 | 6/8/2017 | 06/07/2018 | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 |
| | UNITS: | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| | Class GA | | | | | | | | | | | | |
| ANALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Pesticides | | | | | | | | | | | | | |
| 4,4'-DDD | 0.3 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDE | 0.2 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDT | 0.2 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Aldrin | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-BHC | 0.01 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-Chlordane | $0.05^{(a)}$ | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| beta-BHC | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| delta-BHC | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Dieldrin | 0.004 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan I | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan II | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan sulfate | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin aldehyde | 5 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin ketone | 5 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| gamma-BHC (Lindane) | 0.05 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| trans-Chlordane | $0.05^{(a)}$ | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.011 J | 0.05 U | 0.014 J | 0.05 U | 0.017 J | 0.019 J | 0.05 U |
| Heptachlor | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Heptachlor epoxide | 0.03 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Methoxychlor | 35 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Toxaphene | 0.06 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| PCBs | | | | | | | | | | | | | |
| Aroclor-1016 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Aroclor-1221 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Aroclor-1232 | NS | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 UJ | 0.5 UJ |
| Aroclor-1242 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Aroclor-1248 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Aroclor-1254 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| Aroclor-1260 | NS | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| PCBs, Total | 0.09 | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 UJ | 0.5 UJ |

Notes:

 $\mu g/L$ - Micrograms per liter.



J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated non-detect.

^{* -} NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

NS - No NYSDEC standard exists for this analyte.

ND - A non-detectable concentration by the approved analytical method specified in Section 700.3 of the NYCRR Water Quality Regulations.

PCBs - Polychlorinated Biphenyls.

Values in **bold** indicate the compound was detected.

⁽a) - Criteria for Chlordane used.

Table 23 (continued)

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Pesticides and Polychlorinated Biphenyls

| SAMPLE LOCATION: | | HFL-N | MW-102 | HFL-N | MW-103 | HFL-MW-104 | HFL-MW-104C | HFL-MW-105 | HFL-MW-105C | HFL-MW-106 | HFL-MW-106C |
|---------------------|-----------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| LABORATORY S. | AMPLE ID: | 480-119270-2 | 480-137103-7 | 480-119270-3 | 480-137103-8 | 480-137103-9 | 480-137103-10 | 480-137103-11 | 480-137103-12 | 480-137103-13 | 480-137103-14 |
| SAMPLE DATE | | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 | 06/05/2018 | 06/05/2018 | 06/05/2018 | 06/06/2018 |
| | UNITS: | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| | Class GA | | | | | | | | | | |
| ANALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Pesticides | | | | | | | | | | | |
| 4,4'-DDD | 0.3 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDE | 0.2 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| 4,4'-DDT | 0.2 | 0.05 U | 0.05 U | 0.05 U | 0.013 J | 0.05 U |
| Aldrin | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-BHC | 0.01 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| alpha-Chlordane | 0.05(a) | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| beta-BHC | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| delta-BHC | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Dieldrin | 0.004 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan I | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan II | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endosulfan sulfate | NS | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin | ND | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin aldehyde | 5 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Endrin ketone | 5 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| gamma-BHC (Lindane) | 0.05 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| trans-Chlordane | 0.05(a) | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Heptachlor | 0.04 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Heptachlor epoxide | 0.03 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Methoxychlor | 35 | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U |
| Toxaphene | 0.06 | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| PCB Aroclors | | | | | | | | | | | |
| Aroclor-1016 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 U | 0.5 U |
| Aroclor-1221 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 UJ | 0.5 U |
| Aroclor-1232 | NS | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 UJ | 0.5 UJ | 0.5 UJ | 2.5 UJ | 0.5 U | 0.5 UJ |
| Aroclor-1242 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 U | 0.5 U |
| Aroclor-1248 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 U | 0.5 U |
| Aroclor-1254 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 UJ | 0.5 U |
| Aroclor-1260 | NS | 0.5 U | 0.5 U | 2.5 U | 0.5 U | 0.5 U |
| PCBs, Total | 0.09 | 0.5 U | 0.5 UJ | 0.5 U | 0.5 UJ | 0.5 UJ | 0.5 UJ | 0.5 UJ | 2.5 UJ | 0.5 UJ | 0.5 UJ |

Notes:

 μ g/L - Micrograms per liter.



J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated non-detect.

^{* -} NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

NS - No NYSDEC standard exists for this analyte.

ND - A non-detectable concentration by the approved analytical method specified in Section 700.3 of the NYCRR Water Quality Regulations.

PCBs - Polychlorinated Biphenyls.

Values in **bold** indicate the compound was detected.

⁽a) - Criteria for Chlordane used.

Table 24
New York State Department of Environmental Conservation
Hoosick Falls Landfill - Hoosick Falls, NY
Summary of Results of Analysis of Groundwater and Leachate for Metals

| SAMPLE L | OCATION: | HFL-G | W-PW1 | HFL-M | W-001B | HFL-N | /W-002 | HFL-N | MW-004 | HFL-N | MW-101 | HFL-MW-101B | HFL-MW-101C |
|---------------|-----------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY SA | AMPLE ID: | 480-119437-1 | 480-137103-15 | 480-119270-4 | 480-137103-1 | 480-119270-5 | 480-137103-2 | 480-119270-6 | 480-137103-3 | 480-119270-1 | 480-137103-4 | 480-137103-5 | 480-137103-6 |
| SAMI | PLE DATE: | 6/13/2017 | 06/06/2018 | 6/8/2017 | 06/06/2018 | 6/8/2017 | 06/07/2018 | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 |
| | UNITS: | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| | Class GA | | | | | | | | | | | | |
| ANALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Aluminum | NS | 200 U | 200 U | 200 U | 200 U | 950 | 200 U | 650 | 78 J | 150 J | 200 U | 3,700 | 11,400 |
| Antimony | 3 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| Arsenic | 25 | 15 U | 15 U | 15 U | 15 U | 15 U | 15 U | 15 U | 15 U | 8.6 J | 43 | 7.7 J | 8.5 J |
| Barium | 1,000 | 85 | 630 | 47 | 39 | 370 | 330 | 350 | 230 | 560 | 760 | 60 | 170 |
| Beryllium | 3 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 0.54 J |
| Cadmium | 5 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 0.55 J | 2 U | 2 U | 2 U | 2 U | 2 U |
| Calcium | NS | 27,400 | 75,900 | 100,000 | 86,900 | 124,000 | 129,000 | 148,000 | 153,000 | 105,000 | 123,000 | 48,300 | 80,800 |
| Chromium | 50 | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 6.3 | 26 |
| Cobalt | NS | 4 U | 4 U | 4 U | 4 U | 4 U | 4 U | 2.5 J | 4 U | 4 U | 0.85 J | 2.7 J | 12 |
| Copper | 200 | 2.3 J | 10 U | 10 U | 10 U | 10 U | 10 U | 2.7 J | 10 U | 10 U | 10 U | 7.7 J | 43 |
| Iron | 300 | 170 | 35,200 | 92 | 30 J | 1,700 | 2,000 | 2,500 | 1,700 | 4,100 | 11,100 | 4,800 | 18,400 |
| Lead | 25 | 10 U | 10 U | 3 J | 10 U | 5.2 J | 17 |
| Magnesium | 35,000 | 2,900 | 13,600 | 30,100 | 24,300 | 35,600 | 35,700 | 51,500 | 51,300 | 34,400 | 36,400 | 15,000 | 18,800 |
| Manganese | 300 | 5.7 | 830 | 5.8 | 7.5 | 600 | 690 | 10,200 | 3,200 | 1,300 | 1,500 | 1,700 | 1,700 |
| Mercury | 0.7 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Nickel | 100 | 1.4 J | 1.3 J | 10 U | 10 U | 2 J | 10 U | 3.2 J | 10 U | 1.5 J | 10 U | 4.7 J | 20 |
| Potassium | NS | 2,200 | 4,800 | 780 J+ | 590 | 2,000 J+ | 1,300 | 2,300 | 1,900 | 4,600 | 3,300 | 2,400 | 5,500 |
| Selenium | 10 | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U |
| Silver | 50 | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| Sodium | 20,000 | 7,800 | 49,900 | 8,800 | 7,700 | 30,500 | 29,800 | 23,400 | 25,700 | 14,200 | 14,700 | 15,400 | 16,800 |
| Thallium | 0.5 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| Vanadium | NS | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5.7 | 19 |
| Zinc | 2,000 | 10 U | 2.8 J | 2.6 J | 1.7 J | 4.6 J | 10 U | 11 | 2.8 J | 2.5 J | 10 U | 15 | 67 |

Notes:

 $\mu g/L$ - Micrograms per liter.

J - Estimated value.

J+ - Estimated value; biased high.

U - Compound was not detected at specified quantitation limit.

* - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the compound was detected.

Shading indicates result exceeds guidance value.



Table 24 (continued)

New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Metals

| SAMPLE L | OCATION: | HFL-N | /W-102 | HFL-N | MW-103 | HFL-MW-104 | HFL-MW-104C | HFL-MW-105 | HFL-MW-105C | HFL-MW-106 | HFL-MW-106C |
|---------------|-----------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| LABORATORY SA | | 480-119270-2 | 480-137103-7 | 480-119270-3 | 480-137103-8 | 480-137103-9 | 480-137103-10 | 480-137103-11 | 480-137103-12 | 480-137103-13 | 480-137103-14 |
| | PLE DATE: | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 | 06/05/2018 | 06/05/2018 | 06/05/2018 | 06/06/2018 |
| | UNITS: | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L | μg/L |
| | Class GA | 1.0 | , 0 | , 0 | , 0 | | | 10 | | 10 | |
| ANALYTES | Value* | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Aluminum | NS | 2,400 | 7,300 | 280 | 860 | 470 | 200 U | 200 U | 12,500 | 230 | 200 U |
| Antimony | 3 | 20 U | 20 U | 20 U | 20 U | 20 U |
| Arsenic | 25 | 15 U | 15 U | 14 J | 15 U | 15 U |
| Barium | 1,000 | 140 | 240 | 42 | 48 | 99 | 39 | 40 | 410 | 22 | 200 |
| Beryllium | 3 | 2 U | 0.56 J | 2 U | 2 U | 2 U | 2 U | 2 U | 0.97 J | 2 U | 2 U |
| Cadmium | 5 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 0.52 J | 2 U | 2 U |
| Calcium | NS | 106,000 | 73,800 | 63,000 | 97,600 | 105,000 | 83,000 | 76,700 | 70,100 | 24,100 | 43,000 |
| Chromium | 50 | 2.2 J | 8.9 | 4 U | 4 U | 4 U | 4 U | 4 U | 69 | 2.2 J | 4 U |
| Cobalt | NS | 0.84 J | 5.2 | 4 U | 4 U | 4 U | 4 U | 4 U | 22 | 4 U | 4 U |
| Copper | 200 | 3.4 J | 18 | 10 U | 10 U | 10 U | 10 U | 10 U | 96 | 10 U | 10 U |
| Iron | 300 | 2,700 | 10,200 | 300 | 1,100 | 560 | 560 | 19 J | 30,500 | 400 | 740 |
| Lead | 25 | 3 J | 9 J | 10 U | 10 U | 10 U | 10 U | 10 U | 34 | 10 U | 10 U |
| Magnesium | 35,000 | 23,200 | 19,000 | 18,300 | 26,700 | 27,800 | 30,500 | 16,000 | 37,500 | 5,400 | 22,700 |
| Manganese | 300 | 590 | 770 | 67 | 42 | 240 | 1,300 | 7.1 | 1,500 | 54 | 170 |
| Mercury | 0.7 | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| Nickel | 100 | 3.2 J | 10 | 10 U | 10 U | 10 U | 10 U | 10 U | 37 | 10 U | 10 U |
| Potassium | NS | 4,000 | 4,800 | 880 J+ | 1,100 | 910 | 1,400 | 1,200 | 19,800 | 800 | 2,300 |
| Selenium | 10 | 25 U | 25 U | 25 U | 25 U | 25 U |
| Silver | 50 | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| Sodium | 20,000 | 27,000 | 21,900 | 76,000 | 85,800 | 18,300 | 19,800 | 18,700 | 98,700 | 10,600 | 24,800 |
| Thallium | 0.5 | 20 U | 20 U | 20 U | 20 U | 20 U |
| Vanadium | NS | 2.6 J | 10 | 5 U | 5 U | 5 U | 5 U | 5 U | 18 | 5 U | 5 U |
| Zinc | 2,000 | 11 | 34 | 2.5 J | 4.3 J | 3.2 J | 1.6 J | 10 U | 170 | 1.7 J | 10 U |

Notes:

 μ g/L - Micrograms per liter.

- J Estimated value.
- J+ Estimated value; biased high.
- U Compound was not detected at specified quantitation limit.
- $\ensuremath{^*}$ NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA water.

NS - No NYSDEC standard exists for this analyte.

Values in **bold** indicate the compound was detected.

Shading indicates result exceeds guidance value.



Table 25 New York State Department of Environmental Conservation Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-G | W-PW1 | HFL-M | W-001B | HFL-N | MW-002 | HFL-N | MW-004 | HFL-N | MW-101 | HFL-MW-101B | HFL-MW-101C |
|---|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| LABORATORY SAMPLE ID: | 480-119437-1 | 480-137103-15 | 480-119270-4 | 480-137103-1 | 480-119270-5 | 480-137103-2 | 480-119270-6 | 480-137103-3 | 480-119270-1 | 480-137103-4 | 480-137103-5 | 480-137103-6 |
| SAMPLE DATE: | 6/13/2017 | 06/06/2018 | 6/8/2017 | 06/06/2018 | 6/8/2017 | 06/07/2018 | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 |
| UNITS: | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L |
| | | | | | | | | | | | | |
| ANALYTES | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Perfluorobutanoic acid (PFBA) | 2.3 | 7.6 | 7.1 | 3.3 | 71 | 58 | 11 | 9.5 | 8 | 6.7 | 2.1 U | 1.9 U |
| Perfluoropentanoic acid (PFPeA) | 4.5 | 8.6 | 8 | 2.1 | 99 | 88 | 8.8 | 7.7 | 6.8 | 5.2 | 2.1 U | 1.9 U |
| Perfluorohexanoic acid (PFHxA) | 1.2 J | 30 | 18 | 6.5 | 610 | 520 | 28 | 26 | 37 | 27 | 2.2 UJ | 1.9 U |
| Perfluoroheptanoic acid (PFHpA) | 1.8 J | 27 | 21 | 6.6 | 450 | 500 | 40 | 36 | 55 | 45 | 1.3 J | 0.54 J |
| Perfluorononanoic acid (PFNA) | 1.9 U | 3.7 | 1.8 U | 1.9 U | 3.3 | 20 U | 6.6 | 11 | 4.1 | 2.6 | 2.1 U | 1.9 U |
| Perfluorodecanoic acid (PFDA) | 1.9 U | 0.53 J | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluoroundecanoic acid (PFUnA) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluorododecanoic acid (PFDoA) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluorotridecanoic acid (PFTriA) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluorotetradecanoic acid (PFTeA) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 U | 2.4 | 1.1 J | 0.52 J | 7.3 | 6.6 J | 1.8 J | 1.6 J | 2.1 | 1.9 | 2.1 U | 1.9 U |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 U | 2.7 | 2.3 | 1.9 U | 5.6 | 20 U | 3.3 | 3.2 | 4.9 | 3.8 | 2.1 U | 1.9 U |
| Perfluoroheptanesulfonic acid (PFHpS) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 0.39 J | 1 J | 0.77 J | 2.1 U | 1.9 U |
| Perfluorooctanesulfonic acid (PFOS) | 2.2 | 10 | 1.2 J | 0.71 J | 1.9 U | 20 U | 6.7 | 9.9 J | 46 | 34 | 2.1 U | 1.9 U |
| Perfluorodecanesulfonic acid (PFDS) | 1.9 U | 2 U | 1.8 U | 1.9 U | 1.9 U | 20 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 1.9 U |
| Perfluorooctane Sulfonamide (FOSA) | 1.9 UJ | 2 U | 1.8 UJ | 1.9 U | 1.9 UJ | 20 U | 1.9 UJ | 2.1 U | 1.9 UJ | 1.9 U | 2.1 U | 1.9 U |
| Perfluorooctanoic acid (PFOA) | 43 | 1,300 | 550 | 310 | 24,000 | 25,000 | 1,900 | 2,200 | 5,300 | 4,400 | 28 | 10 |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | 20 U | NA | 19 U | NA | 200 U | NA | 21 U | NA | 3.5 J | 21 U | 19 U |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | 20 U | NA | 19 U | NA | 200 U | NA | 21 U | NA | 19 U | 21 U | 19 U |
| N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine (N- | NA | 20 U | NA | 19 U | NA | 200 U | NA | 21 11 | NA | 19 U | 21 U | 19 U |
| EtFOSAA) | NA | 20 U | NA | 19 U | I NA | 200 U | NA NA | 21 U | I NA | 19 0 | 21 0 | 19 0 |
| 2-(N-methyl perfluorooctanesulfonamido) acetic acid (N- MeFOSAA) | NA | 20 U | NA | 19 U | NA | 200 U | NA | 21 U | NA | 19 U | 21 U | 19 U |

Notes:

ng/L - Nanograms per liter.

- J Estimated value.
- U Compound was not detected at specified quantitation limit.
- UJ Estimated non-detect

For reference only: The USEPA has set a Health Advisory Level of 70 ng/L for PFOA and PFOS in drinking water (individual or combined concentrations).

NA - Sample not analyzed for the listed analyte.

Values in **bold** indicate the compound was detected.



Table 25 (continued)

New York State Department of Environmental Conservation

Hoosick Falls Landfill - Hoosick Falls, NY

Summary of Results of Analysis of Groundwater and Leachate for Per- and Polyfluoroalkyl Substances

| SAMPLE LOCATION: | HFL-N | MW-102 | HFL-N | MW-103 | HFL-MW-104 | HFL-MW-104C | HFL-MW-105 | HFL-MW-105C | HFL-MW-106 | HFL-MW-106C |
|---|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| LABORATORY SAMPLE ID: | 480-119270-2 | 480-137103-7 | 480-119270-3 | 480-137103-8 | 480-137103-9 | 480-137103-10 | 480-137103-11 | 480-137103-12 | 480-137103-13 | 480-137103-14 |
| SAMPLE DATE: | 6/8/2017 | 06/07/2018 | 6/7/2017 | 06/06/2018 | 06/06/2018 | 06/06/2018 | 06/05/2018 | 06/05/2018 | 06/05/2018 | 06/06/2018 |
| UNITS: | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L | ng/L |
| ANALYTES | Results | Results | Results | Results | Results | Results | Results | Results | Results | Results |
| Perfluorobutanoic acid (PFBA) | 3 | 3.3 | 4.3 | 4.8 | 7.3 | 2.1 U | 3.1 | 1.9 U | 2 U | 1.9 U |
| Perfluoropentanoic acid (PFPeA) | 1.9 U | 3.2 | 4.1 | 4.9 | 7.8 | 2.1 U | 3.1 | 1.9 U | 0.54 J | 1.9 U |
| Perfluorohexanoic acid (PFHxA) | 2.1 | 28 | 11 | 14 | 20 | 2.1 U | 15 | 1.9 U | 7.4 | 1.9 U |
| Perfluoroheptanoic acid (PFHpA) | 2.3 | 38 | 17 | 22 | 24 | 2.1 U | 25 | 1.9 U | 25 | 1.9 U |
| Perfluorononanoic acid (PFNA) | 1.9 U | 1.9 U | 3.8 | 4.2 | 1.9 U | 2.1 U | 0.66 J | 1.9 U | 0.44 J | 1.9 U |
| Perfluorodecanoic acid (PFDA) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluoroundecanoic acid (PFUnA) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorododecanoic acid (PFDoA) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorotridecanoic acid (PFTriA) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorotetradecanoic acid (PFTeA) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorobutanesulfonic acid (PFBS) | 1.9 U | 0.24 J | 1 J | 0.48 J | 0.78 J | 2.1 U | 0.8 J | 1.9 U | 0.51 J | 1.9 U |
| Perfluorohexanesulfonic acid (PFHxS) | 1.9 U | 1.9 U | 0.87 J | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluoroheptanesulfonic acid (PFHpS) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorooctanesulfonic acid (PFOS) | 2.1 | 0.88 J | 11 | 8.5 J | 1.2 J | 2.1 U | 2.5 J | 1.9 U | 1.1 J | 1.9 U |
| Perfluorodecanesulfonic acid (PFDS) | 1.9 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorooctane Sulfonamide (FOSA) | 1.9 UJ | 1.9 U | 1.8 UJ | 2 U | 1.9 U | 2.1 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Perfluorooctanoic acid (PFOA) | 94 | 1,800 | 570 | 650 | 590 | 5.3 | 930 | 2.5 | 850 | 1.9 U |
| 6:2 Perfluorooctane Sulfonate (6:2 FTS) | NA | 2.7 J | NA | 20 U | 19 U | 12 J | 19 U | 3.5 J | 20 U | 65 |
| 8:2 Perfluorodecane Sulfonate (8:2 FTS) | NA | 19 U | NA | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U |
| N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine (N-EtFOSAA) | NA | 19 U | NA | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U |
| 2-(N-methyl perfluorooctanesulfonamido) acetic acid (N- MeFOSAA) | NA | 19 U | NA | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U |

Notes:

ng/L - Nanograms per liter.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated non-detect.

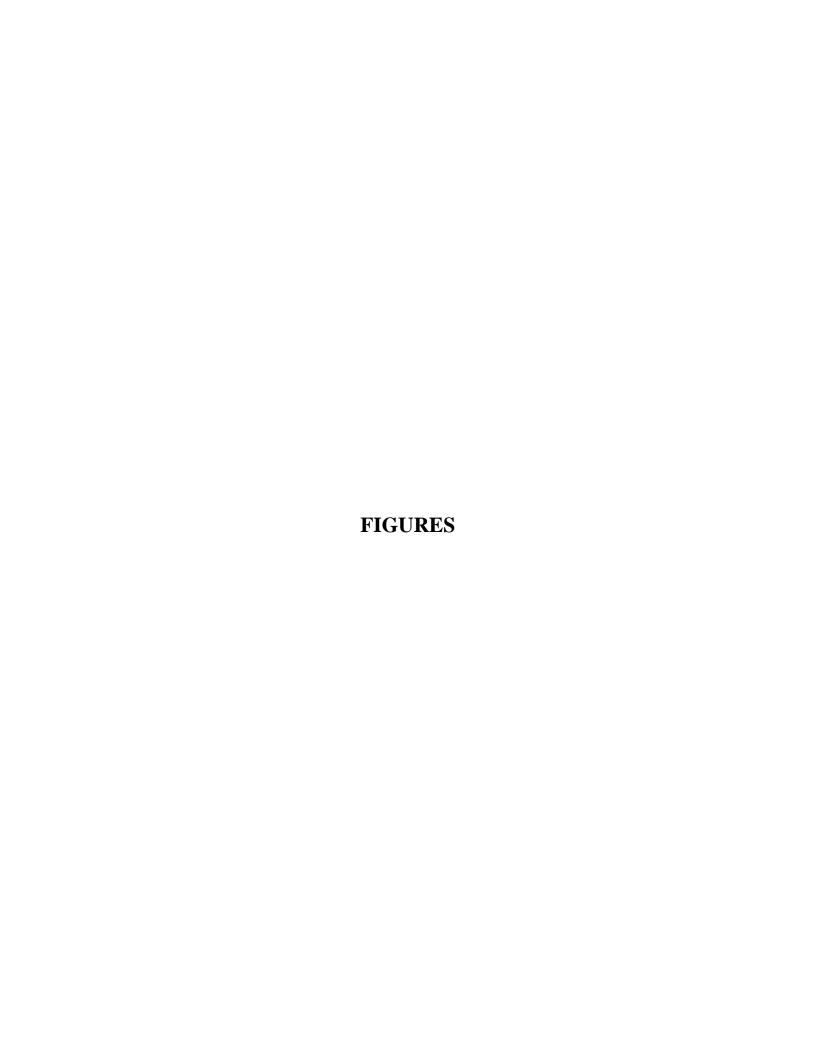
For reference only: The USEPA has set a Health Advisory Level of 70 ng/L for PFOA and PFOS in drinking water (individual or combined concentrations).

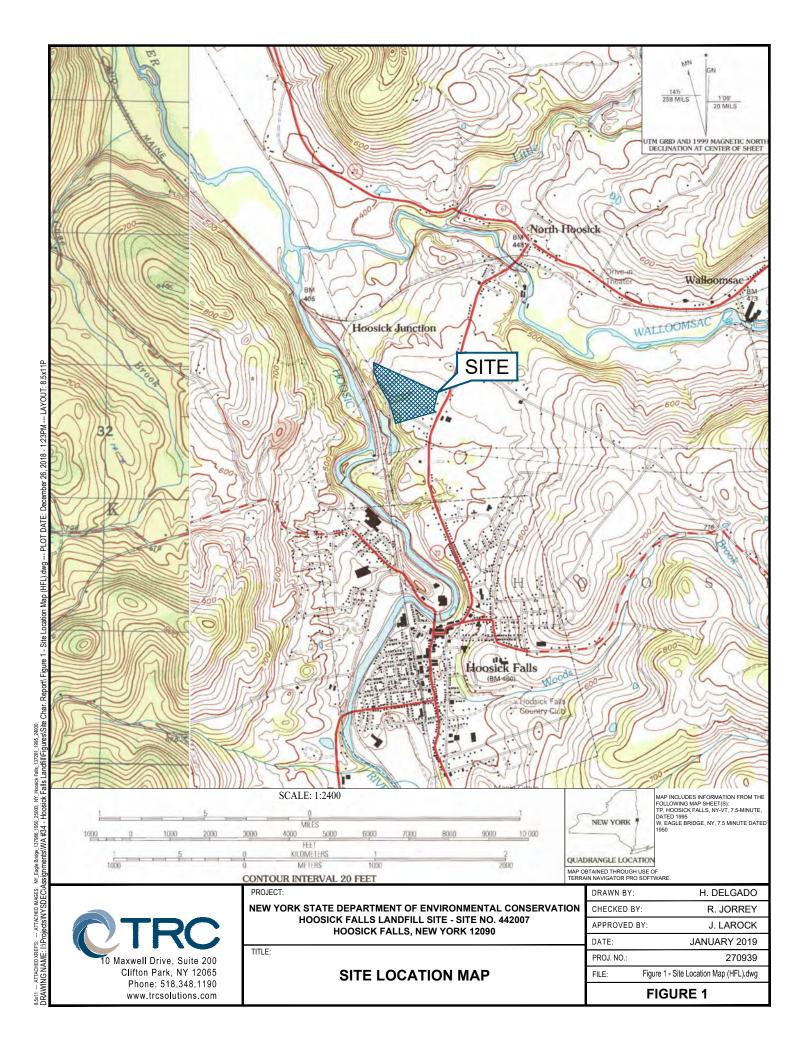
NA - Sample not analyzed for the listed analyte.

Values in **bold** indicate the compound was detected.



J - Estimated value.





HFL-MH-001

MANHOLE LOCATION AND IDENTIFICATION NUMBER



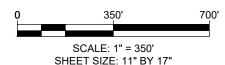
PRE-EXISTING OVERBURDEN MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED 1990 AND 1991)



LEACHATE COLLECTION VAULT

NOTES:

- 1. BASE MAP IMAGERY SOURCED FROM ESRI 2017.
- 2. APPROXIMATE LANDFILL BOUNDARY INFORMATION FROM PREVIOUS REPORTS.
- POINT LOCATION INFORMATION BASED ON SURVEY COMPLETED BY C.T. MALE ASSOCIATES ON SEPTEMBER 1, 2017.
- LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

PROJECT LIMITS AND PRE-EXISTING SITE FEATURES

| DRAWN BY: | H. DELGADO |
|--------------|--------------|
| CHECKED BY: | R. JORREY |
| APPROVED BY: | J. LAROCK |
| DATE: | JANUARY 2019 |

PROJ NO.:

FIGURE 2

CTRC

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270939

Figure 2 - Proj. Limits and Pre-Exist. Site Feat..dwg

HFL-MH-001

MANHOLE LOCATION AND IDENTIFICATION NUMBER



PRE-EXISTING OVERBURDEN MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED 1990 AND 1991)



OVERBURDEN GROUNDWATER MONITORING WELL LOCATION AND **IDENTIFICATION NUMBER** (INSTALLED MAY 2017)



OVERBURDEN GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH AND APRIL 2018)



BEDROCK GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH AND APRIL



SURFACE SOIL SAMPLE LOCATION AND IDENTIFICATION NUMBER (COLLECTED JUNE 2017 AND APRIL 2018)



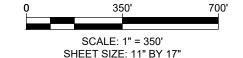
SURFACE WATER / SEDIMENT SAMPLE LOCATION AND IDENTIFICATION NUMBER (COLLECTED JUNE 2017 AND JUNE 2018)



LEACHATE COLLECTION VAULT

NOTES:

- 1. BASE MAP IMAGERY SOURCED FROM ESRI 2017.
- 2. APPROXIMATE LANDFILL BOUNDARY INFORMATION FROM PREVIOUS REPORTS.
- 3. POINT LOCATION INFORMATION BASED ON SURVEY COMPLETED BY C.T. MALE ASSOCIATES ON SEPTEMBER 1, 2017 AND AUGUST 1, 2018.
- 4. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

SAMPLING LOCATION PLAN

| DRAWN BY: | H. DELGADO | PROJ NO.: |
|--------------|--------------|-----------|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | |
| DATE: | JANUARY 2019 | |

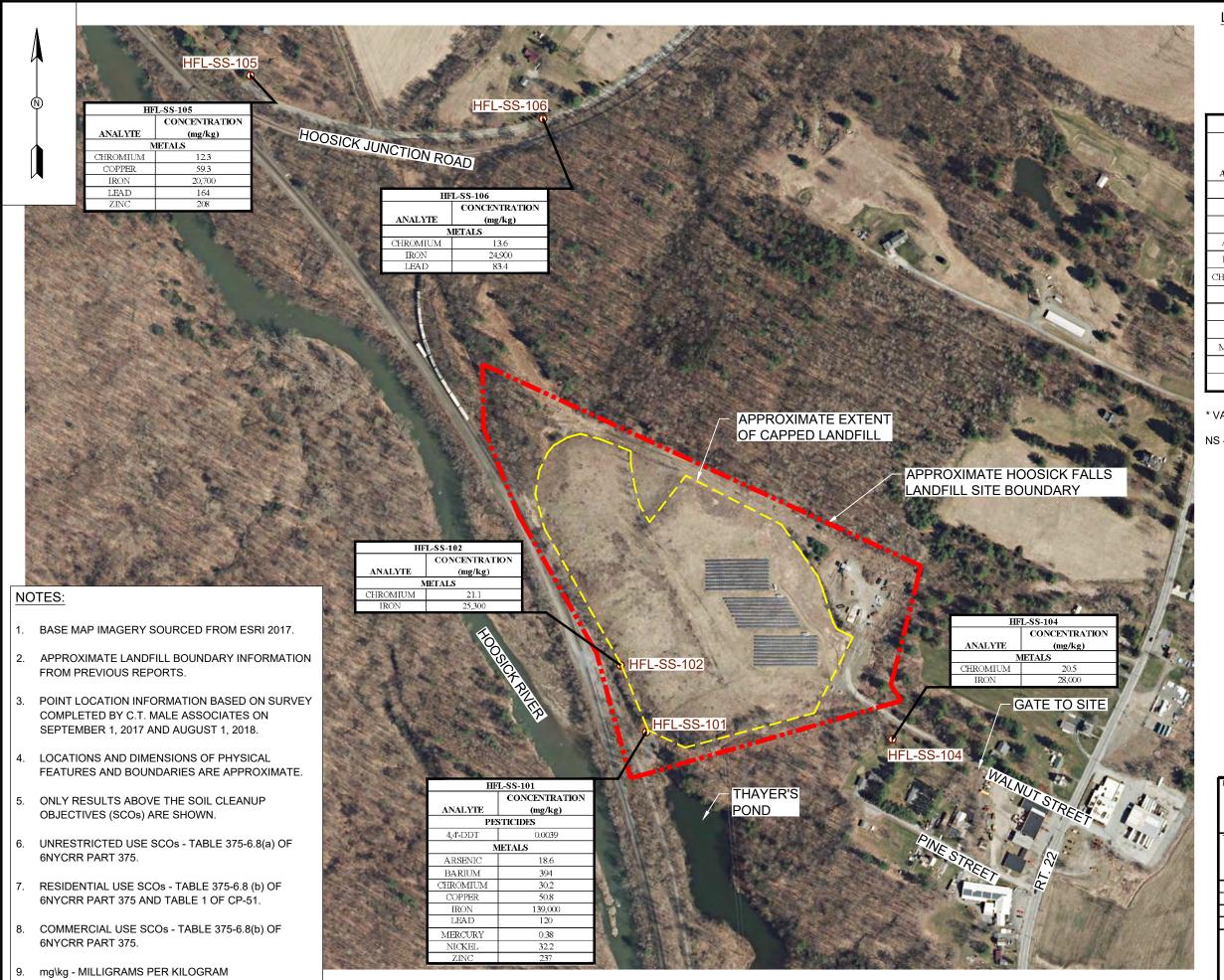
FIGURE 3



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270939

Figure 3 - Sampling Location Plan.dwg





SURFACE SOIL SAMPLE LOCATION AND IDENTIFICATION NUMBER (COLLECTED JUNE 2017 AND APRIL 2018)

| NY | NYSDEC SOIL CLEANUP OBJECTIVES (SCOs) | | | | | | | | | |
|-----------|---------------------------------------|-----------------------------------|----------------------------------|--|--|--|--|--|--|--|
| ANALYTE | UNRESTRICTED USE SCO (mg/kg) | RESIDENTIAL USE SCO (mg/kg) | COMMERCIAL USE SCO (mg/kg) | | | | | | | |
| | PESTI | CIDES | | | | | | | | |
| 4,4'-DDT | 0.0033 | 1.7 | 47 | | | | | | | |
| | MEI | ALS | | | | | | | | |
| ARSENIC | 13 | 16 | 16 | | | | | | | |
| BARIUM | 350 | 350 | 400 | | | | | | | |
| CHROMIUM* | 1 | 22 | 400 | | | | | | | |
| COPPER | 50 | 270 | 270 | | | | | | | |
| IRON | NS | 2,000 | NS | | | | | | | |
| LEAD | 63 | 400 | 1,000 | | | | | | | |
| MERCURY | 0.18 | 0.81 | 2.8 | | | | | | | |
| NICKEL | 30 | 140 | 310 | | | | | | | |
| ZINC | 109 | 2,200 | 10,000 | | | | | | | |

* VALUES ARE FOR HEXAVALENT CHROMIUM

NS - NO NYSDEC STANDARDS EXIST FOR THIS ANALYTE



PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

TITLE:

SELECT SURFACE SOIL ANALYTICAL RESULTS

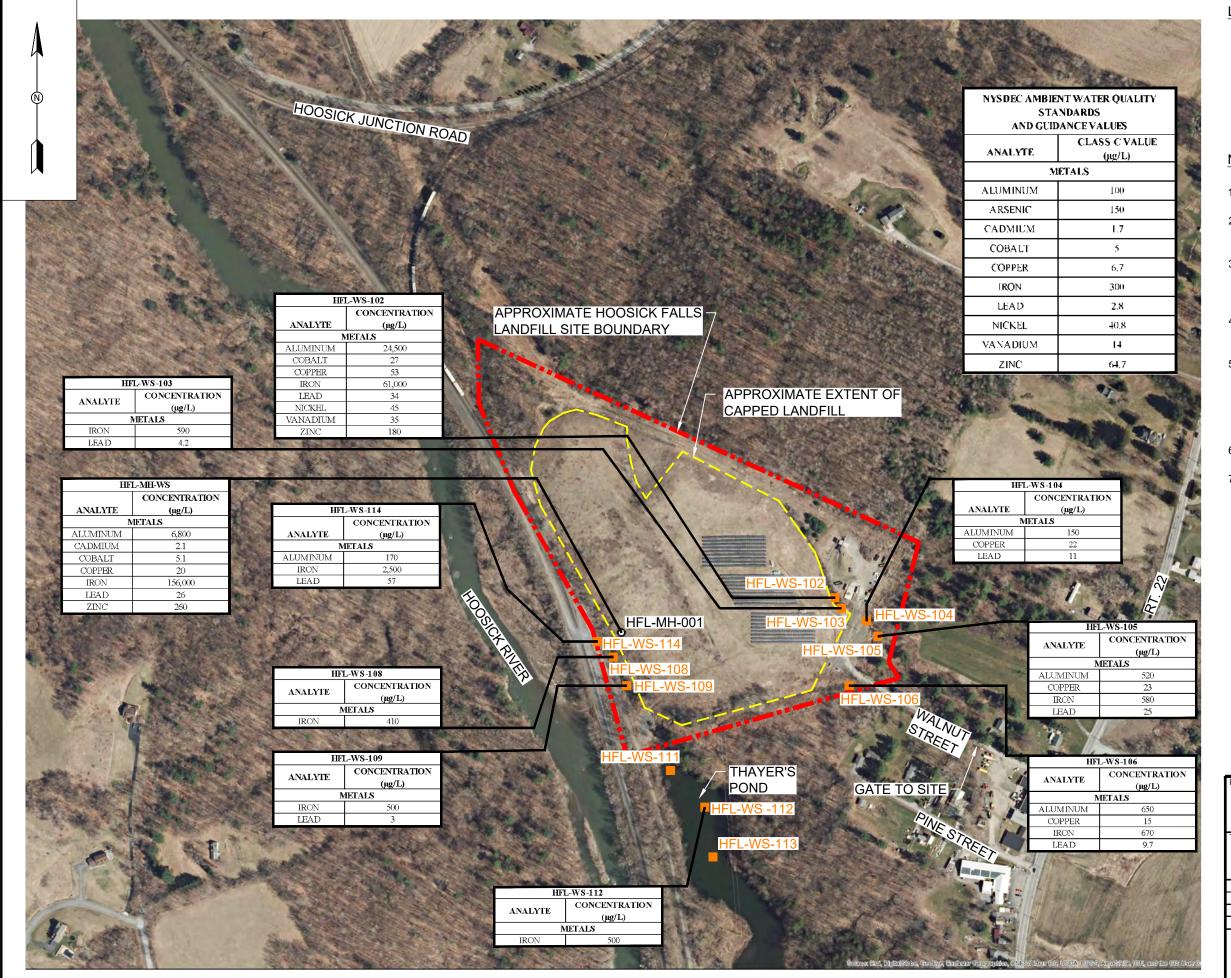
| DRAWN BY: | H. DELGADO | Р |
|--------------|------------|---|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | |
| | | 1 |

FIGURE 4



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NO.: Figure 4 - Select Surf. Soil Anal. Res..dwg



HFL-MH-001

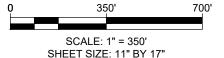
MANHOLE LOCATION AND IDENTIFICATION NUMBER



SURFACE WATER SAMPLE LOCATION AND IDENTIFICATION NUMBER (COLLECTED JUNE 2017 AND JUNE 2018)

NOTES:

- 1. BASE MAP IMAGERY SOURCED FROM ESRI 2017.
- 2. APPROXIMATE LANDFILL BOUNDARY INFORMATION FROM PREVIOUS REPORTS.
- POINT LOCATION INFORMATION BASED ON SURVEY COMPLETED BY C.T. MALE ASSOCIATES ON SEPTEMBER 1, 2017 AND AUGUST 1, 2018.
- LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
- 5. ONLY RESULTS ABOVE THE NYSDEC AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS C WATER ARE SHOWN. THE MOST STRINGENT GUIDANCE VALUES FOR CLASS C WATER WERE USED FOR COMPARISON.
- 6. μg\L MICROGRAMS PER LITER
- SURFACE WATER SAMPLE HFL-MH-WS
 COLLECTED FROM WITHIN MANHOLE HFL-MH-001.



PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

TITLE

SELECT SURFACE WATER ANALYTICAL RESULTS FOR METALS

PROJ NO.:

| DRAWN BT: | H. DELGADO |
|--------------|--------------|
| CHECKED BY: | R. JORREY |
| APPROVED BY: | J. LAROCK |
| DATE: | JANUARY 2019 |

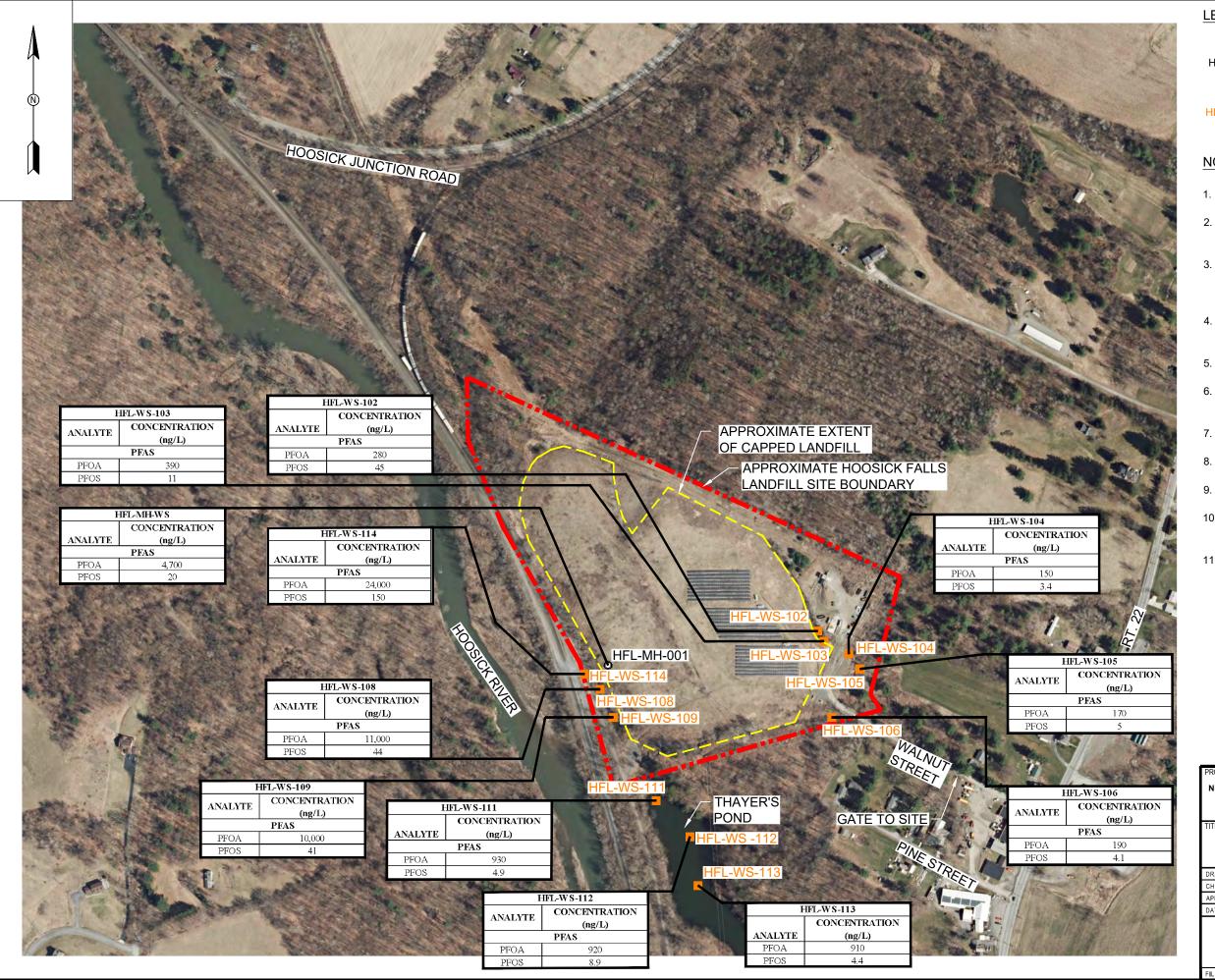
FIGURE 5

CTRC

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Figure 5 - Select Surf. Water and Sed. Anal. Res. for Metals.dwg



O HFL-MH-001 MANHOLE LOCATION AND IDENTIFICATION NUMBER



SURFACE WATER SAMPLE LOCATION
AND IDENTIFICATION NUMBER
(COLLECTED JUNE 2017 AND JUNE 2018)

NOTES:

- 1. BASE MAP IMAGERY SOURCED FROM ESRI 2017.
- APPROXIMATE LANDFILL BOUNDARY INFORMATION FROM PREVIOUS REPORTS.
- POINT LOCATION INFORMATION BASED ON SURVEY COMPLETED BY C.T. MALE ASSOCIATES ON SEPTEMBER 1, 2017 AND AUGUST 1, 2018.
- LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
- 5. ONLY PFOA AND PFOS RESULTS ARE SHOWN.
- 6. PFAS PER- AND POLYFLUOROALKYL SUBSTANCES
- 7. PFOA PERFLUOROOCTANOIC ACID
- 8. PFOS PERFLUOROOCTANESULFONIC ACID
- 9. ng\L NANOGRAMS PER LITER
- 10. SURFACE WATER SAMPLE HFL-MH-WS COLLECTED FROM WITHIN MANHOLE HFL-MH-001.
- 11. FOR REFERENCE ONLY, THE USEPA HAS SET A HEALTH ADVISORY LEVEL OF 70 ng/L FOR PFOA AND PFOS IN DRINKING WATER (INDIVIDUAL OR COMBINED CONCENTRATIONS).



PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

IIILL.

SELECT SURFACE WATER
ANALYTICAL RESULTS FOR PFAS

| APPROVED BY: | J. LAROCK | F |
|--------------|------------|-----------|
| CHECKED BY: | R. JORREY | |
| DRAWN BY: | H. DELGADO | PROJ NO.: |

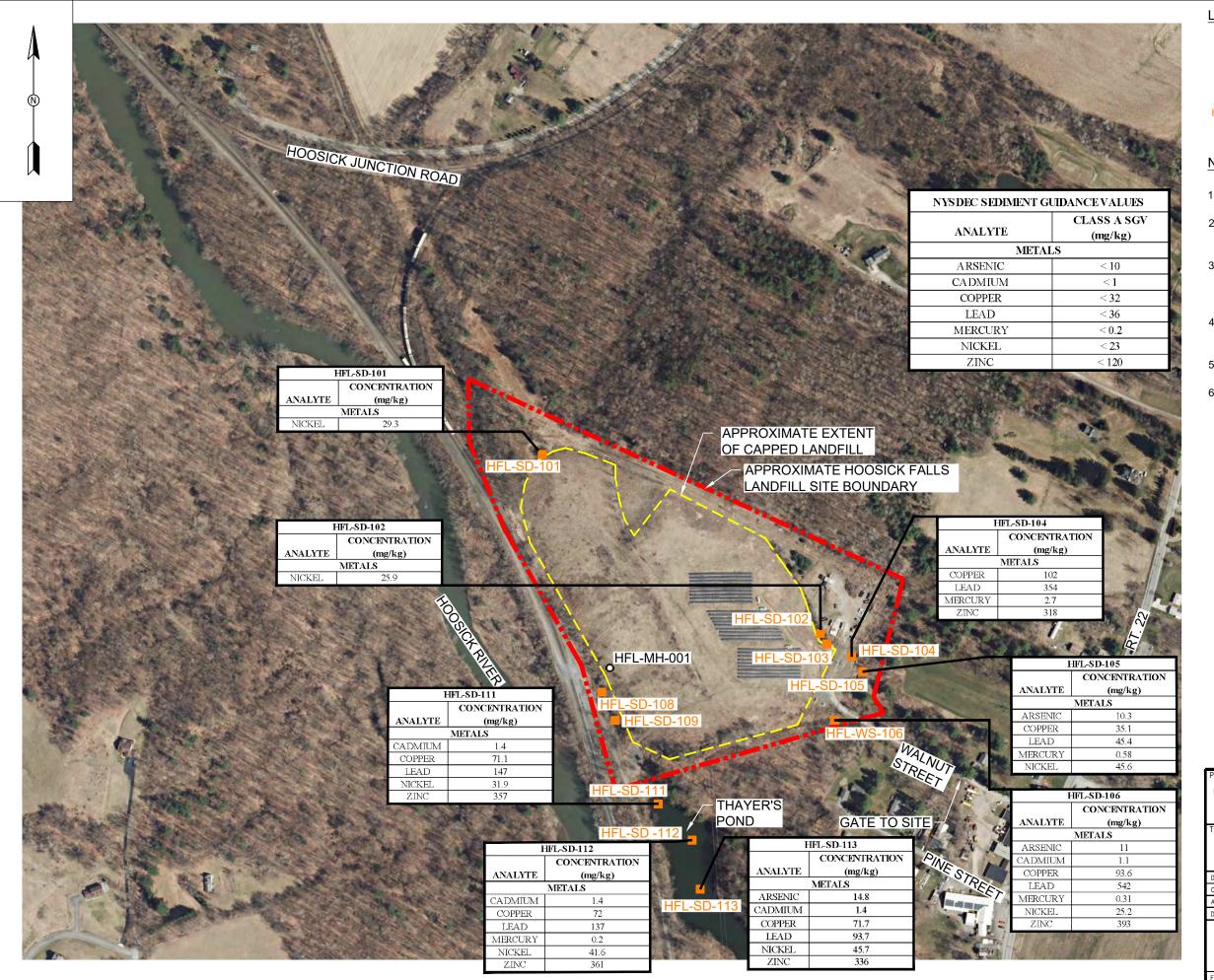
FIGURE 6



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ILE NO.: Figure 6 - Select Surf. Water and Sed. Anal. Res. for PFAS.dwg



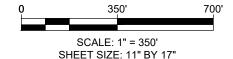
O HFL-MH-001 MANHOLE LOCATION AND IDENTIFICATION NUMBER



SEDIMENT SAMPLE LOCATION AND IDENTIFICATION NUMBER (COLLECTED JUNE 2017 AND JUNE 2018)

NOTES:

- 1. BASE MAP IMAGERY SOURCED FROM ESRI 2017.
- APPROXIMATE LANDFILL BOUNDARY
 INFORMATION FROM PREVIOUS REPORTS.
- POINT LOCATION INFORMATION BASED ON SURVEY COMPLETED BY C.T. MALE ASSOCIATES ON SEPTEMBER 1, 2017 AND AUGUST 1, 2018.
- 4. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE.
- 5. mg\kg MILLIGRAMS PER KILOGRAMS
- 6. THE RESULTS FOR THE MANHOLE SEDIMENT SAMPLE (HFL-MH-SD) HAVE NOT BEEN COMPARED TO THE SEDIMENT GUIDANCE VALUES AS THE SEDIMENT SAMPLE LOCATION IS WITHIN A MANHOLE AND IS NOT READILY ACCESSIBLE TO FISH AND WILDLIFE.



PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

TITLE

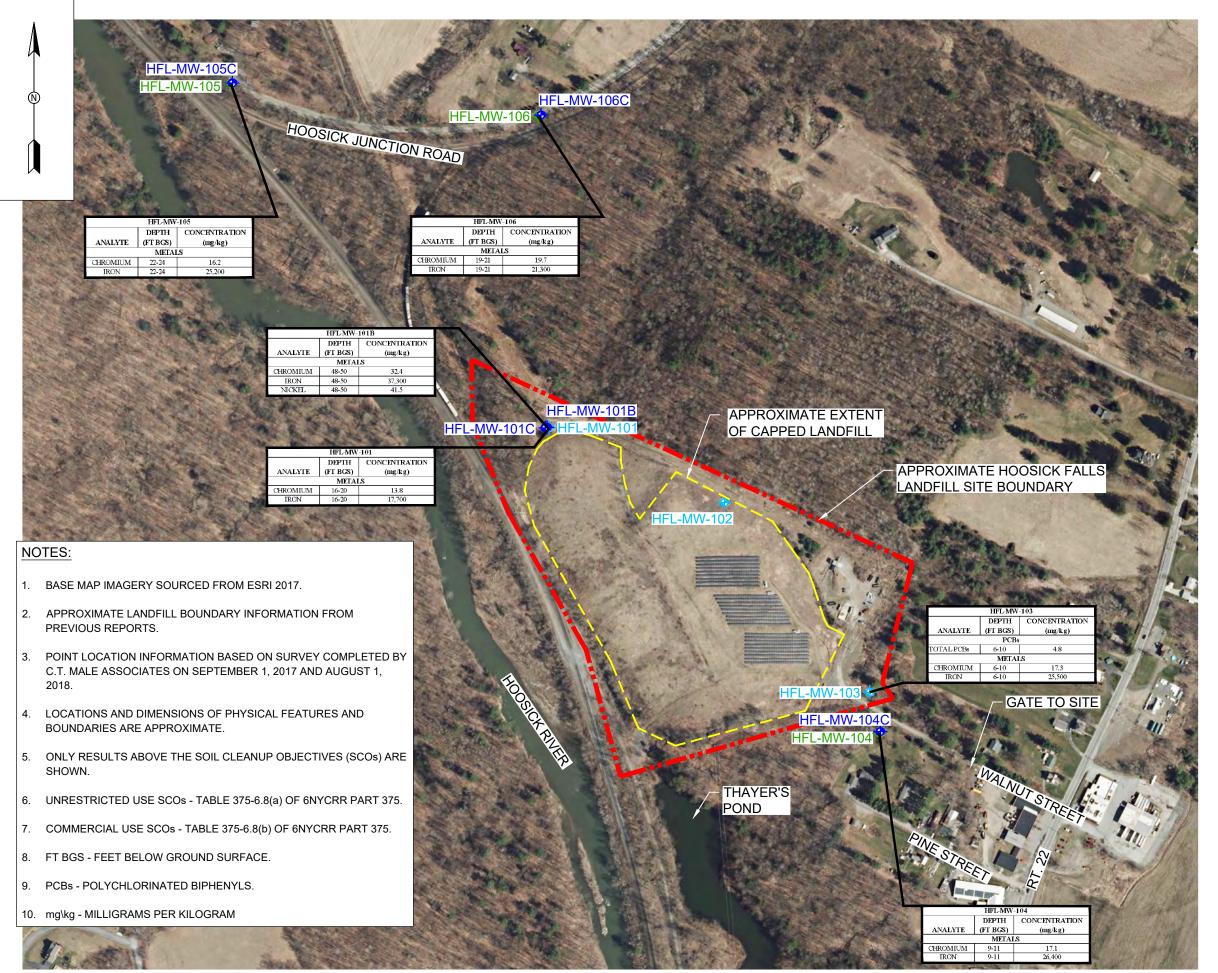
SELECT SEDIMENT ANALYTICAL RESULTS

| DRAWN BY: | H. DELGADO | PROJ NO.: 270939 |
|--------------|------------|------------------|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | FIGURE 7 |



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No.: Figure 7 - Select Sediment Anal. Res..dwg





OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MAY 2017)



OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MARCH AND APRIL 2018)

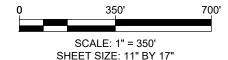


BEDROCK GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH AND APRIL 2018)

| NYSDEC SOIL CLEANUP OBJECTIVES (SCOs) | | | | | | | | | | | | |
|---------------------------------------|--------------|-------------|------------|--|--|--|--|--|--|--|--|--|
| | UNRESTRICTED | RESIDENTIAL | COMMERCIAL | | | | | | | | | |
| | USESCO | USESCO | USESCO | | | | | | | | | |
| ANALYTE | (mg/kg) | (mg/kg) | (mg/kg) | | | | | | | | | |
| PCBs | | | | | | | | | | | | |
| TOTAL PCBs | 0.1 | 1 | 1 | | | | | | | | | |
| | МЕТ | ALS | | | | | | | | | | |
| CHROMIUM* | 1 | 22 | 400 | | | | | | | | | |
| IRON | NS | 2,000 | NS | | | | | | | | | |
| NICKEL | 30 | 140 | 310 | | | | | | | | | |

* VALUES ARE FOR HEXAVALENT CHROMIUM

NS - NO NYSDEC STANDARD EXISTS FOR THIS ANALYTE



ROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

TITLE

SELECT SUBSURFACE SOIL ANALYTICAL RESULTS

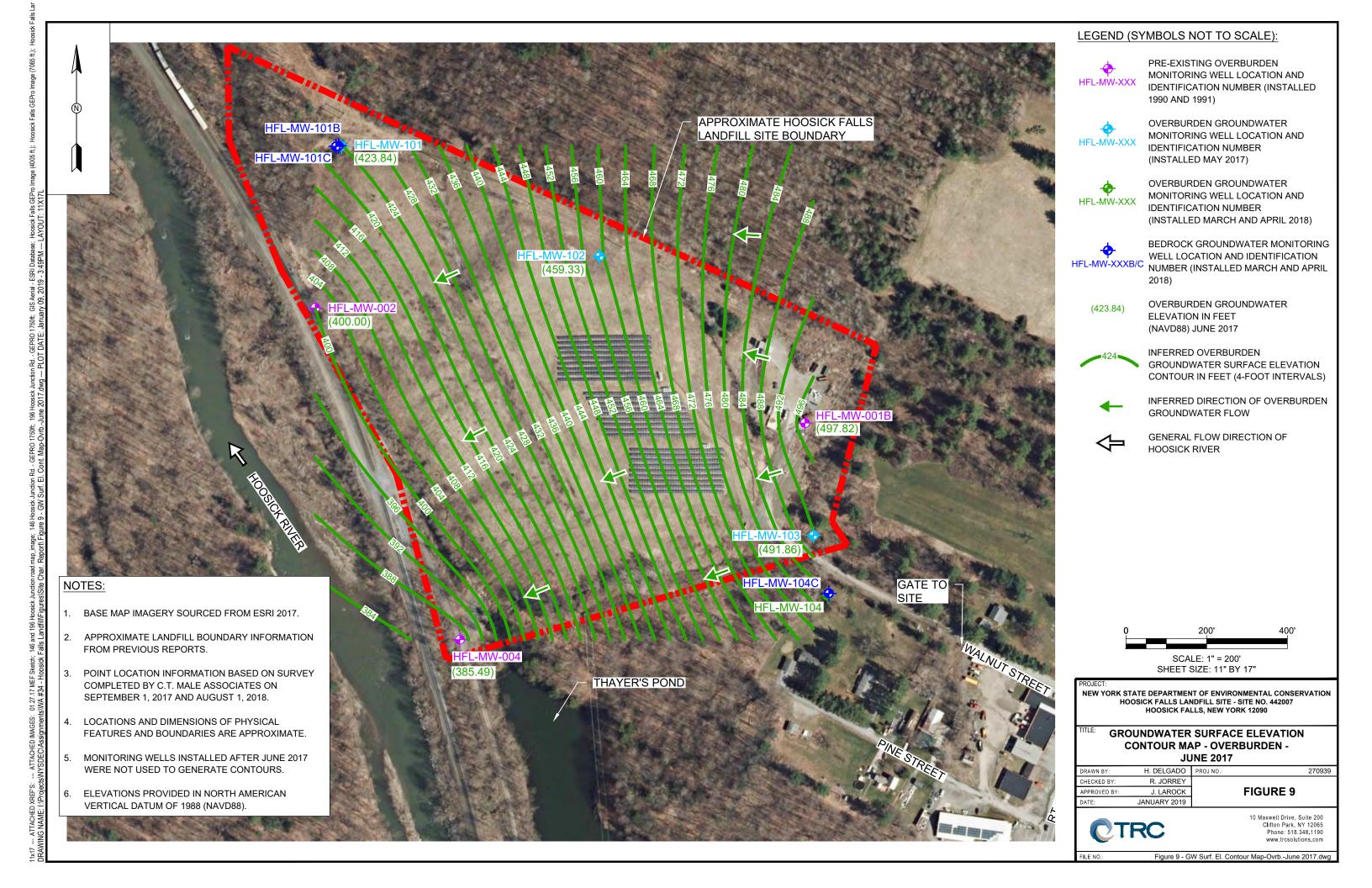
| DRAWN BY: | H. DELGADO | PROJ NO.: | 270939 |
|--------------|--------------|-----------|--------|
| CHECKED BY: | R. JORREY | | |
| APPROVED BY: | J. LAROCK | FIGURE 8 | |
| DATE: | JANUARY 2019 | | |

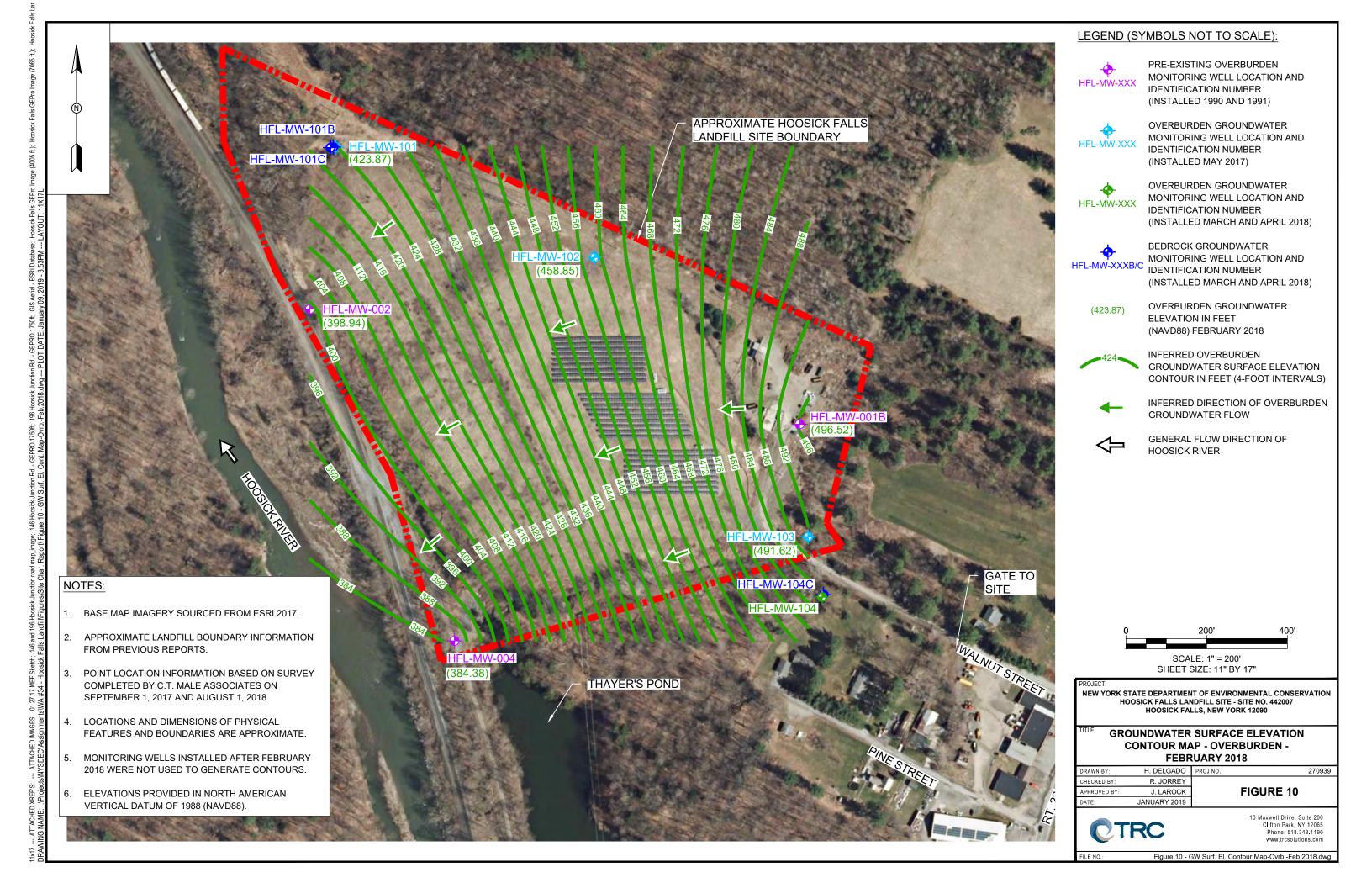
OTRC

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0.: Figure 8 - Select SubSurface Soil Anal. Res..dwg







PRE-EXISTING OVERBURDEN MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED 1990 AND 1991)



OVERBURDEN GROUNDWATER MONITORING WELL LOCATION AND **IDENTIFICATION NUMBER** (INSTALLED MAY 2017)



OVERBURDEN GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH AND APRIL 2018)



BEDROCK GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER (INSTALLED MARCH AND APRIL

(422.37)

OVERBURDEN GROUNDWATER ELEVATION IN FEET (NAVD88) JUNE 2018



INFERRED OVERBURDEN GROUNDWATER SURFACE ELEVATION CONTOUR IN FEET (4-FOOT INTERVALS)



INFERRED DIRECTION OF OVERBURDEN **GROUNDWATER FLOW**

(384.77)

BEDROCK GROUNDWATER ELEVATION IN FEET (NAVD88) JUNE 2018



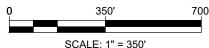
INFERRED BEDROCK GROUNDWATER SURFACE ELEVATION CONTOUR IN FEET (4-FOOT INTERVALS)



INFERRED DIRECTION OF BEDROCK **GROUNDWATER FLOW**



GENERAL FLOW DIRECTION OF HOOSICK RIVER



SHEET SIZE: 11" BY 17"

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

GROUNDWATER SURFACE ELEVATION CONTOUR MAP - OVERBURDEN AND BEDROCK -JUNE 2018

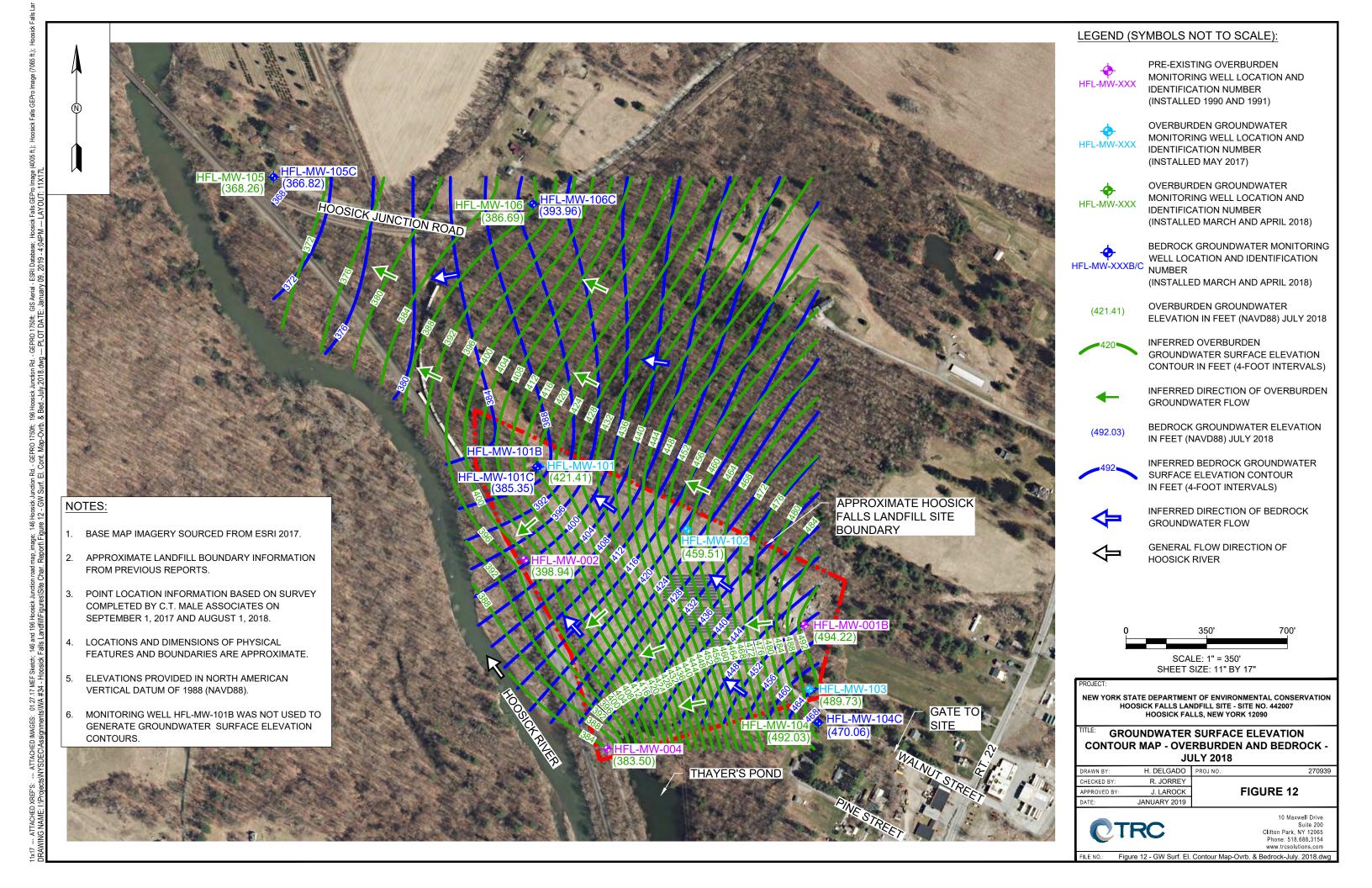
| DRAWN BY: | H. DELGADO | |
|--------------|--------------|--|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | |
| DATE: | JANUARY 2019 | |

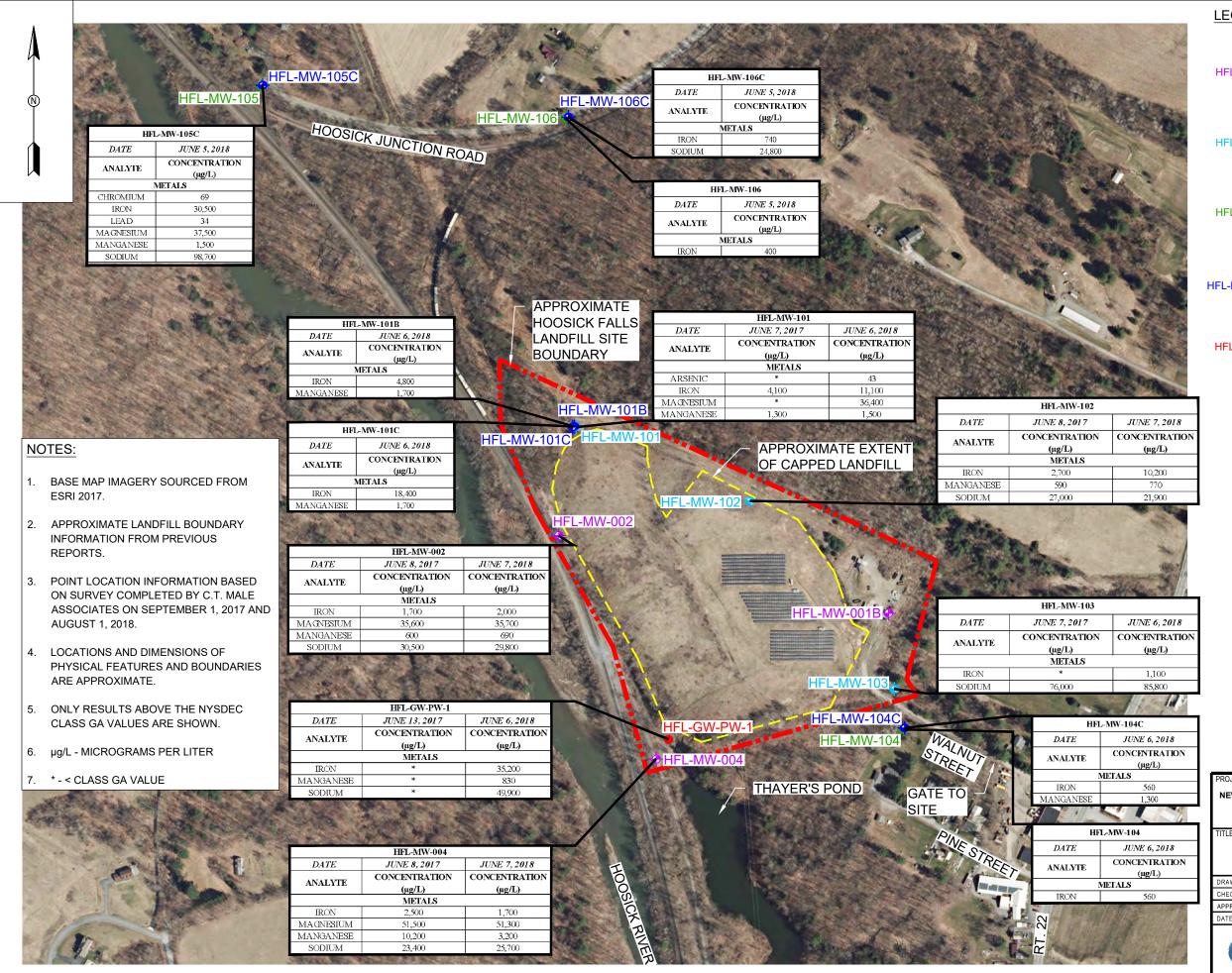
PROJ NO.: FIGURE 11



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FILE NO.: Figure 11 - GW Surf. El. Contour Map-Ovrb. & Bedrock-June. 2018.dwg







PRE-EXISTING OVERBURDEN

MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED 1990 AND 1991)



OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MAY 2017)



OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MARCH AND APRIL 2018)

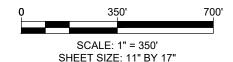


BEDROCK GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MARCH AND APRIL 2018)



LEACHATE COLLECTION VAULT

| NYSDEC CLASS GA VALUES | | | | | | | | | | |
|---------------------------|-----------------------------|--|--|--|--|--|--|--|--|--|
| ANALYTE | CLASS GA VALUE (µg/L) | | | | | | | | | |
| METALS | | | | | | | | | | |
| ARSENIC | 25 | | | | | | | | | |
| CHROMIUM | 50 | | | | | | | | | |
| IRON | 300 | | | | | | | | | |
| LEAD | 25 | | | | | | | | | |
| MAGNESIUM | 35,000 | | | | | | | | | |
| MANGANESE | 300 | | | | | | | | | |
| SODIUM | 20,000 | | | | | | | | | |



PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

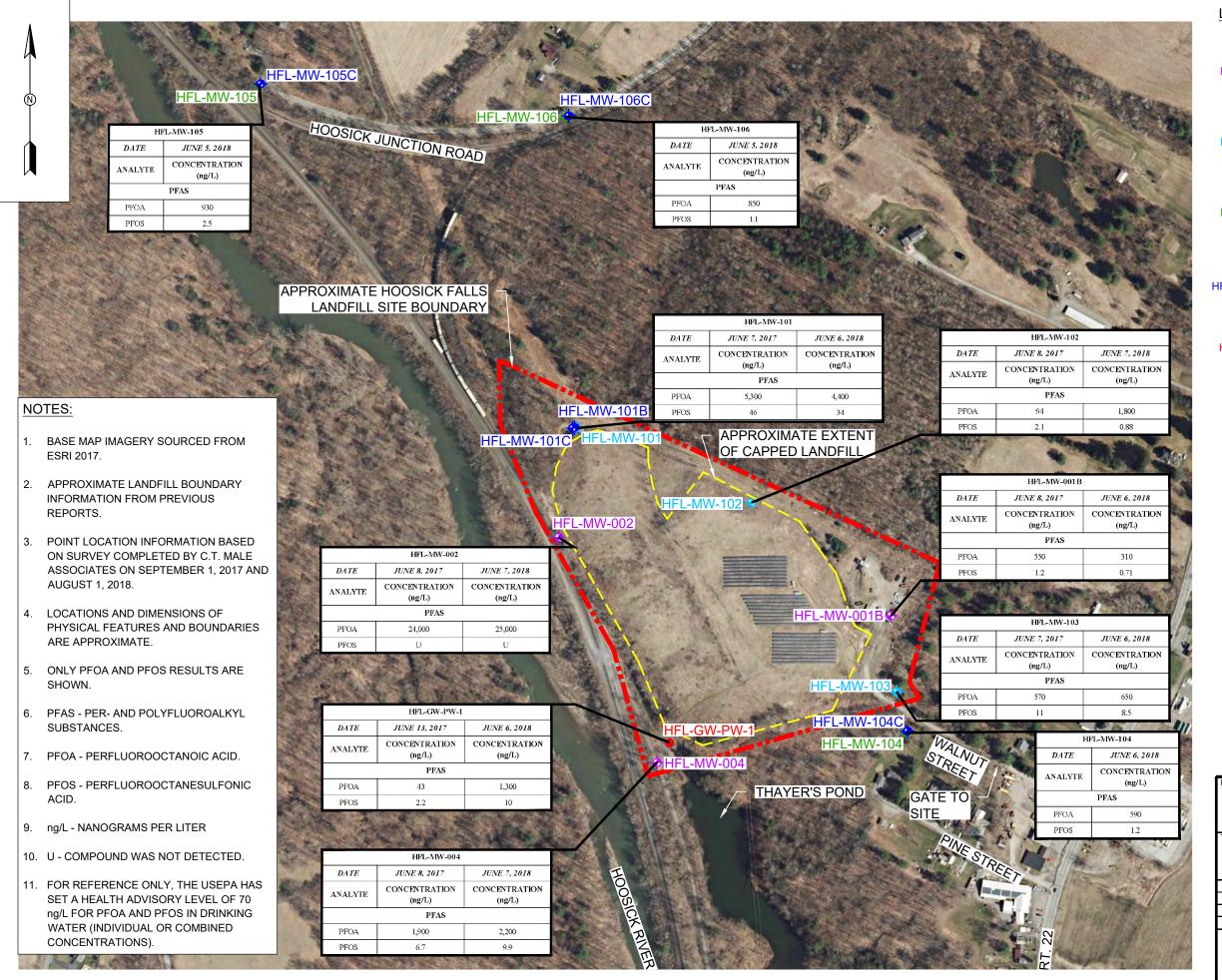
SELECT GROUNDWATER ANALYTICAL RESULTS FOR METALS

| DRAWN BY: | H. DELGADO | PROJ NO.: 270939 |
|--------------|---------------|------------------|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | FIGURE 13 |
| DATE: | IANITARY 2010 | |



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Figure 13 - Select GW Anal. Res. for Metals.dwg



HFL-MW-XXX

PRE-EXISTING OVERBURDEN
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED 1990 AND 1991)



OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MAY 2017)



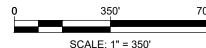
OVERBURDEN GROUNDWATER
MONITORING WELL LOCATION AND
IDENTIFICATION NUMBER
(INSTALLED MARCH AND APRIL 2018)



BEDROCK GROUNDWATER MONITORING
WELL LOCATION AND IDENTIFICATION
NUMBER (INSTALLED MARCH AND APRIL
2019)



LEACHATE COLLECTION VAULT



SHEET SIZE: 11" BY 17"

PROJECT:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HOOSICK FALLS LANDFILL SITE - SITE NO. 442007 HOOSICK FALLS, NEW YORK 12090

SELECT GROUNDWATER AND LEACHATE
ANALYTICAL RESULTS FOR PFAS

| DRAWN BY: | H. DELGADO | PROJ NO.: |
|--------------|------------|-----------|
| CHECKED BY: | R. JORREY | |
| APPROVED BY: | J. LAROCK | FIGURE 14 |



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270939

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E NO.: Figure 14 - Select GW and Leachate Anal. Res. for PFAS.dwg

APPENDIX A SOIL BORING AND MONITORING WELL CONSTRUCTION LOGS

CTRC Results you can rely on

BH / TP / WELL - TRC-STD US, GDT - 1/18/19 OJECTSINYSDECWA #34 - HOOSICK FALLS LANDFILLISC ACTIVITIESISOIL BORING LOGSIHOOSICK-SOIL BORING LOGS, GPJ 10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

WELL NUMBER HFL-MW-101

PAGE 1 OF 1

CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill PROJECT NUMBER 270939.0000.0000 PROJECT LOCATION Hoosick Falls, NY **DATE STARTED** 5/23/17 **COMPLETED** 5/23/17 **GROUND ELEVATION** 435.16 ft HOLE SIZE 4 DRILLING CONTRACTOR Parratt-Wolff, Inc. **GROUND WATER LEVELS:** DRILLING METHOD Hollow Stem Auger $\overline{igspace}$ AT TIME OF DRILLING $\underline{}$ 14.00 ft / Elev 421.16 ft **T** AT END OF DRILLING 13.50 ft / Elev 421.66 ft LOGGED BY Stephen Johansson CHECKED BY Ryan Jorrey **Y** AFTER DRILLING 13.75 ft / Elev 421.41 ft NOTES Elevation Datum: NAVD 88 SAMPLE TYPE NUMBER Environmental Data BLOW COUNTS (N VALUE) GRAPHIC LOG U.S.C.S. RECOVERY MATERIAL DESCRIPTION WELL DIAGRAM Top of Metal Casing Top of Riser 0'- 2' (SM) Brown, medium silty sand, dry. PID = 02-2-4-4 SS 38 SM (6)2.0 433.2 2'- 4' (SM) Brown, medium silty sand, moist. 4-4-6-7 SS 25 SM (10)431.2 4.0 4'- 6' (SM) Gray, medium silty sand, moist. Grout 5 8-7-4-5 SS 25 SM (11)6.0 429.2 6'- 8' (SM) Gray, medium silty sand, moist. 7-7-10-8 SS 75 SM (17)8.0 427.2 8'- 10' (ML) Brown/gray, silt, soft, moist. 3-3-4-3 SS ML 88 (7) 10 10.0 425 2 Bentonite PID = 010'- 12' (ML) Brown/gray, silt, soft, moist. Seal 1-2-4-50 SS 38 ML (6)12.0 423.2 12'- 14' (CL-ML) Brown/gray, silty clay, moist. 6-10-5-4 CL-SS 38 (15)ML 14.0 421.2 14'- 16' (CL-ML) Brown/gray, silty clay, wet. 15 12-14-5-4 CL-SS 50 ML (19)419.2 16'- 18' (CL-ML) Gray, silty clay, wet. 10-12-17-SS 75 ML (29)18.0 417.2 18'- 20' (CL-ML) Brown/gray, silty clay, moist, 2-4-9-10 CLcobble at 18'. SS 50 ML (13)20 20.0 415.2 20'- 24' (CL-ML) Gray, silty clay. PID = 07-10-24-11 Well Screen SS 75 (34)ML10-14-17-SS 100 (31)24.0 411.2 24'- 26' (ML) Gray, silt. 10-14-21-25 SS 100 ML 23 PID = 0(35)26.0 409.2 26'- 29' No recovery. 20-24-33-NR 0 41 (57)29.0 406.2 Bottom of borehole at 29.0 feet.

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WELL NUMBER HFL-MW-101B PAGE 1 OF 2

| 1 | | | | | | | | AME Site No. 442007 - | | ls Landf | ill |
|--|---------------------|----------|------------------|-----------------------------------|------------------|----------|---|---|-----------------------|------------------|----------------------------------|
| 1 | | | | 270939.00 | | | | OCATION Hoosick Falls | | 175 ^ | |
| | | | | 26/18 C TOR <u>Parr</u> | | | | .EVATION <u>437.54 ft</u> ATER LEVELS: | _ HOLE S | oI ZE _∠_ | |
| | | | | Hollow Ste | | | | ME OF DRILLING 49.00 | ft / Elev 388 | .54 ft | |
| 1 | | | | | | | | D OF DRILLING 50.53 f | | | |
| NOTE | ES _ | Eleva | tion D | atum: NAV | D 88 | | AFTER | R DRILLING 49.57 ft / E | lev 387.97 ft | | |
| O DEPTH | SAMBI E TYBE | NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC | MATERIAL DESCRIPT | ΓΙΟΝ | Environmental Data | W | ELL DIAGRAM Top of Metal Casing |
| | M | SS | 50 | 1-3-4-5 (7) | OL | | 0'- 2' (OL) Brown, topsoil with organ | nics. 435.5 | PID = 0 | | Top of Riser |
| | M | SS | 63 | 5-5-5-6 (10) | SM | | 2'- 6' (SM) Brown, silty sand, some | angular gravel. | | | |
| 5 | \mathbb{N} | SS | 25 | 5-6-7-6 (13) | SIVI | | 6.0 | 431.5 | | | |
| | A | SS | 100 | 5-6-6 (12) | ML | <u> </u> | 8.0 8'- 10' (SP-SM) Brown, medium silt | 429.5 | | | |
| <u> 10</u> | $\frac{1}{4}$ | SS | 88 | 2-3-3-3 (6) | SP- SM | | 10.0 10'- 12' (SP-SM) Brown, medium s | 427.5 | PID = 0 | | |
| | $\frac{1}{1}$ | SS | 50 | 4-4-9-10 (13) | SP- SM | | 12.0 12'- 14' (SP-SM) Brown, silty sand | 425.5 | 115 0 | | |
| 15 | $\frac{1}{A}$ | SS | 25 | 4-5-12-8 (17) 4-6-8-8 | SP- SM CL- | | gravel. 14.0 14'- 16' (CL-ML) Gray, silty clay, m | 423.5 | | | |
| | \mathbb{M} | SS | 38 | (14) | ML | | 16.0 | 421.5 | | | |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | M | SS | 75 | 16-20-20- 17 (40) | | | 16'- 38' (CL-ML) Gray, silty clay. | | | | |
| | X | SS | 50 | 15-17-22- 27 (39) | | | | | PID = 0 | | |
| | $\frac{1}{\lambda}$ | SS | | 6-18-18-26 (36) 20-27-31- | | | | | | | |
| 25 | | SS | 100 | 34 (58) 16-20-27- | | | | | | | |
| | | SS SS | 100 | 29 (47) 22-32-42- 47 | CL- | | | | | | |
| | A | SS | | (74) 8-11-17-21 | ML | | | | | | |
| 25 - 401 MILLION A STANDARD A STA | $\frac{1}{M}$ | SS | 100 | (28) 12-20-26- 22 | | | | | PID = 0 | | ⊲ Grout |
| TSDECIW. | $\frac{1}{M}$ | SS | 88 | (46) 12-18-26- 37 | | | | | | | |
| 35 | | SS | 100 | (44) 20-32-34- 32 (66) | | | | | | | |
| | $\frac{1}{N}$ | SS | 100 | 11-19-16- 20 (35) | | | 38.0 | 399.5 | | | |

WELL NUMBER HFL-MW-101B

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10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

| DEPTH (ft) | SAMPI E TYPE | NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAN |
|---------------|--------------|--------|------------------|-----------------------------|-----------|----------------|---|-----------------------|----------------------------|
| | M | SS | 100 | 21-25-28- 29 | СН | | 38'- 40' (CH) Gray, silty clay, more plastic. | | |
| 40 | M | SS | 100 | (53) 13-15-16- 18 | | | 40.0 397.5 40'- 48' (CL-ML) Gray, silty clay. | PID = 0 | |
| · - | M | SS | 100 | (31) 15-15-16- 16 | | | | | |
| - 45 | \bigcirc | | | (31) 5-13-13-17 | CL- ML | | | | |
| | A | SS | 50 | (26) 17-25-21- | | | | | |
| · - | X | SS | 100 | 21 (46) | | | 48.0 389.5 | - | |
| 50 | X | SS | 50 | 1-6 | CL- ML | | 50.0 🛨 387.5 | DID 0 | |
| · - | X | SS | 63 | 8-14-20-14 (34) | CL- | | ▼ 50'- 54' (CL-ML) Gray, silty clay, wet. | PID = 0 | |
| | M | SS | 100 | 6-9-13-17 (22) | ML | | 54.0 383.5 | | |
| 55 | M | ss | 100 | 14-20-16- 16 (36) | | | 54'- 62' (CL-ML) Gray, silty clay, stiff. | | |
| | M | SS | 100 | 6-11-10-12 (21) | CL- | | | | |
| - 60 | M | ss | 100 | 5-14-15-15 (29) | N/I | | | | |
| | M | ss | 100 | 16-15-16- 16 | | | | PID = 0 | |
| · - | M | ss | 100 | (31) 20-44-45- 40 | | | 62.0 375.5 62'- 70' (CL-ML) Gray, silty clay, some angular gravel, stiff. | | ■ Bentonite Seal |
| 65 | M | SS | 63 | (89) 15-53-60- 62 | | | | | |
| . <u>-</u> | M | SS | 38 | (113) 75-75 | CL- ML | | | | |
| - - | \bigvee | SS | 63 | 32-50-100 | | | | | |
| 70 | | SS | 100 | (150) 100/1" | | | 70.0 367.5 70'- 75' Black, slate/phyllite, calcite veins, thin | PID = 0 | |
| | | RC | 90 | | | | foliation, highly weathered. | | ▼Filter Sand Well Scree |
| · - | | 110 | (30) | | | | | | |
| 75 | Ħ | | | | | | 75.0 362.5 75'- 80' Black, slate/phyllite, calcite veins, thin foliation. | _ | |
| · - | | RC | 100 (75) | | | | | | |
| 80 | | | | | | | 80.0 357.5 | PID = 0 | |

WELL NUMBER HFL-MW-101C PAGE 1 OF 2

Results you can rely on

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| DATE STAI DRILLING (DRILLING I | RTED 3/ CONTRAC | CTOR Parr | att-Wo | CON olff, In ger | PLETED 4/2/18 GROUND ELEVATION 437.05 GROUND WATER LEVELS: | PROJECT LOCATION Hoosick Falls, NY GROUND ELEVATION 437.05 ft HOLE SIZE 2 GROUND WATER LEVELS: AT TIME OF DRILLING 49.00 ft / Elev 388.05 ft | | | | | |
|---------------------------------------|--------------------|----------------------------|-----------|------------------------|---|---|-----------------------|-----------------------------|--|--|--|
| NOTES E | | | | CHE | CKED BY Ryan Jorrey | | | | | | |
| O DEPTH (ft) SAMPLE TYPE | | | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | | Environmental Data | WELL DIAGRAM Top of Metal | | | |
| \(\) | S 50 | 1-3-4-5 (7) | OL | | 0'- 2' (OL) Brown, topsoil with organics. | 435.1 | PID = 0 | Top of Riser | | | |
| | S 63 | 5-5-5-6 (10) | | | 2'- 6' (SM) Brown, silty sand, some angular gravel. | | | | | | |
| 5 (| S 25 | 5-6-7-6 (13) | SM | | 6.0 | 431.1 | | | | | |
| | S 100 | 5-6-6-6 (12) | ML | | 6'- 8' (ML) Light brown, fine silt with sand, dry. | 429.1 | | | | | |
| 10 - | S 88 | 2-3-3-3 (6) | SP- SM | | 8'- 10' (SP-SM) Brown, medium silty sand. | 427.1 | | | | | |
| | S 50 | 4-4-9-10 (13) | SP- SM | | 10'- 12' (SP-SM) Brown, medium silty sand, moist. | | PID = 0 | | | | |
| | S 25 | 4-5-12-8 (17) | SP- SM | | 12'- 14' (SP-SM) Brown, silty sand with angular | 425.1 | | | | | |
| 15 | S 38 | 4-6-8-8 (14) | CL- ML | | 14'- 16' (CL-ML) Gray, silty clay, moist. | 423.1 | | | | | |
| | S 75 | 16-20-20- 17 | IVIL | | 16.0 16'- 48' (CL-ML) Gray, silty clay. | 421.1 | | | | | |
| | S 50 | (40) 15-17-22- | | | | | | | | | |
| 20 | S 75 | 27 (39) 6-18-18-26 | | | | | PID = 0 | | | | |
| | S 100 | (36) 20-27-31- | | | | | | | | | |
| 25 | S 88 | 34 (58) 16-20-27- | | | | | | | | | |
| | S 100 | 29 (47) | | | | | | | | | |
| | S 88 | 22-32-42- 47 | | | | | | | | | |
| 30 | S 100 | (74) 8-11-17-21 (28) | C | | | | PID = 0 | | | | |
| | S 88 | 12-20-26- 22 | CL- ML | | | | | | | | |
| 35 | S 100 | (46) 12-18-26- 37 | | | | | | Grout | | | |
| | S 100 | (44) 20-32-34- | | | | | | | | | |
| - 40 + 5 | S 100 | 32 (66) 11-19-16- | | | | | | | | | |
| 40 | S 100 | 20 (35) | | | | | PID = 0 | | | | |
| | S 100 | 21-25-28- 29 | | | | | | | | | |
| 45 | S 50 | (53) 13-15-16- 18 | | | | | | | | | |
| - [] | 1 | (31) | | | | | | K/A K/A | | | |

WELL NUMBER HFL-MW-101C

PAGE 2 OF 2



10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation

PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

| DEPTH (ft) | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | | | Environmental Data | WE | LL DIAGRAM |
|---------------|---------------------------------------|--------|------------------|-----------------------------|-----------|----------------|--|----------|-----------------------|--------|--------------------|
| 50 | X | SS | 50 | (31) 5-13-13-17 | CL- ML | | 48'- 50' (CL-ML) Gray, silty clay, moist to wet. | 387.1 | | | |
| - | X | SS | 63 | (26) 17-25-21- 21 | CL- | | 50'- 54' (CL-ML) Gray, silty clay, wet. | | PID = 0 | | |
| _ | M | SS | 100 | (46) 1-6 | ML | | | 202.4 | | | |
| 55 | M | SS | 100 | 8-14-20-14 (34) | | | 54.0 54'- 62' (CH) Gray, silty clay, stiff. | 383.1 | | | |
| - | () | | | (34) 6-9-13-17 (22) | | | | | | | |
| · - | X | SS | 100 | (22) 14-20-16- 16 | СН | | | | | | |
| 60 | X | SS | 100 | (36) 6-11-10-12 | | | | | | | |
| | M | ss | 100 | (21) 5-14-15-15 | | | ca o | 075.4 | PID = 0 | | |
| · - | M | SS | 100 | (29) 16-15-16- | | | 62.0 62'- 70' (CH) Gray, silty clay, some angular gravel, | 375.1 | | | |
| 65 | () | | | 16 | | | stiff. ▼ | | | | |
| | \mathbb{A} | SS | 63 | (31) 20-44-45- | СН | | | | | | |
| - | X | SS | 38 | 40 (89) | | | | | | | |
| - | M | ss | 63 | 15-53-60- 62 | | | 70.0 | 007.4 | | | ≺Bentonite Seal |
| 70 | П | SS | 100 | (113) 75-75 | | | 70.0 70'- 75' Black, slate/phyllite, calcite veins, thin | 367.1 | PID = 0 | | Seal |
| | | RC | 90 | 32-50-100 (150) | | | foliation, highly fractured with horizontal/vertical orientation. | | | | : |
| · | | 110 | (30) | 100/1" | | | | | | | : |
| 75 _ | H | | | | | | 75.0 75'- 80' Black, weathered phyllite/slate, calcite | 362.1 | | | : |
| | | RC | 80 | | | | veins, thin wavy foliation. | | | | |
| · - | | 110 | (0) | | | | | | | | |
| 80 | H | | | | | | 80.0 80'- 85' Black, phyllite/slate, calcite veins, thin | 357.1 | PID = 0 | | : |
| · - | | | 100 | | | | foliation. | | 0 | | ; |
| | | RC | (70) | | | | | | | | |
| 85 | Ц | | | | | | 85.0 | 352.1 | | | Filter Sand |
| | | | 100 | | | | 85'- 90' Black, phyllite/slate, calcite veins throughout, thin foliation, fractured with oxydation | | | | Well Scree |
| | | RC | 100 (65) | | | | present. | | | | |
| 90 | Ц | | | | | | 90.0 | 347.1 | | | |
| - | | | | | | | 90'- 95' Black, phyllite/slate, fractured throughout, calcite from 90'-93'. | | PID = 0 | | : |
| · - | | RC | 100 (75) | | | | | | | | ; |
| 95 | | | | | | | 95.0 | 342.1 | | | |
| _ | П | | | | | | 95'- 100' Black, phyllite/slate, calcite veins, thin foliation, fractured throughout. | | | | |
| | | RC | 94 (66) | | | | ionation, nactarea unoughout. | | | | |
| 100 | | | (50) | | | | 100.0 | 337.1 | PID = 0 | | |
| 100 | ш | | | <u> </u> | | V/X// | Bottom of borehole at 100.0 feet. | <u> </u> | | 1-4-1- | - |

10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

WELL NUMBER HFL-MW-102 PAGE 1 OF 2

| | | | | ou can rei | | | | | | | | | | | | | | |
|---|--------------|------------------------|------------|---------------------------------|----------------|----------------|--------|---|---|----------------|-----------------------|---|----------|-------------------------------------|--|--|--|--|
| 1 | | | | • | | | vironr | mental Conservation | PROJECT LOCATION - Hoosick Falls Landfill | | | | | | | | | |
| 1 | | | | 270939.00 | 00.00 | | .n | FED 5/05/45 | PROJECT LOCATION Hoosick Falls, NY GROUND ELEVATION 509.56 ft HOLE SIZE 4 | | | | | | | | | |
| DATE | | | | | - 44 \ \ \ \ \ | | | FED _5/25/17 | | | | | | | | | | |
| | | | | TOR Parr | | | C. | | GROUND WATER LEVELS: VALUE OF DRILLING 52.00 ft / Floy 457.56 ft | | | | | | | | | |
| 1 | | | | <u>Hollow Ste</u> en Johanss | | | CKEL | DBY Ryan Jorrey | ✓ AT TIME OF DRILLING 52.00 ft / Elev 457.56 ft ▼ AT END OF DRILLING 50.62 ft / Elev 458.94 ft | | | | | | | | | |
| 1 | | | | atum: NAV | | CHE | CKEL | Kyan Joney | AFTER DRILLING 50.0 | | | | | | | | | |
| NOTE | | | ם ווטוו | atum. NAV | D 00 | | | | AFTER DRILLING _50.0 | JJ 11 / L1 | ev 439.31 II | · | | | | | | |
| O DEPTH (ft) | L | SAMPLE I YPE NUMBER | RECOVERY % | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | | | IAL DESCRIPTION | | Environmental Data | \ | | _ DIAGRAM Top of Metal Casing | | | | |
| | \bigvee | SS | 67 | 1-5-10-0 | OL SP | | 0.3 | 0'- 0.33' (OL) Brown 0.33'- 1.5' (SP) Brow | , topsoil with organics. | <u>509.2</u> / | PID = 0 | | | Top of Riser | | | | |
| L . | Δ | | | (15) | | | 1.5 | 1.5'- 3.5' (SM) Gray | | 508.1 | | | | | | | | |
| ļ | M | SS | 75 | 7-10-11-14 | SM | | | | • | 500.4 | | | | | | | | |
| - | \triangle | | | (21) | | 1 1 | 3.5 | 3.5'- 6' (ML) Gray, s | ilt, trace clay, dry. | 506.1 | | | | | | | | |
| _ 5 | \bigvee | SS | 65 | 0-2-10-8 | ML | | | | | | | | | | | | | |
| <u> </u> | Λ | | | (12) | | | 6.0 | | | 503.6 | PID = 0.4 | | | | | | | |
| ļ | \bigvee | SS | 80 | 5-7-10-10 | GC | | | 6'- 8' (GC) Gray, silt (till). | , clay, clay, sub-angular gravel | | | | | | | | | |
| 5 | \triangle | | | (17) | | 12 | 8.0 | | | 501.6 | | | | | | | | |
| | | NR | 0 | 11-21-20- 18 | | | | 8'- 10' No recovery. | | | | | | | | | | |
| 10 | | IVIX | 0 | (41) | | | 10.0 | | | 499.6 | | | | | | | | |
| | \mathbb{N} | SS | 25 | 8-10-21-21 | | | | 10'- 28' (GC) Gray, s moist. | silt, clay, subangular gravel (till), | | PID = 0 | | | | | | | |
| 2 2 2 | Λ | 55 | 20 | (31) | | | | | | | | | | | | | | |
| <u> </u> | \mathbb{N} | SS | 75 | 15-22-22- 23 | | | | | | | | | | | | | | |
| 2 | Λ | 55 | 7.5 | (44) | | | | | | | | | % | ⋖Grout | | | | |
| 15_ | N | SS | 70 | 13-19-19- 19 | | | ı | | | 1 | | | | | | | | |
| | Λ | 55 | 70 | (38) | | | | | | | | | | | | | | |
| | | SS | 75 | 21-22-21- 23 | | | | | | | | | | | | | | |
| <u>_</u> | Λ | JJ | 13 | (43) | | | | | | | | | | | | | | |
| L | | SS | 50 | 19-21-20- 21 | GC | | 1 | | | | | | | | | | | |
| 20 | Λ | JJ | 50 | (41) | 30 | | 4 | | | | | | | | | | | |
| 5 | | SS | 75 | 12-18-26- 30 | | | 1 | | | | PID = 0 | | | | | | | |
| | \triangle | JJ | 13 | (44) | | | | | | | | | | | | | | |
| | | SS | 75 | 19-34-37- | | | | | | | | | | | | | | |
| | \mathbb{N} | JJ | 13 | 50 (71) | | | | | | | | | | | | | | |
| 25 | | SS | 50 | 19-31-32- 40 | | | 1 | | | | | | | | | | | |
| | \mathbb{N} | JJ | JU | (63) | | | | | | | | | | | | | | |
| ; ; | | 66 | 25 | 19-15-14- | | | | | | | | | | | | | | |
| | \mathbb{N} | SS | 25 | 16 (29) | | | 28.0 | | | 481.6 | | | | | | | | |
| | | NID | 0 | 50 | | | | 28'- 30' No recovery | | | | | | | | | | |
| 30 | \square | NR | 0 | 50 | | | 30.0 | | | 479.6 | | | | Bentonite | | | | |
| 3 | \bigvee | 90 | 75 | 12-14-17- | | | | 30'- 34' (GC) Gray, | silt, clay, subangular gravel (till). | | PID = 0 | | | Seal | | | | |
| [| SS 75 25 GC | | | | | | | | | | | | | | | | | |
| PAICKIPROJECTS/NVSDEC/WA #34 - HOOSICK FALLS LANDFILL/SC ACTIVITIES/SOIL BORING LOGS/GPJ 10 10 10 10 10 10 10 10 10 10 10 10 10 | X | | | | | | | | | | | | | | | | | |

WELL NUMBER HFL-MW-102

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Results you can rely on

10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

| PROJECT NUM | /IBER | 270939.0 | 000.00 | 000 | PROJECT LOCATION Hoosick Falls | s, NY | |
|-------------------------------|------------|-----------------------------|----------|----------------|---|-----------------------|--------------|
| DEPTH (ft) SAMPLE TYPE NUMBER | RECOVERY % | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAM |
| 35 40 | 50 | 21-50 | GC | | 30'- 34' (GC) Gray, silt, clay, subangular gravel (till). (continued) 34'- 70' Per discussion with NYSDEC, no sampling was completed for soil classification beyond 34' bgs. | PID = 0 | |
| 45 | | | | | | | |
| 55 | | | | | $ar{ar{\Lambda}}$ | | ▼Filter Sand |
| 55 | | | | | | | |
| 60 | | | | | | | Well Screen |
| 65 | | | | | | | |
| 70 | | | | | 70.0 439.6 Bottom of borehole at 70.0 feet. | | <u> </u> |

WELL NUMBER HFL-MW-103 10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 PAGE 1 OF 1 Telephone: (518) 688-3102 CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill PROJECT LOCATION Hoosick Falls, NY PROJECT NUMBER 270939.0000.0000 **COMPLETED** 5/24/17 **DATE STARTED** 5/24/17 **GROUND ELEVATION** 493.83 ft HOLE SIZE 4 DRILLING CONTRACTOR Parratt-Wolff, Inc. **GROUND WATER LEVELS:** $\sqrt{2}$ AT TIME OF DRILLING 6.00 ft / Elev 487.83 ft DRILLING METHOD Hollow Stem Auger TAT END OF DRILLING 4.32 ft / Elev 489.51 ft LOGGED BY Stephen Johansson CHECKED BY Ryan Jorrey **▼ AFTER DRILLING** 4.10 ft / Elev 489.73 ft NOTES Elevation Datum: NAVD 88 SAMPLE TYPE NUMBER Environmental Data BLOW COUNTS (N VALUE) GRAPHIC LOG U.S.C.S. RECOVERY MATERIAL DESCRIPTION WELL DIAGRAM Top of Metal Casing Top of Riser 0'- 2' (OL) Light brown, topsoil with medium sand. PID = 02-2-2-2 SS 88 OL Grout (4) 491.8 2.0 2'- 4' (ML) Light brown, silt, moist. 4-5-6-8 SS 75 ML Bentonite (11)Seal 489.8 4'- 6' (ML) Light brown, silt, soft, wet. 5 2-2-2-3 SS 88 ML (4) 487.8 6'- 8' (ML) Brown, silt, wet. 6-4-3-10 SS ML 75 (7) 8.0 485.8 8'- 10' (GC) Brown, silt and gray till, moist. 6-5-5-5 SS GC 38 (10)10 10.0 483.8 PID = 010'- 12' No recovery. 3-5-4-6 NR 0 (9) 481.8 Filter Sand 12'- 24' (GC) Gray, till, moist. Well Screen 4-6-6-6 SS 75 (12)3-5-12-8 15 SS 25 (17)

AL BH / TP / WELL - TRC-STD US,GDT - 1/18/19 PROJECTSINYSDECWA #34 - HOOSICK FALLS LANDFILL\SC ACTIVITIES\SOIL BORING LOGS\HOOSICK-SOIL BORING LOGS.GPJ

25

5-7-8-9

(15)

4-9-12-6

(21)

7-5-4-6

(9)

7-9-12-15

(21)

2-50

12-27-28-

(55)

21-33-50

(83)

GC

GC

SS

SS

SS

SS

NR

SS

SS

75

38

50

75

0

75

Bottom of borehole at 30.0 feet.

24'- 26' No recovery.

26'- 30' (GC) Gray, till, moist.

PID = 0

PID = 0

469.8

467.8

463.8

CTRC Results you can rely on

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WELL NUMBER HFL-MW-104

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| ORILL ORILL LOGG | ING ING SED | CON MET BY | HOD Stephe | TOR Parr | em Au on | olff, iger | Inc. | GROUND ELEVATION 500.14 ft GROUND WATER LEVELS: AT TIME OF DRILLING 11.00 AFTER DRILLING 6.34 ft / E |) ft / Elev 489 t / Elev 497.5 | 9.14 ft 54 ft | |
|------------------------|-------------------|------------------|---------------|-----------------------------|-------------|---------------|------|---|-----------------------------------|------------------|-----------------------------------|
| O DEPIH | SAMPI F TYPF | NUMBER | RECOVERY % | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC | 507 | MATERIAL DESCRIPTION | Environmental Data | , | L DIAGRAM ▼Top of Me Casing |
| - | | | | | ОН | | | 0'- 5' (OH) Dark brown topsoil with organics, moist ▼ | PID = 0 | | Top of Ris |
| 5 _ | M | SS | 65 | 2-3-3-4 (6) | МН | | | | | | ⋖ Bentonite Seal |
| - | | SS | 100 | 3-2-2-2 (4) | ML | | | 7'- 9' (ML) Brown, silt, stiff. | | | |
| 10 _ | M | SS | 88 | 1-2-5-6 (7) | ML | | 1 | 9'- 11' (ML) Dark brown, sandy silt, moist. 1.0 489. | PID = 0 | | |
| - | | SS | 0 | 4-5-6-4 (11) | | ि । | 1 | 11'- 13' No recovery. 3.0 487. | 1 | | |
| 15 | | SS | 88 | 2-3-3-3 (6) | ML | | 1 | 13'- 15' (ML) Dark brown, sandy silt, wet. 5.0 485. 15'- 23' (ML) Dark brown-gray, silt, stiff, moist. | 1 | | ⋖ Filter San |
| - | | SS | 100 | 2-3-3-3 (6) | | | | 13-23 (IVIL) DAIN DIOWII-YIAY, SIII, SIIII, MOISI. | | | −Well Scre |
| - | | SS | 100 | 5-8-9-9 (17) | ML | | | | | | |
| 20 _ | | SS | 100 | 3-3-10-10 (13) | | | | | PID = 0 | | |
| _ | M | ss | 100 | 7-10-15-15 (25) | | | | | PID = 0 | | |

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WELL NUMBER HFL-MW-104C PAGE 1 OF 2

| PRO DATI DRIL DRIL LOG | JEC E ST LINC LINC GED | T NUM ARTE CON MET BY | IBER D 4/4 ITRAC HOD Marnie | 270939.00 4/18 CTOR Parr Hollow Ste | att-W | 000 COM olff, Ir | /PLE | TED 4/10/18 D BY Ryan Jorrey | PROJECT LOCATION Hoosi GROUND ELEVATION 500.4 GROUND WATER LEVELS: AT TIME OF DRILLING | ck Falls 9 ft 11.00 f 24.84 ft | , NY HOLE S ft / Elev 489 t / Elev 475. | .49 ft 65 ft | 2 | |
|---|------------------------------------|-----------------------------------|-----------------------------|--|----------|------------------------|-------------|--------------------------------|---|---|--|-----------------|----------|-----------------------------|
| O DEPTH (ft) | | NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | | MATER | IAL DESCRIPTION | | Environmental Data | <u>-</u> | | DIAGRAM Top of Metal Casing |
| - - - - 5 | _ _ _ | | | | ОН | | \ \ \ | 0'- 5' (OH) Dark bro moist. | wn, topsoil with organics, loose, | 495.5 | PID = 0 | | | Top of Riser |
| - | - M | ss | 65 | 2-3-3-4 (6) | мн | Ì | 7.0 | 5'- 7' (MH) Brown, s | ilt, soft, wet. | 493.5 | | | | |
| F | | SS | 100 | 3-2-2-2 (4) | ML | | | 7'- 9' (ML) Brown, si | lt, stiff. | | | | | |
| 10 | | SS | 88 | 1-2-5-6 (7) | ML | | 9.0 | | own, sandy silt, moist. | 491.5 | PID = 0 | | | |
| 25 - 15 - 15 - 20 - 25 - 25 - 25 - 25 - 25 - 25 - 2 | $\downarrow \downarrow$ | SS | 0 | 4-5-6-4 | | | 11.0 | 11'- 13' No recovery | | 489.5 | י וט – ט | | | |
| <u> </u> | $\downarrow \downarrow$ | SS | 88 | (11) 2-3-3-3 | ML | | 13.0 | 13'- 15' (ML) Dark b | rown, sandy silt, wet. | 487.5 | | | | |
| 15 | $\downarrow \downarrow$ | SS | 100 | (6) 2-3-3-3 | | | 15.0 | | rown-gray, silt, stiff, moist. | 485.5 | | | | |
| _ | \bigoplus | SS | 100 | (6) 5-8-9-9 | | | | | | | | | | |
| 20 | \forall | | | (17) 3-3-10-10 | ML | | | | | | | | | |
| - | $\downarrow \downarrow$ | SS | 100 | (13) 7-10-15-15 | | | | | | | PID = 0 | | | |
| F | $\frac{1}{1}$ | SS | 100 | (25) 37-32-22- | | | 23.0 | | subangular gravel with sand. | 477.5 | | | | |
| 25 | $\downarrow \downarrow \downarrow$ | SS | 25 | 21 (54) | GP | 000 | | _ | abangalar graver with band. | | | | | |
| <u> </u> | \mathbb{A} | SS | 13 | 23-17-25- 25 | | 000 | 27.0 | 07!_00! (14) \ 0 | 114 - 4155 | 473.5 | | | | |
| - - | \mathbb{M} | SS | 50 | (42) 7-14-16-29 (30) | ML | | 29.0 | ▼ 27'- 29' (ML) Gray, s | | 471.5 | | | | |
| 30 | M | SS | 25 | 30-50 | NAI | | | 29'- 33' (ML) Gray, s | silt with some gravel, moist. | | PID = 0 | | | |
| F | $\overline{\mathbb{X}}$ | SS | 50 | 34-50-65- 63 | ML | | 33.0 | | | 467.5 | | | - | Grout |
| 35 | X | SS | 0 | (115) 60 | | | 35.0 | 33'- 35' No recovery | | 465.5 | | | | |
| 33 | | SS | 25 | 38-50 | | | 33.0 | 35'- 47' (ML) Gray, s | silt with gravel, stiff, moist. | 400.5 | | | | |
| <u> </u> | $\downarrow \downarrow$ | SS | 38 | 30-50 | | | | | | | | | | |
| 40 | \bigwedge | SS | 63 | 39-32-50 | | | | | | | | | | |
| Ŀ | \mathbb{H} | | | (82) 28-32-29- | ML | 60 | | | | | PID = 0 | | | |
| F | A | SS | 88 | 60 (61) | | 900 | | | | | | | | |
| 35 | $\downarrow \downarrow \downarrow$ | SS | 0 | 45-50 | | | | | | | | | | |
| | \mathbb{X} | SS | 25 | 50 | | 99 | 47.0 | | | 453.5 | | | | |

WELL NUMBER HFL-MW-104C

PAGE 2 OF 2



10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation

PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

PROJECT NUMBER 270939.0000.0000

PROJECT LOCATION Hoosick Falls, NY

| | PROJ | EC | T NUI | /IBER | 270939.00 | 000.00 | 000 | PROJECT LOCATION Hoosick Fall | s, NY | |
|--|---------------|--------------|------------------------|------------------|-----------------------------|----------|----------------|--|-----------------------|--------------|
| | DEPTH (ft) | במאד דו ומאף | SAMPLE I YPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAM |
| [| | X | SS | 25 | 50 | | | 47'- 51' (ML) Brown-gray, sandy silt, moist. | | |
| İ | 50 | X | SS | 50 | 36-50 | ML | | 51.0 449. | PID = 0 | |
| İ | | X | SS | 25 | 7-37-50 (87) | | | 51'- 57' (ML) Brown-gray, sandy silt, trace of gravel, moist. | | |
| | - 55 | X | SS | 13 | 110 | ML | | | | |
| | | X | SS | 13 | 50 | | | 57.0 443. | 5 | |
| Ī | | X | SS | 38 | 50 | | . 0 | 57'- 63' (ML) Gray-orange, silt, traces of gravel, wet. | | |
| | 60 | X | SS | 25 | 50 | ML | | | PID = 0 | |
| ŀ | | M | SS | 25 | 50 | | | 63.0 437. | 5 | ✓ Bentonite |
| G. | 65 | M | SS | 0 | 100 | | | 63'- 65' No recovery. Bedrock at 63' bgs. 65.0 435. | 5 | Seal |
| .0GS.G | | \prod | SS RC | 100 | 100/1" | | | 65'- 72.2' Black, phyllite/slate, weathered. | | |
| IL BORING | - 70 | | RC | 100 | | | | | | |
| SICK-SC | | H | | (45) | | | | 72.2 428.3 | PID = 0 | |
| VITIES/SOIL BORING LOGS/HOOSICK-SOIL BORING LOGS.GPJ | - 75 | | RC | 100 (75) | | | | 72.2'- 77.2' Black, phyllite/slate, weathered, calcite veins, thin foliation. | | |
| 30RING | | Ц | | | | | | 77.2 423.3 | 3 | |
| TIES/SOIL I | 80 | | RC | 100 (75) | | | | 77.2'- 82' Black, phyllite/slate, calcite veins, thin foliation, highly weathered. | PID = 0 | Filter Sand |
| | | Ц | | 100 | | | | 82.0 418.9 | | Well Screen |
| ILL\SC | - | Н | RC | 100 (88) | | | | 82'- 83.5' White calcite, minor phyllite/slate, minor weathering. 417.0 |) | |
| SLANDF | 85 | | RC | 100 (53) | | | | 83.5'- 87' Black, phyllite/slate, fractured throughout, calcite vein from 84'-85' | | |
| K FALL | | H | | | | | | 87'- 93.51' Black, phyllite/slate, calcite veins throughout, thin foliation, highly weathered. | PID = 0 | |
| SDECWA#34 - HOOSICK FALLS LANDFILL\SC ACTI | 90 | | RC | 100 (48) | | | | raginary mining in modulo od. | FID = 0 | |
| 1,WA #3 | | | | | | | | 93.5 407.0 | PID = 0 | |
| Ü. | | | | | | • | | Bottom of borehole at 93.5 feet. | • | |

GENERAL BH / TP / WELL - TRC-STD US GDT - 1/18/19 P:/ECR:PROJECTS!NYSDEC:WA #34 - HOOSICK FALLS

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WELL NUMBER HFL-MW-105

PAGE 1 OF 1

| CLIER | NT _ | New \ | ork S | State Depar | tment | of En | vironmental Conservation | PROJECT NAME Site No. 442007 - Hoosick Falls Landfill | | | | | |
|-------------|--------------|--------|---------------------|-----------------------------|----------|----------------------|---|---|-----------|-----------------------|---------------------------------|--|--|
| PROJ | EC1 | NUM | BER | 270939.00 | 00.00 | 000 | | PROJECT LOCATION Hoosig | k Falls | , NY | | | |
| DATE | ST | ARTE | 1 <u>4</u> / | 11/18 | | CON | IPLETED 4/12/18 | GROUND ELEVATION 390.8 | 9 ft | HOLE SIZE 2 | | | |
| DRILL | ING | CON | TRAC | CTOR Parr | att-W | olff, In | C. | GROUND WATER LEVELS: | | | | | |
| DRILL | ING | MET | HOD | Hollow Ste | em Au | ıger | | $\overline{igspace}$ at time of drilling $_{f 1}$ | 22.50 | ft / Elev 368 | .39 ft | | |
| LOGG | ED | BY N | /larnie | e Chancey | | CHE | CKED BY Ryan Jorrey | lacksquare at end of drilling $lacksquare$ | 20.81 f | t / Elev 370. | 08 ft | | |
| NOTE | S | Elevat | ion D | atum: NAVI | D 88 | | | Ψ after drilling 22.6 | 4 ft / EI | ev 368.25 ft | | | |
| O DEPTH | SAMPI E TYPE | NUMBER | RECOVERY % | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIA | AL DESCRIPTION | | Environmental Data | WELL DIAGRAM | | |
| - | | | | | ОН | 1/ 1/ 1/ 1/ 1/ 1/ | moist. | n, topsoil with organics, loose, | 388.9 | PID = 0.3 | Manhole Cover Top of Rise | | |
| - - 5 | - | | | | GP | | 2'- 5' (GP) Dark brow organics, moist. | n, gravel and sand, some | 385.9 | | | | |
| _ | M | ss | 13 | 5-6-6-3 (12) | ML | | 5'- 7' (ML) Brown, silt | with sand, loose, moist. | 383.9 | | Grout | | |
| - | M | ss | 50 | 5-4-6-3 (10) | SP | | 7'- 9' (SP) Brown, me loose. | dium-coarse sand and gravel, | 381.9 | | | | |
| 10 | M | SS | 75 | 0-1-2-7 (3) | SM | | 9'- 13' (SM) Brown-gr sorted, moist. | ay, fine sand and silt, poorly | | PID = 0 | | | |
| - | M | ss | 63 | 2-4-6-9 (10) | O.W. | | 13.0 | | 377.9 | | ≺ Bentonite Seal | | |
| - 15 | X | SS | 50 | 7-27-17-27 (44) | SM | | silt, trace clay, moist. | | 375.9 | | | | |
| - | M | SS | 38 | 20-25-50- 25 (75) | SP | | 15'- 17' (SP) Brown, 1 | medium sand and gravel. | 373.9 | | | | |
| - | \bigvee | SS | 75 | 39-22-30- 30 (52) | ML | | 17'- 19' (ML) Gray-bro moist. | own, coarse sand and silt, | 371.9 | | | | |
| 20 | M | SS | 38 | 6-15-13-12 (28) | GC | | 19'- 23' (GC) Brown-r moist. | ed, till, subangular gravel, stiff, | | PID = 0 | ▼ Filter Sand | | |
| - | M | SS | 75 | 20-20-16- 14 (36) | 00 | | 23.0 | | 367.9 | | Well Scree | | |
| - 25 | M | SS | 88 | 18-12-12- 12 (24) | | | 23'- 29.5' (GC) Browr stiff, wet. | n-red, till, subangular gravel, | | | | | |
| - | M | ss | 75 | 9-11-16-16 (27) | GC | | | | | | | | |
| - | | SS | 50 | 10-10-11- 12 (21) | | | 29.5 | | 361.4 | PID = 0 | | | |

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WELL NUMBER HFL-MW-105C PAGE 1 OF 3

| | | | | 270939.00 | | | /ironmental Conservation | PROJECT NAME Site No. 442007 - Hoosick Falls Landfill PROJECT LOCATION Hoosick Falls, NY | | | | |
|--------------|------------------------------------|----------------------|----------|---|-----------|----------------|---|--|----------------|-----------------------|---------------------------------|--|
| | | | | 2/18 TOR Parr | | | PLETED 4/18/18 | GROUND ELEVATION 390.2 GROUND WATER LEVELS: | 8 ft | _ HOLE S | SIZE 2 | |
| LOGG | SED B | Y Ma | arnie | Hollow Ste Chancey atum: NAVI | | | CKED BY Ryan Jorrey | □ AT TIME OF DRILLING □ AT END OF DRILLING □ AFTER DRILLING 23.6 | 25.02 ff | ft / Elev 365.26 ft | | |
| o DEPTH (ft) | SAMPLE TYPE | NUMBER RECOVERY % | (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIA | AL DESCRIPTION | | Environmental Data | WELL DIAGRAM | |
| | | | | | OH GP | | 2.0 moist. 2'- 5' (GP) Dark brow organics, moist. | n, topsoil with organics, loose, n, gravel and sand, some | 388.3 | PID = 0 | Manhole Cover Top of Rise | |
| <u> </u> | \$ | ss · | 13 | 5-6-6-3 (12) | ML | | 7.0 | with sand, loose, moist. | 385.3 | | | |
| 10 | \longleftrightarrow | | 50 75 | 5-4-6-3 (10) 0-1-2-7 | SP | | _{9.0} loose. | ray, fine sand and silt, moist. | 381.3 | | | |
| - - - | \vdash | | 63 | (3) 2-4-6-9 (10) | SM | | 13.0 | | 377.3 | PID = 0 | | |
| 15 | \longleftrightarrow | | 50 38 | 7-27-17-27 (44) 20-25-50- | SM SP | | 15.0 silt, trace clay, moist. | red, medium-coarse sand and medium sand and gravel. | 375.3 | | | |
| - - | $\left\langle \cdot \right\rangle$ | | 75 | 25 (75) 39-22-30- 30 | ML | | _{19.0} moist. | own, coarse sand and silt, | 373.3 371.3 | | | |
| 20 _ | + | | 38 75 | (52) 6-15-13-12 (28) 20-20-16- | GC | | 19'- 23' (GC) Brown-i moist. | red, till, subangular gravel, stiff, | | PID = 0 | | |
| - 25 | \longleftrightarrow | | - | 14 (36) 18-12-12- | | | 23.0 <u>V</u> 23'- 29' (GC) Brown-I <u>V</u> wet. | red, till, subangular gravel, stiff, | 367.3 | | | |
| | $\left\langle \cdot \right\rangle$ | | 75 | 12 (24) 9-11-16-16 (27) 10-10-11- | GC | | - | | | | | |
| 30 | \forall | | 63 | 10-10-11- 12 (21) 12-16-17- | | | 29.0 29'- 33' (CL) Brown-g wet. | ray, silty clay, some fine sand, | 361.3 | PID = 0 | | |
| - - | \vdash | | 75 | 22 (33) 11-20-20- | CL | | 33.0 33'- 37' (CL) Brown-g | ray, clay, some sand, stiff. | 357.3 | | | |
| 35 | $\left\langle \cdot \right\rangle$ | | 50 63 | 25 (40) 10-12-15- 15 | CL | | 37.0 | | 353.3 | | | |
| 40 | $\left\langle \cdot \right\rangle$ | | 75 | (27) 11-16-20- 20 (36) | SP- SM | <u> </u> | 37'- 39' (SP-SM) Bro moist. | wn-gray, fine sand with silt, ed, clay with fine sand, stiff. | 351.3 | | | |
| - | \vdash | | 38 38 | 11-11-21- 21 (32) | CL | | 41.0 | ray, clay with fine sand, stiff. | 349.3 | PID = 0 | | |
| 45 | | SS : | 50 | 12-20-30- 29 (50) 15-16-15- | CL | | | | | | | |
| - | { | ss e | 63 | 14 | | | 47.0 | | 343.3 | | | |

WELL NUMBER HFL-MW-105C

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CLIENT New York State Department of Environmental Conservation

PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

PROJECT NUMBER 270939.0000.0000

PROJECT LOCATION Hoosick Falls, NY

| PRO. | PROJECT NUMBER 270939.0000.0000 | | | | | | PROJECT LOCATION Hoosick Falls, NY | | | | | | | |
|--|---------------------------------|------------------------|------------------|---------------------------------|----------|----------------|---|-------|-----------------------|--------------|--|--|--|--|
| DEPTH (ft) | II GM 40 | SAMPLE I TPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | | Environmental Data | WELL DIAGRAM | | | | |
| - | M | SS | 100 | (31) 30-30-18- | CL | | 47'- 49' (CL) Gray, clay with fine sand, stiff. | 341.3 | | | | | | |
| 50 | M | SS | 75 | 25 (48) | CL | | 49'- 51' (CL) Gray-brown, clay with fine sand, stiff, | | PID = 0 | | | | | |
| - | M | SS | 88 | 9-10-9-10 (19) 8-11-16-16 | | | 51'- 55' (CL) Gray, clay with fine sand, stiff. | 339.3 | PID = 0 | | | | | |
| - | \forall | | | (27) 7-11-13-14 | CL | | | | | | | | | |
| 55 | $\langle \rangle$ | SS | | (24) 3-9-15-20 | | | 55.0 55'- 57' (CL) Gray, clay with fine sand, trace gravel, | 335.3 | | | | | | |
| - | \mathbb{A} | SS | 38 | (24) 8-28-34-36 | CL | | 57.0 stiff. | 333.3 | | | | | | |
| | M | SS | 50 | (62) 9-10-36-50 | CL | | 57'- 61' (CL) Gray-brown, clay with fine sand, stiff, moist. | | | | | | | |
| _ 60 | X | SS | 25 | (46) 30-30-25- | OL | | 61.0 | 329.3 | PID = 0 | Grout | | | | |
| - | M | SS | 13 | 18 (55) 30-55-50 | CL | | 61'- 63' (CL) Gray, clay with fine sand, trace gravel, | | | | | | | |
| _ - : | M | SS | 13 | (105) 100-0-0-0 | | | 63.0 Stiff, moist. 63'- 103' (GC) Gray, clayey sand with gravel (till), stiff, moist. | 327.3 | | | | | | |
| 65 89 89 | M | SS | 13 | (0) 100-0-0-0 | | | Suil, Hoist. | | | | | | | |
| SI . | \bigcirc | | | (0) 100-0-0-0 | | | | | | | | | | |
| - 70 - 70 | \mathbb{A} | SS | 25 | (0) 100-0-0-0 | | | | | | | | | | |
| 70 | X | SS | 25 | 50-0-0-0 | | | | | PID = 0 | | | | | |
| | M | SS | 25 | (0) 60-0-0-0 | | | | | | | | | | |
| H/S50 75 | M | SS | 38 | (0) 50-0-0-0 (0) | | | | | | | | | | |
| 515 15N | M | SS | 25 | 50-0-0-0 | | | | | | | | | | |
| ref sool bonned 100s/sool bonned 100s/so | M | SS | 25 | 100-0-0-0 | | | | | | | | | | |
| 80 | M | SS | 25 | (0) 50-0-0-0 | | | | | | | | | | |
| | \bigcirc | | | (0) 60-0-0-0 | GC | | | | PID = 0 | | | | | |
| LISCA | $\langle \rangle$ | SS | 38 | (0) 50-30-0-0 | 00 | | | | | | | | | |
| 85 | \mathbb{A} | SS | 50 | (30) | | | | | | | | | | |
| P. IECRIPROJECTSON YSDECIWA #34 - HOOSIGK FALLS LANDFILLISC ACTIV | M | SS | 0 | 50-0-0-0 (0) | | | | | | | | | | |
| CK FA | X | SS | 25 | 40-50-0-0 (50) | | | | | | | | | | |
| 90 | M | SS | 100 | 30-45-50- 30 | | | | | PID = 0 | | | | | |
| A #34 - | | SS | 88 | (95) 18-45-60- | | | | | - | | | | | |
| | | SS | 50 | 55 (105) 25-65-50-0 | | | | | | | | | | |
| 95 NS | \mathbb{N} | | | 26-62-40- | | | | | | | | | | |
| JECT: | $\langle \rangle$ | SS | 75 | 90 (102) | | | | | | | | | | |
| N - 12 | \mathbb{A} | SS | 50 | 50-0-0-0 | | | | | | | | | | |
| 입 100 | \mathbb{N} | SS | 63 | (0) 32-50-0-0 | | | (Continued Next Page) | | PID = 0 | | | | | |

GENERAL BH / TP / WELL - TRC-STD US.GDT - 1/18/19 PAFCRIPROJECTSINYSDECIWA #34 - HOOSICK FALLS LANDFILLISC ACTIVITIESISOIL BORING LOGSIHOOSICK-SOIL BORING LOGS, GPJ

WELL NUMBER HFL-MW-105C

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CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

| DEPTH (ft) | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) U.S.C.S. GRAPHIC LOG | | | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAM |
|----------------|-----------------------|------------------|---|----|--|--|-----------------------|---------------------|
| - - | ss | 25 | (50) 35-70-65- 65 (135) | GC | | 63'- 103' (GC) Gray, clayey sand with gravel (till), stiff, moist. <i>(continued)</i> 287.3 103'- 105' (GC) Red-gray, clayey sand with gravel | | |
| 105 | SS | 63 | (135) 100-0-0-0 (0) | GC | | 105- 105 (GC) Nea-gray, clayey sand with gravel (till), stiff, moist. 285.3 105'- 119' (GC) Gray, clayey sand with gravel (till), | - | |
| · - | ss | 63 | (0) 34-80-85- 65 | | | stiff, moist. | | |
| | ss | 50 | (165) 50-0-0-0 | | | | | |
| 110 | ss | 75 | (0) 35-35-45- 47 | | | | PID = 0 | |
| | ss | 100 | (80) 50-0-0-0 | GC | | | | |
| 115 | ss | 100 | (0) 30-33-35- 60 | | | | | |
| | ss | 50 | (68) 70-0-0-0 | | | | | |
| | ss | 75 | (0) 40-34-60- 50 | | | 119.0 271.3 | | |
| 120 | ss | 13 | (94) 110-70-0-0 | СН | | 119'- 121' (CH) Gray, fat clay with sand and gravel, stiff, wet. 269.3 | | |
| | SS | 0 100 | (70) 100-0-0- 0/0" | СН | | 122.0 121'- 122' (CH) Gray, fat clay with sand and gravel, 268.3 | 1 | ■ Bentonite Seal |
| - - 125 | | (1) 100 | 0/0 | | | 123.3 122'- 123.3' Black, phyllite/slate, little fracturing. 267.0 123.3'- 133.3' Black, phyllite/slate, fractures | - | |
| . – | RC | (26) | | | | throughout. | | |
| | RC | 100 (0) | | | | | | |
| 130 | | 100 | | | | | PID = 0 | |
| | RC | (60) | | | | | PID = 0 | |
| · - | | | | | | 133.3 257.0 133.3'- 153' Black, phyllite/slate, calcite veins, thin | - | |
| 135 _ | RC | 100 (63) | | | | foliation, fractured. | | |
| | | (63) | | | | | | - Filter Sand |
| 125 | | | | | | | | - Well Scree |
| | RC | (30) | | | | | PID = 0 | |
| | | | | | | | | |
| 145_ | RC | 100 (57) | | | | | | |
| | | (37) | | | | | | |
| _ 150 | | 400 | | | | | | |
| | RC | 100 (63) | | | | | PID = 0 | |
| _ | | | | | | 153.0 237.3 Bottom of borehole at 153.0 feet. | | |

10 Maxwell Drive, Suite 200 Olifton Park, NY 12180 Telephone: (518) 688-3102 WELL NUMBER HFL-MW-106 PAGE 1 OF 1

Results you can rely on

| CLIENT New York State Department of Environmental Conservation PROJECT NUMBER 270939.0000.0000 | | | | | | | VIIOIIIIEIILAI COIISEI VALIOII | PROJECT LOCATION Hoosick Falls NV | | | | | |
|---|---------------|--------|------------|-----------------------------|-----------|--|---|--|-----------|-----------------------|---------------------------------|--|--|
| | | | | | 00.00 | | DI ETED 4/20/40 | PROJECT LOCATION Hoosick Falls, NY GROUND ELEVATION 408.88 ft HOLE SIZE 2 | | | | | |
| DATE : | | | | | o# \^/ | | PLETED 4/20/18 | GROUND WATER LEVELS: | π | _ HOLE S | DI ZE _Z | | |
| | | | | TOR Parr | | | C | _ | | | | | |
| | | | | Hollow Ste | | | CKED BY Ryan Jorrey | | | | | | |
| | | _ | | atum: NAVI | | CHE | CRED BY _ Ryan Joney | | | | | | |
| NOTES | | | ם ווטוו | atum. NAVI | J 00 | | | AFTER DRILLING _22.00 | U IL / ER | ev 300.20 II | · | | |
| O DEPTH (ft) | SAMDIE TVDE | NUMBER | RECOVERY % | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERI | AL DESCRIPTION | | Environmental Data | WELL DIAGRAM | | |
| _ | | | | | ОН | 10 11 11 11 11 11 11 11 11 11 11 11 11 1 | moist. | vn, topsoil with organics, loose, | 406.9 | PID = 0 | Manhole Cover Top of Rise | | |
| - - - | | | | | SP | · () | | n-red, sand and gravel, trace | | | | | |
| 5 | 1 | | | | | | | n-gray, sand, some clay and | 403.9 | | Grout | | |
| - | $\frac{X}{A}$ | SS | 50 | 6-7-6-9 (13) | SP- SC | | gravel, loose, moist. | • | | | | | |
| - | X | ss | 63 | 8-8-8-8 (16) | | | 9.0 | | 399.9 | | | | |
| 10 | X | ss | 38 | 4-5-6-7 (11) | CL | | moist. | ray, clay with fine sand, gravel, | | PID = 0 | ✓Bentonite | | |
| | X | ss | 38 | 7-14-21-7 (35) | | | 13.0 | | 395.9 | | Seal | | |
| 15 | \bigvee | ss | 38 | 3-8-9-6 (17) | SP- SC | | 13'- 15' (SP-SC) Bro clay and gravel. 15.0 | wn-red, medium sand, some | 393.9 | | | | |
| - | X | ss | 13 | 38-30-25- 15 (55) | SM | | 15'- 17' (SM) Brown- clay, wet. | gray, medium sand with silt and | 391.9 | | | | |
| | \bigvee | ss | 38 | 18-10-8-10 (18) | SM | | ▼ clay, wet. | medium sand with silt and | | | | | |
| 20 | \bigvee | SS | 88 | 8-8-8-7 (16) | SP- SC | | 19.0 ∑ 19'- 21' (SP-SC) Bro clay and gravel, den: 21.0 | wn-red, medium sand, some se. | 389.9 | PID = 0 | - Filter Sand | | |
| | | SS | 100 | 9-10-11-8 (21) | SM | | | medium sand with silt and | 385.9 | | Well Scree | | |
| 25 | M | SS | 100 | 4-9-11-11 (20) | SM | | 23'- 25' (SM) Brown- clay, wet. 25.0 | gray, medium sand with silt and | 383.9 | | | | |
| | \bigvee | ss | 63 | 5-6-11-11 (17) | | | | rown, sand and clay, dense. | 000.0 | | | | |
| 30 | | ss | 50 | 13-13-15- 22 (28) | SC | | 30.0 | | 378.9 | PID = 0 | | | |

10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

WELL NUMBER HFL-MW-106C PAGE 1 OF 3

| PROJE | ECT NUN | IBER | 270939.00 | 00.00 | 000 | | PROJECT NAME Site No. 442007 - Hoosick Falls Landfill PROJECT LOCATION _ Hoosick Falls, NY | | | | | |
|--|---------|----------------|---|-----------|----------------|--|---|-----------------------|--------------|-------------|--|--|
| | | | | | | PLETED <u>5/2/18</u> | GROUND WATER LEVELS: AT TIME OF DRILLING 19.00 ft / Elev 390.19 ft | | | | | |
| DRILL LOGG | ING MET | 'HOD Marnie | CTOR Parr Hollow Stee Chancey atum: NAVI | em Au | ıger | c. CKED BY Ryan Jorrey | | | | | | |
| SAMPLE TYPE NUMBER RECOVERY % (RQD) BLOW COUNTS (N VALUE) U.S.C.S. | | | | | GRAPHIC LOG | MATER | IIAL DESCRIPTION | Environmental Data | WELL DIAGRAM | | | |
| | | | | ОН | 1/ 1// | 0'- 2' (OH) Dark bro moist. | wn, topsoil with organics, loose, | 407.2 | PID = 0 | Manhole | | |
| | | | | SP | ; ; ; | 2'- 5' (SP) Dark brow clay, moist. | wn-red, sand and gravel, trace | | | Top of Rise | | |
| 5 - | ss | 50 | 6-7-6-9 (13) | 0.0 | | 5:0 5'- 9' (SP-SC) Brow gravel, loose, moist | n-gray, sand, some clay and | 404.2 | | | | |
| - | ss | 63 | 8-8-8-8 (16) | SP- SC | | | | 400.0 | | | | |
| 10 | ss | 38 | 4-5-6-7 (11) | | | 9.0 9'- 13' (CL) Brown-g moist. | gray, clay with fine sand, gravel, | 400.2 | PID = 0 | | | |
| - | ss | 38 | 7-14-21-7 (35) | CL | | 13.0 | | 396.2 | | | | |
| - (- 15 | ss | 38 | 3-8-9-6 (17) | SP- SC | | | own-red, medium sand, some | 394.2 | | | | |
| | ss | 13 | 38-30-25- 15 | SM | | 15'- 17' (SM) Brown clay, wet. | -gray, medium sand with silt and | | | | | |
| | ss | 38 | (55) 18-10-8-10 (18) | SM | | | , medium sand with silt and | 390.2 | | | | |
| 20 | ss | 88 | 8-8-8-7 (16) | SP- SC | | 19'- 21' (SP-SC) Bro clay and gravel, der | own-red, medium sand, some nse. | 388.2 | PID = 0 | | | |
| | ss | 100 | 9-10-11-8 (21) | SM | | 21'- 23' (SM) Brown clay, wet. | , medium sand with silt and | 386.2 | | | | |
| | ss | 100 | 4-9-11-11 (20) | SM | | clay, wet. | | 384.2 | | | | |
| | ss | 63 | 5-6-11-11 (17) | sc | | 25'- 29' (SC) Light b | prown, sand and clay, dense. | | | | | |
| | ss | 75 | 13-13-15- 22 (28) | | | 29.0 | | 380.2 | | | | |
| 30 | ss | 63 | 9-11-14-14 (25) | SM | | stiff, wet. / | , fine sand with silt and clay, | 378.2 | PID = 0 | | | |
| | ss | 100 | 18-19-20- 28 (39) | | | 31'- 46' (SM) Gray, wet. | sand, some silt and clay, stiff, | | | | | |
| | ss | 75 | 14-17-22- 25 (39) | | | | | | | | | |
| | ss | 88 | 16-20-32- 32 | | | | | | | | | |
| | ss | 63 | (52) 14-22-26- 33 | SM | | | | | | | | |
| 40 | ss | 88 | (48) 9-10-22-22 (32) | | | | | | PID = 0 | | | |
| | ss | 63 | 12-15-21- 21 (36) | | | | | | | | | |

WELL NUMBER HFL-MW-106C

PAGE 2 OF 3



10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

| PROJECT | NUMBER | 270939.00 | 00.00 | 000 | PROJECT LOCATION Hoos | ick Falls | , NY | | |
|------------------------|--------|-----------------------------|----------|---|--|-----------------------|--------------|-------|--|
| DEPTH (ft) SAMPLE TYPE | | BLOW COUNTS (N VALUE) | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAM | | |
| 45 | NR 0 | | SM | | 31'- 46' (SM) Gray, sand, some silt and clay, stiff, wet. <i>(continued)</i> | 363.2 | | | |
| | SS 50 | 12-12-12- 12 | SP | | 46'- 48' (SP) Gray, fine sand, medium dense, wet. | | | | |
| - + | SS 100 | (24) 2-24-22-22 | | | 48.0 48'- 54' (SP-SC) Gray, fine sand with clay, dense. | 361.2 | | | |
| 50 | | (46) 8-13-13-13 | | | | | PID = 0 | | |
| - 1 | SS 75 | (26) | sc | | | | | | |
| - 44 | SS 63 | 15 - (24) 20-20-18- | | | 54.0 | 355.2 | | Grout | |
| 55 | SS 50 | 20 | | | 54'- 66' (GC) Gray, clayey sand with gravel (till), moist, stiff. | | | | |
| | SS 38 | (38) 32-22-16- 16 | | | | | | | |
| 60 | SS 25 | (38) 14-26-30- | | | | | | | |
| | SS 13 | 33 (56) 70 | GC | | | | PID = 0 | | |
| | SS 13 | 50 | | | | | | | |
| + } | | | | | | | | | |
| - | SS 10 | 50 | | | 66.0 66'- 71' No recovery. | 343.2 | | | |
| 0 | NR 0 | | | | , | | | | |
| 70 | NR 0 | | | | | | | | |
| - | 00 5 | 50 | GC | | 71.0 71'- 73' (GC) Gray, clayey sand with gravel (till), | 338.2 | PID = 0 | | |
| | SS 5 | 50 | GC | | 73.0 moist, stiff. 73'- 76' No recovery. | 336.2 | | | |
| 75 | NR 0 | | | | | | | | |
| | SS 13 | 50 | GC | | 76.0 76'- 78' (GC) Gray, clayey sand with gravel (till), moist, stiff. | 333.2 | | | |
| | - 13 | | | 8 <i>[]</i> | 78.0 78'- 81' No recovery. | 331.2 | | | |
| 80 | NR 0 | | | | 81.0 | 328.2 | PID = 0 | | |
| | SS 13 | 50 | GC | | 81'- 83' (GC) Gray, clayey sand with gravel (till), | | | | |
| | | | | <i>V.L./\\\</i> } | 83.0 83'- 86' No recovery. | 326.2 | | | |
| 85 | NR 0 | | | | 86.0 | 323.2 | | | |
| | SS 0 | 50 | GC | | 86'- 88' (GC) Gray, clayey sand with gravel (till), moist, stiff. | 321.2 | | | |
| | NR 0 | | | r1-x / \$\forall \cdot \c | 88'- 91' No recovery. | 021.2 | | | |
| 90 | INTX U | | | ZXZVV | 91.0 | 318.2 | PID = 0 | | |
| | SS 17 | 100 | GC | | 91'- 93' (GC) Gray, clayey sand with gravel (till), moist, stiff. | 316.2 | | | |
| | | | | | 93'- 96' No recovery. | | | | |

WELL NUMBER HFL-MW-106C

PAGE 3 OF 3



10 Maxwell Drive, Suite 200 Clifton Park, NY 12180 Telephone: (518) 688-3102

CLIENT New York State Department of Environmental Conservation

PROJECT NAME Site No. 442007 - Hoosick Falls Landfill

PRO JECT NUMBER 270939 0000 0000

PROJECT LOCATION Hoosick Falls NY

| PRO | PROJECT NUMBER 270939.0000.0000 PROJECT LOCATION Hoosick Falls, NY | | | | | | | | | |
|---|--|----|-------------|--------|----------|----------------|--|-----------------------|--------------|--------------------------|
| DEPTH (ft) | SAI | | | | U.S.C.S. | GRAPHIC LOG | MATERIAL DESCRIPTION | Environmental Data | WELL DIAGRAM | |
| 95 | | NR | 0 | | | | 93'- 96' No recovery. (continued) | | | |
| | X | SS | 13 | 50 | GC | | 96.0 96'- 98' (GC) Gray, clayey sand with gravel (till), moist, stiff. | 313.2 | | |
| | | | | | | | 98'- 101' No recovery. | | | |
| 100 | 10 | NR | 0 | | | | 101.0 | 308.2 | PID = 0 | |
| | X | ss | 10 | 100 | GC | | 101'- 103' (GC) Gray, clayey sand with gravel (till), moist, stiff. | 306.2 | | |
| 105 | $\frac{1}{2}$ | NR | 0 | | | | 103'- 106' No recovery. | | | |
| 105 | \top | | | | | | 106.0 | 303.2 | | |
| | | SS | 100 | 100/2" | | | 106'- 121.2' Black, phyllite/slate, calcite veins, thin foliation, highly fractured. | | | |
| - | 10 | NR | 0 | | | | ionation, mgmy natitated. | | | ≺Bentonite Seal |
| 110 | П | RC | 100 (50) | | | | | | | |
| - · | Н | RC | 100 | | | | | | PID = 0 | |
| | Н | | (61) | | | | | | | |
| 198 115 | | RC | 100 (83) | | | | | | | |
| 77- 120 120 120 | | RC | 100 (71) | | | | 121.2 | 288.0 | PID = 0 | |
| | - | RC | 100 (82) | | | | 121.2'- 126.3' Black, phyllite/slate, minor fracturing. 126.3 | 282.9 | | ▼Filter Sand Well Screen |
| TANDHIT SC ACIN | | RC | 100 (96) | | | | 126.3'- 138' Black, phyllite/slate, highly fractured. | 202.0 | PID = 0 | |
| 115 120 | | RC | 100 (75) | | | | 129.0 | 274.0 | PID = 0 | |
| JUN JUN JUN JUN JUN JUN JUN JUN JUN JUN | | | | | | <u> </u> | Bottom of borehole at 138.0 feet. | 271.2 | | |

GENERAL BH / TP / WELL - TRC-STD US.GDT - 1/18/19 P:/ECR!PROJECTS!NYSDEC!WA #34 - HOOSICK FALLS LAND

WELL: HFL-MW-101 **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill HFL-MW-101 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow Stem Auger INSTALLATION DATE: 5/23/2017 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/26/2017 DEPTH TO WATER²: 16.01 HEIGHT OF STICK-UP: 2.26 ELEVATION¹: 437.42 DEPTH TO PRODUCT²: NGVD88 DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.55 437.71 Top of Metal Casing 2.26 437.42 Top of Casing (TOC) 0.00 435.16 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 432.16 3.00 of Concrete Collar Top of Sand Pack/ Bottom of 11.00 424.16 Bentonite Slurry 13.00 422.16 Top of Well Screen Slot Size: 0.010" 13.75 421.41 Depth to Water 406.32 End of Well Screen 28.84 29.00 406.16 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-101B **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 Hoosick Falls Landfill WELL NUMBER: PROJECT NAME: HFL-MW-101B ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow Stem Auger INSTALLATION DATE: 3/29/2018 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/4/2018 DEPTH TO WATER²: 51.89 HEIGHT OF STICK-UP: 2.32 ELEVATION¹: 437.54 DEPTH TO PRODUCT²: NGVD88 DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.43 437.65 Top of Metal Casing 2.32 437.54 Top of Casing (TOC) 0.00 435.22 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 374.22 61.00 of Concrete Collar Top of Sand Pack/ Bottom of 63.00 372.22 Bentonite Slurry 65.00 370.22 Top of Well Screen Slot Size: 0.010" 49.57 Depth to Water 385.65 79.69 355.53 End of Well Screen 80.00 355.22 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-101C **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill HFL-MW-101C ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow Stem Auger INSTALLATION DATE: 4/3/2018 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/4/2018 DEPTH TO WATER²: 51.70 HEIGHT OF STICK-UP: 2.25 ELEVATION¹: 437.05 DEPTH TO PRODUCT²: NGVD88 DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.55 437.35 Top of Metal Casing 2.25 437.05 Top of Casing (TOC) 0.00 434.80 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 68.00 366.80 of Concrete Collar Top of Sand Pack/ Bottom of 70.00 364.80 Bentonite Slurry 72.00 362.80 Top of Well Screen Slot Size: 0.010" 49.45 385.35 Depth to Water 99.55 335.25 End of Well Screen 100.00 334.80 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-102 **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill HFL-MW-102 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow Stem Auger INSTALLATION DATE: 5/25/2017 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 6/5/2017 DEPTH TO WATER²: 52.54 HEIGHT OF STICK-UP: 2.49 ELEVATION¹: 512.05 DEPTH TO PRODUCT²: NGVD88 DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.49 512.05 Top of Metal Casing 2.49 512.05 Top of Casing (TOC) 0.00 509.56 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 482.56 27.00 of Concrete Collar Top of Sand Pack/ Bottom of 32.00 477.56 Bentonite Slurry 55.00 454.56 Top of Well Screen Slot Size: 0.010" 50.05 459.51 Depth to Water End of Well Screen 63.46 446.10 70.00 439.56 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-103 **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill HFL-MW-103 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 5/24/2017 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/26/2017 DEPTH TO WATER²: 6.84 HEIGHT OF STICK-UP: 2.74 ELEVATION¹: 496.57 DEPTH TO PRODUCT²: NGVD88 DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 3.05 496.88 Top of Metal Casing 2.74 496.57 Top of Casing (TOC) 0.00 493.83 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 2.00 491.83 of Concrete Collar Top of Sand Pack/ Bottom of 489.83 4.00 Bentonite Slurry 5.00 488.83 Top of Well Screen Slot Size: 0.010" 4.10 489.73 Depth to Water End of Well Screen 19.85 473.98 30.00 463.83 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-104 **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 Hoosick Falls Landfill WELL NUMBER: PROJECT NAME: HFL-MW-104 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 4/4/2018 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/3/2018 DEPTH TO WATER²: 8.11 HEIGHT OF STICK-UP: 1.77 ELEVATION¹: 500.14 NGVD88 DEPTH TO PRODUCT²: DATUM: SCREEN MATERIAL: CASING MATERIAL: PVC PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.06 500.43 Top of Metal Casing 1.77 500.14 Top of Casing (TOC) 0.00 498.37 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 494.37 4.00 of Concrete Collar Top of Sand Pack/ Bottom of 6.00 492.37 Bentonite Slurry 8.00 490.37 Top of Well Screen Slot Size: 0.010" 6.34 492.03 Depth to Water End of Well Screen 22.78 475.59 23.00 475.37 End of Boring Not to Scale Notes: ¹Feet above datum

WELL: HFL-MW-104C **OTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill HFL-MW-104C ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 4/10/2018 DRILLER: Parratt-Wolff, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 5/3/2018 DEPTH TO WATER²: 30.43 HEIGHT OF STICK-UP: 2.51 ELEVATION¹: 500.49 DEPTH TO PRODUCT²: NGVD88 DATUM: CASING MATERIAL: PVC PVC SCREEN MATERIAL: FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.75 500.73 Top of Metal Casing 2.51 500.49 Top of Casing (TOC) 0.00 497.98 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 439.23 58.75 of Concrete Collar Top of Sand Pack/ Bottom of 60.99 436.99 Bentonite Slurry 68.50 429.48 Top of Well Screen Slot Size: 0.010" 27.92 470.06 Depth to Water End of Well Screen 93.51 404.47 93.51 404.47 End of Boring Not to Scale Notes: ¹Feet above datum

| ©TRC | | ELL CONSTRUCTIO | ON SHEET 1 OF 1 |
|-------------------------------------|------------------------|---------------------------------|---|
| PROJECT NAME: | | WELL NUMBER: | |
| ADDRESS: | · | _ DRILLING METHOD: | |
| INSTALLATION DATE: | 4/11/2018 | _ DRILLER: | Parratt-Wolff, Inc. |
| DEVELOPMENT DATE: | 5/7/2018 | _ GAUGING DATE: | 7/19/2018 |
| HEIGHT OF STICK-UP: | | DEPTH TO WATER ² : | 22.63 |
| ELEVATION ¹ : DATUM: | | DEPTH TO PRODUCT ² : | N/A |
| CASING MATERIAL: | PVC | SCREEN MATERIAL: | PVC |
| FILTER PACK TYPE: | #0 Sand | SEAL TYPE: | Grout |
| Depth from Ground Surface (feet) | Elevation ¹ | | |
| 0.00 | 390.90 | | Manhole Cover, Ground Surface |
| 0.01 | 390.89 | | Top of Casing (TOC) |
| 0.75 | 390.15 | | Top of Concrete Collar |
| 10.80 | 380.10 | | Top of Bentonite Slurry/Bottom of Concrete Collar |
| 12.80 | 378.10 | | Top of Sand Pack/ Bottom of Bentonite Slurry |
| 14.50 | 376.40 | | ·Top of Well Screen |
| | | | Slot Size: |
| | 368.26 | | Depth to Water |
| 29.09 29.50 | 361.81 361.40 | lot to Scale | End of Well Screen End of Boring |

NOT TO SCALE

Notes:

¹Feet above datum ²Feet below top of casing

| ©TRC | FLUSH-MOUNT | WELL CONSTRUCTION | N WELL: HFL-MW-105C SHEET 1 OF 1 |
|---|------------------------|---------------------------------|---|
| | Hoosick Falls Landfill | | |
| • | Hoosick Falls, NY | | |
| INSTALLATION DATE: | 4/11/2018 | DRILLER: | Parratt-Wolff, Inc. |
| DEVELOPMENT DATE: | 5/7/2018 | GAUGING DATE: | 7/19/2018 |
| HEIGHT OF STICK-UP: | | DEPTH TO WATER ² : | 23.46 |
| ELEVATION ¹ : _ DATUM: | | DEPTH TO PRODUCT ² : | N/A |
| CASING MATERIAL: | | SCREEN MATERIAL: | |
| FILTER PACK TYPE: | | SEAL TYPE: | |
| Surface (feet) | Elevation ¹ | | |
| 0.00 | 390.50 | | Manhole Cover, Ground Surface |
| 0.22 | 390.28 | | Top of Casing (TOC) |
| 1.75 | 388.75 | | Top of Concrete Collar |
| 120.10 123.00 | 270.40 267.50 | | Top of Bentonite Slurry/Bottom of Concrete Collar Top of Sand Pack/ Bottom of Bentonite Slurry |
| 125.00 | 265.50 | | Top of Well Screen |
| | | | Slot Size: |
| | 366.82 | | Depth to Water |
| 152.77 | 237.73 | | End of Well Screen |
| 153.00 | 237.50 | Not to Scale | End of Boring |
| Notes: ¹ Feet above datum | | | |

| ©TRC | FLUSH-MOUN | | LL CONSTRUCT DG | FION WELL: HFL-MW-106 SHEET 1 OF 1 |
|-------------------------------------|------------------------|----------|--------------------|--|
| | Hoosick Falls Landf | | WELL NUMBE | |
| ADDRESS: | Hoosick Falls, NY | <u>′</u> | DRILLING METHO | OD: Hollow-stem auger |
| INSTALLATION DATE: | 4/11/2018 | | DRILLE | ER: Parratt-Wolff, Inc. |
| DEVELOPMENT DATE: | 5/7/2018 | | GAUGING DA | TE:7/19/2018 |
| HEIGHT OF STICK-UP: | | | DEPTH TO WATE | R ² : 22.19 |
| ELEVATION ¹ : DATUM: | | | DEPTH TO PRODUC | CT ² : N/A |
| CASING MATERIAL: | PVC | | SCREEN MATERIA | AL: PVC |
| FILTER PACK TYPE: | #0 Sand | | SEAL TYP | PE: Grout |
| Depth from Ground Surface (feet) | Elevation ¹ | | | |
| 0.00 | 409.29 | | | Manhole Cover, Ground Surface |
| 0.41 | 408.88 | | | Top of Casing (TOC) |
| 0.75 | 408.54 | | | Top of Concrete Collar |
| 9.50 | 399.79 | | | Top of Bentonite Slurry/Bottom of Concrete Collar |
| 12.00 | 397.29 | | | Top of Sand Pack/ Bottom of Bentonite Slurry |
| 14.00 | 395.29 | | | Top of Well Screen |
| | | | | Slot Size: |
| | 386.69 | | | Depth to Water |
| 29.62 30.00 | 379.67 379.29 | No. | ot to Scale | End of Well Screen End of Boring |

Notes:

¹Feet above datum ²Feet below top of casing

| ©TRC | FLUSH-MOUNT WE | | WELL: HFL-MW-106C SHEET 1 OF 1 |
|----------------------------|----------------------------|---|---|
| | L | OG | SHEET TOP T |
| | Hoosick Falls Landfill | WELL NUMBER: | |
| ADDRESS: | Hoosick Falls, NY | DRILLING METHOD: | Hollow-stem auger |
| INSTALLATION DATE: | 4/11/2018 | DRILLER: | Parratt-Wolff, Inc. |
| DEVELOPMENT DATE: | 5/7/2018 | GAUGING DATE: | 7/19/2018 |
| HEIGHT OF STICK-UP: | | DEPTH TO WATER ² : | 15.23 |
| ELEVATION ¹ : | | | NIA |
| DATUM: CASING MATERIAL: | NGVD88 PVC | DEPTH TO PRODUCT ² : SCREEN MATERIAL: | N/A PVC |
| FILTER PACK TYPE: | | SEAL TYPE: | |
| • | Elevation ¹ | | |
| 0.00 | 409.48 | | Manhole Cover, Ground Surface |
| 0.29 | 409.19 | | Top of Casing (TOC) |
| 0.50 | 408.98 | | Top of Concrete Collar |
| 107.00 109.00 | 302.48 300.48 298.48 | | Top of Bentonite Slurry/Bottom of Concrete Collar Top of Sand Pack/ Bottom of Bentonite Slurry |
| 15.52 | 393.96 | - - - - - - - - - - - - - - - - - - - | Top of Well Screen Slot Size: Depth to Water |
| 137.63 138.00 | 271.85 271.48 | | End of Well Screen End of Boring |

Not to Scale

NOT TO SCALE

Notes:

¹Feet above datum ²Feet below top of casing

WELL: MW-1B **CTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill MW-1B ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 9/10/1991 DRILLER: Gibbs & Hill, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 6/5/2017 DEPTH TO WATER²: 4.78 HEIGHT OF STICK-UP: 0.66 ELEVATION¹: 499 NGVD88 DEPTH TO PRODUCT²: DATUM: SCREEN MATERIAL: PVC CASING MATERIAL: PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 0.96 499.30 Top of Metal Casing 0.66 499.00 Top of Casing (TOC) 0.00 498.34 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 1.80 496.54 of Concrete Collar Top of Sand Pack/ Bottom of 492.54 5.80 Bentonite Slurry 8.20 490.14 Top of Well Screen Slot Size: 0.010" 4.12 494.22 Depth to Water

Notes:

Well construction log has been re-drawn based upon the "Overburden Well Construcion Schematic" provided in the December 1991 Closure Investigation Report by Laberge Engineering & Consulting Group Ltd.

Not to Scale

End of Well Screen

End of Boring

¹Feet above datum

20.19

22.00

478.15

476.34

WELL: MW-2 **CTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill MW-2 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 1/31/1990 DRILLER: Gibbs & Hill, Inc. GAUGING DATE: 7/19/2018 DEVELOPMENT DATE: 6/8/2017 DEPTH TO WATER²: 4.83 HEIGHT OF STICK-UP: 2.11 ELEVATION¹: 400.8 NGVD88 DEPTH TO PRODUCT²: DATUM: SCREEN MATERIAL: PVC CASING MATERIAL: PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.45 403.25 Top of Metal Casing 2.11 402.91 Top of Casing (TOC) 0.00 400.80 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 2.00 398.80 of Concrete Collar Top of Sand Pack/ Bottom of 17.70 383.10 Bentonite Slurry 20.00 380.80 Top of Well Screen Slot Size: 0.010" 2.72 Depth to Water 398.08

Notes:

Well construction log has been re-drawn based upon the "Overburden Well Construcion Schematic" provided in the December 1991 Closure Investigation Report by Laberge Engineering & Consulting Group Ltd.

Not to Scale

End of Well Screen

End of Boring

¹Feet above datum

30.03

35.00

370.77

365.80

WELL: MW-4 **CTRC** STICK-UP WELL CONSTRUCTION LOG SHEET 1 OF 1 WELL NUMBER: PROJECT NAME: Hoosick Falls Landfill MW-4 ADDRESS: Hoosick Falls, NY DRILLING METHOD: Hollow-stem auger INSTALLATION DATE: 2/6/1990 DRILLER: Gibbs & Hill, Inc. GAUGING DATE: 2/13/2018 DEVELOPMENT DATE: 6/8/2017 DEPTH TO WATER²: 22.65 HEIGHT OF STICK-UP: 2.76 ELEVATION¹: 403.39 NGVD88 DEPTH TO PRODUCT²: DATUM: SCREEN MATERIAL: PVC CASING MATERIAL: PVC FILTER PACK TYPE: #0 Sand SEAL TYPE: Grout Depth from Ground Elevation¹ Surface (feet) 2.79 406.18 Top of Metal Casing 2.76 406.15 Top of Casing (TOC) 0.00 403.39 Ground Surface, Top of Concrete Top of Bentonite Slurry/Bottom 2.00 401.39 of Concrete Collar Top of Sand Pack/ Bottom of 20.00 383.39 Bentonite Slurry 22.00 381.39 Top of Well Screen Slot Size: 0.010" 19.89 383.50 Depth to Water

Notes:

Well construction log has been re-drawn based upon the "Overburden Well Construcion Schematic" provided in the December 1991 Closure Investigation Report by Laberge Engineering & Consulting Group Ltd.

Not to Scale

End of Well Screen

End of Boring

¹Feet above datum

31.70

35.00

371.69

368.39

APPENDIX B FIELD FORMS – GROUNDWATER SAMPLING LOGS

| | | | | LOW | FLOW GR | DUNDW | /AT | ER SAMP | LING RE | COR | D | | |
|----------------------|-------------------------------------|--------------------|---------|--|---------------------------------------|-----------------------|---------------------|--|------------------------------|---------|---------------------------|---|--|
| | PROJECT NAME | | NYS | SDEC Hoosick Falls Lar | adfill | | LOC | ATION ID HFL-MW- | 103 | DATE | 6/7/201 | 17 | 1 |
| | PROJECT NUMB | ER | | 270939.0000.0000 | | | STAI | RT TIME 14:02 | | END T | TIME 15:00 |) | 1 |
| | SAMPLE ID | HFL-M | W-101 | SAM | 14:47 | | SITE | 2 NAME/NUMBE 442007 | | PAGE | 1 OF | 1 |] |
| WELL DIAM | IETER (INCHES) | 1 | | 2 X 4 | 6 | 8 | | OTHER | | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID (| (INCHES) | 1/8 | _ | 1/4 X 3/8 | 1/2 | 5/8 | | OTHER | | | | CAP CASING | <u>X</u> |
| MEASUREM | IENT POINT (MP) | X | TOP OF | RISER (TOR) | TOP OF CASIN | IG (TOC) | | OTHER | | | | LOCKED COLLAR | |
| INITIAL I (BMP) | DTW 13 | 1.58 | FT | FINAL DTW (BMP) | 15.33 | FT | | T. CASING CKUP (AGS) | 2.55 | 2.55 FT | | TOC/TOR DIFFERENC | 0.29 FT |
| WELL DEPTH 28 FT | | | | SCREEN LENGTH | 15 | PID FT AMBIENT AIR | | | 0 | 0 PPM | | | IER SEC |
| WATER COLUMN | 14 | .42 | FT | DRAWDOWN VOLUME | 1.15 | GAL | PID V | WELL JTH | 0 | 0 PPM | | | E - SEC |
| CALCULA GAL/VOL | ٠ 9. | .46 | GAL | (final DTW - initial D'TOTAL VOL. PURGED | GAL | | WDOWN/ AL PURGED | 0.4 | 19 | | PRESSURE TO PUMP | - PSI | |
| | well diameter square | | | (mL per minute X tota | | | | | | | | | |
| TIME 3-5 Minutes | DTW (FT) 0.0-0.33 ft Drawdown | PURC | E RATE | TEMP. (°C) (+/- 3 degrees) | SP. CONDUCTANO (mS/cm) (+/- 3%) | | | DISS. O ₂ (mg/L) (+/- 10%) | TURBIDITY (+/- 10% <10 | | REDOX (mv) (+/- 10 mv) | PUMP INTAKE DEPTH (ft) | COMMENTS |
| 14:02 | BEGIN PUR | GING | | | | | | | | | | | • |
| 14:07 | 13.91 | : | 200 | 22.8 | 0.645 | 6.12 | | 1.84 | 24.6 | | 103 | 25 | |
| 14:12 | 14.11 | : | 200 | 18.4 | 0.67 | 6.61 | | 0 | 29.9 | | 105 | 25 | |
| 14:17 | 14.39 | | 200 | 17.6 | 0.681 | 6.65 | | 0 | 55.9 | | 86 | 25 | |
| 14:22 | 14.58 | | 200 | 17.5 | 0.686 | 6.6 | | 0 | 67.6 | | 98 | 25 | |
| 14:27 14:32 | 14.78 14.96 | | 200 | 16.9 | 0.691 | 6.54 0 6.54 0 | | 0 | 70.9 64.5 | | 95 | 25 25 | |
| 14:37 | 15.15 | 200 17.1 0.69 6.34 | | + | 0 | 55.3 | | 93 | 25 | | | | |
| 14:42 | 15.24 | : | 200 | | | 53.3 | | 99 | 25 | | | | |
| 14:47 | 15.33 | | 200 | 17.5 | 0.693 | 6.47 | | 0 | 49.0 | | 97 | 25 | |
| | | | | | | | | | | | | | |
| | _ | | | <u> </u> | | | | | | | | | legree (ex. 10.1 = 10) |
| | F | INAL S | STABILI | ZED FIELD PAR | AMETERS (to ap | propriate s | signifi | icant figures[S | F]) | | | COND.: 3 SF mar pH: nearest tenth DO: nearest tenth | |
| | | | | 18 | 0.693 | 6.5 | | 0 | 49 | | 97 | TURB: 3 SF max. | t, nearest tenth (6.19 = 6.2, 101 = 101) = 44, 191 = 190) |
| - | DOCUMENTATION TYPE OF PUMP | N | D | ECON FLUIDS USED | | TURI | NG/PH | MP/BLADDER MA | TERIALS | | | | EQUIPMENT USED |
| X PERIS | TALTIC ERSIBLE | | X | LIQUINOX DEIONIZED WATER | | TUBING TUBING | 110/1 0/ | S. ST | EEL PUMP MAT PUMP MATERIA | | | X WL M | |
| BLAD | | | | POTABLE WATER | TEFLON | LINED TUBIN | ٩G | GEO | PROBE SCREEN | ıL | | X WQ M | |
| WATT | | | | NITRIC ACID HEXANE | X HDPE TO | | | OTH | | | | X PUMP | |
| OTHE | R | | | METHANOL PFAS FREE WATER | OTHER OTHER | | _ | OTH OTH | | | | OTHEI FILTE | |
| ANALYTIC | CAL PARAMETER PARAM | | | METHOD | FIELD | | | | OLUME | | MPLE | QC | SAMPLE BOTTLE ID |
| v | PFA | | | NUMBER 537.1 | FILTERE No | D | METH | | EQUIRED 500 mL | | ECTED Yes | COLLECTED No | NUMBERS NUMBERS |
| X | 1,4-dio | xane | | 8270-SIM | No | | Ico | | 2 L | | Yes . | No | |
| X | PCB | Bs | | 8082A | No | | Ico | e | 500 mL | , | Yes | No | |
| X | TCL Pes | | | 8081B | No | | Ice | | 500 mL | | Yes | No | _ |
| X | TCL SV | | | 8270D 8260C | No No | | Ice HC | | 500 mL 150 mL | | r'es | No No | _ |
| X | Total M | | | 6010C, 7470. | A No | | Nitric . | | 500 mL | | Yes Yes | No No | _ |
| ш | SERVATIONS | | | | | | | KETCH/NOTES | | | | | |
| PURGE WA CONTAINE | | NO NO | 1 | NUMBER OF GALL GENERATED | ONS 2.3 | 4 | | | | | | | |
| NO-PURGE | | NO NO | | If yes, purged approxima | | | | | | | | | |
| UTILIZED | | X | 1 | to sampling or | mL for this sample lo | cation. | - | | | | | | |
| Sampler Sign | nature: | DL | | Print Name: | Stephen Johansson | | | | | | | | |
| Checked By: | Ryan Jorrey | | | Date: 6/ | 7/2017 | | | | | | | | |



| | | | | | LOV | V FLOW GRO | UNDW | AT | ER SAN | MPL | ING RECO | ORD | | |
|----------------------------------|--------------------|------------------|------------|-----------------|---|---|-------------------------|----------|-------------------------------------|--------|----------------------------------|-------------|---|---|
| | PROJECT I | NAME | | NYS | SDEC Hoosick Falls Lan | dfill | | LOCA | ATION ID | -MW-1 | | ATE 6/8/20 | 017 | |
| | PROJECT ! | NUMBE | ER | | 270939.0000.0000 | | | STAR | RT TIME | 9:55 | | ND TIME | | |
| | SAMPLE II | D | HFL-MV | W-102 | SAM | PLE TIME 10:40 | | SITE | NAME/NU | | PA | AGE 1 OF | 1 | |
| WELL DIAM | IETER (INC | снеѕ) Г | 1 | | 2 X 4 | 6 | 18 | | OTHER | | | | | WELL INTEGRITY YES NO N/A |
| | | / [| 1/8 | | 1/4 X 3/8 | 1/2 | 15/8 | _ | OTHER | | | | CAP CASING | X |
| TUBING ID (| | L Γ (MP) | | | RISER (TOR) | TOP OF CASING | _ | _ | OTHER | | | | LOCKED COLLAR | |
| INITIAL I (BMP) | DTW | 52. | 72 | FT | FINAL DTW (BMP) | 54.33 | FT | | T. CASING KUP (AGS) | | 2.49 | FT | TOC/TOR DIFFERENCE | 0.0 FT |
| WELL DE (BMP) | ЕРТН | 71. | 77 | FT | SCREEN LENGTH | 15 | FT | PID | PID AMBIENT AIR | | 0 PPM | | REFILL TIMI | ER 25 SEC |
| WATER | /ATER 19.05 | | | DRAWDOWN 1.06 | | PID WELI | | WELL | | 0 | | DISCHARGE | 5 | |
| CALCUL | | 12.: | 50 | FT | VOLUME (final DTW - initial D' TOTAL VOL. | TW X well diam. square | GAL d X 0.041) | MOU | WDOWN/ | | 0.42 | PPM | PRESSURE | SEC 60 |
| | well diameter | r squared | 1 X 0.041) | | ` * | l minutes X 0.00026 gal | | TOTA | AL PURGE | D | | | TO PUMP | PSI |
| | DTW (F | | | | | SP. CONDUCTANCE | | | DICC C | | | \ n===== | PUMP | |
| TIME 3-5 Minutes | 0.0-0.33 Drawdo | 3 ft | | E RATE /min) | TEMP. (°C) (+/- 3 degrees) | (mS/cm) (+/- 3%) | pH (unit (+/- 0.1 un | | DISS. O ₂ (r (+/- 10% | | TURBIDITY (nt (+/- 10% <10 nt | , | INTAKE DEPTH (ft) | COMMENTS |
| 9:52 | BEGIN | PURG | GING | | | | | | | | | | _ | |
| 10:05 | 53.12 | 2 | 2 | 200 | 16.14 | 0.733 | 7.23 | | 2.91 | | 0 | 197 | 60 | |
| 10:10 | 53.48 | | | 200 | 14.2 | 0.743 | 7.23 | | 1.81 | | 0 | 203 | 60 | |
| 10:15 | 53.67 | | | 200 | 14.37 | 0.744 | 7.2 | | 1.59 | | 13.7 28.5 | 207 | 60 | |
| 10:25 | 53.92 | | | 200 | 13.98 | 0.744 | 7.16 | | 0.98 | | 44.1 | 208 | 60 | |
| 10:30 | 30 54.11 200 | | 200 | 13.95 | 0.738 | 7.14 | | 0.7 | | 55.3 | 208 | 60 | | |
| 10:35 | 54.26 200 | | 200 | 14.2 | 0.739 | 7.12 | | 0.78 | | 59.2 | 208 | 60 | | |
| 10:40 | 54.33 | 3 | 2 | 200 | 14.1 | 0.749 | 7.11 | | 0.64 | | 58.9 | 208 | 60 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | gree (ex. 10.1 = 10) |
| | | F | INAL S | STABIL | 1 | AMETERS (to app | 1 | ignific | | es[SF] | · | 200 | pH: nearest tenth (e DO: nearest tenth (| ex. 3.51 = 3.5) |
| EQUIPMENT | DOCUMEN | TATIO | N | | 14 | 0.749 | 7.1 | | 0.6 | | 58.9 | 208 | ORP: 2 SF (44.1 = | nearest tenth (6.19 = 6.2, 101 = 101) 44, 191 = 190) |
| | TYPE OF PUM | <u>IP</u> | | | ECON FLUIDS USED LIQUINOX | SILICON T | | NG/PUM | MP/BLADDEF | | <u>RIALS</u> EL PUMP MATERI | AL | X WL ME | EQUIPMENT USED TER |
| SUBM BLAD | IERSIBLE DER | | | | DEIONIZED WATER POTABLE WATER | TEFLON T | UBING INED TUBIN | IG. | | | UMP MATERIAL ROBE SCREEN | | | MultiRae ETER Horiba |
| WATT | | | | | NITRIC ACID HEXANE | X HDPE TUB LDPE TUB | ING | | | | N BLADDER | | X TURB. | METER Geopump |
| OTHE | R | | | | METHANOL | OTHER | ING | | | OTHER | ₹ | | OTHER | |
| ANALYTIC | R CAL PARAM | METERS | S | X | PFAS FREE WATER | OTHER | | | | OTHE | ₹ | | FILTER | S NO. TYPE |
| | | ARAME | ETER | | METHOD NUMBER | FIELD FILTERED | | METH | | REG | QUIRED C | SAMPLE | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | | PFAS 1,4-diox | | | 537.1 8270-SIM | No No | | Ice | | | 00 mL 2 L | Yes | No No | |
| X | | PCBs | S | | 8082A | No | | Ice | e | 5 | 00 mL | Yes | No | |
| X | Т | CL Pesti | icides | | 8081B | No | | Ice | | 5 | 00 mL | Yes | No | |
| X | 7 | TCL SV | OCs | | 8270D | No | | Ice | e | 5 | 00 mL | Yes | No | · · |
| X | | TCL VC | | | 8260C | No | | HC | | | 50 mL | Yes | No | |
| X | | Total Me | etals | | 6010C, 7470A | A No | | Nitric A | | | 00 mL | Yes | No | |
| PURGE OB PURGE WA CONTAINE | | YES X | NO | | NUMBER OF GALL GENERATED | ONS 2.50 | | SK | KETCH/NO | TES | | | | |
| NO-PURGE UTILIZED | | YES | NO X | | | tely 1 standing volume prio mL for this sample local | | | | | | | | |
| a | | MI | 1 | _ | B W | 61 | | | | | | | | |
| Sampler Sign | | 911 | | | | Stephen Johansson | | | | | | | | |
| Checked By: | Ryan Jo | orrey | | | Date: 6/8/2 | U1/ | | 1 | | | | | | |



| | | | | | LOW | FLOW GR | OUNDW | AT | ER SA | MPL | ING RECO | ORD | | |
|----------------------|--------------------|-------------------|--------|--------------------|---|---------------------------|----------------------|-----------------|----------------------|----------------|--------------------------------|-------------------------|--|--|
| | PROJECT N | NAME | | NYS | DEC Hoosick Falls Lan | dfill | | LOC | ATION II | | | ATE | | |
| | PROJECT N | NUMBE | R | | 270939.0000.0000 | | | STAI | HFL-I | MW-103 | | 6/7/20 ND TIME | | |
| | SAMPLE ID |) | | | | PLE TIME | | SITE | NAME/N | 12:36 UMBEF | R PA | 13:1 AGE | .0 | |
| | HF | FL-MW- | 103 | | | 13:00 | | | | 442007 | | 1 OF | | |
| WELL DIAM | METER (INC | HES) | 1 | | 2 X 4 | 6 | 8 | | OTHER _ | | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID | (INCHES) | | 1/8 | | 1/4 X 3/8 | 1/2 | 5/8 | | OTHER _ | | | | CAP CASING LOCKED | <u>X</u> |
| MEASUREM | IENT POINT | (MP) | X | TOP OF I | RISER (TOR) | TOP OF CASI | NG (TOC) | | OTHER _ | | | | COLLAR | X |
| INITIAL I (BMP) | DTW | 4.7 | 1 | FT | FINAL DTW (BMP) | 5.84 | | | T. CASIN CKUP (AG | | 3.05 | FT | TOC/TOR DIFFERENCE | 0.31 FT |
| WELL DE (BMP) | 2LL DEPTH 19.71 FT | | FT | SCREEN LENGTH | 15 | FT AM | |) IBIENT AIR | | 0 PPM | | REFILL TIMI SETTING | ER SEC | |
| WATER COLUMN | | | FT | DRAWDOWN VOLUME | 0.74 | | | D WELL OUTH | | 0 PPM | | DISCHARGE TIMER SETT | | |
| CALCULA GAL/VOL | | 9.84 | 4 | GAL | (final DTW - initial D' TOTAL VOL. PURGED | TW X well diam. squa | DRAW | | WDOWN AL PURG | 0.39 | | | PRESSURE TO PUMP | - PSI |
| (column X | well diameter | | | | (mL per minute X tota | | gal/mL) | | | | | | | |
| TIME | DTW (F 0.0-0.33 | T) | | E RATE | TEMP. (°C) | SP. CONDUCTANO (mS/cm) | | ts) | DISS. O ₂ | (mg/L) | TURBIDITY (nt | u) REDOX (mv | PUMP INTAKE | COMMENTS |
| 3-5 Minutes | Drawdov | wn | - | /min) | (+/- 3 degrees) | (+/- 3%) | (+/- 0.1 ur | nits) | (+/- 10 | 0%) | (+/- 10% <10 nt | (+/- 10 mv) | DEPTH (ft) | COMMENTS |
| 12:36 | BEGIN | PURG | | | 1 | | | | | | I | | 1 | |
| 12:40 | 5.01 | | | 000 | 18.91 | 0.701 | 5.97 | | 4.6 | | 0 | 224 | 18 | |
| 12:45 | 5.24 | | | .00 | 15.25 | 0.714 | 6.2 | | 0.8 | | 0 | 231 | 18 | |
| 12:50 | 5.42 | | | .00 | 14.56 | 0.719 | 6.23 | | 0 | | 0 | 236 | 18 | |
| 12:55 | 5.67 | | | .00 | 14.90 | 0.718 | 6.3 | | 0 | | 0 | 236 | 18 | |
| 13:00 | 5.84 | | 2 | .00 | 14.97 | 0.719 | 6.32 | | 0 | | 0 | 236 | 18 | <u> </u> |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | - | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | E | DIAT C | TABILI | ZED EIEI D DAD | METERS (4 | | | 4 6° | ICE | D. | | | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | F | INAL S | IADILI | ZED FIELD PAR | | | igiiiii | | | <u> </u> | 1 | pH: nearest tenth (e DO: nearest tenth (e | ex. 5.53 = 5.5) ex. 3.51 = 3.5) |
| EQUIPMENT | DOCUMENT | TATION | J | | 15 | 0.719 | 6.3 | | 0 | | 0 | 240 | TURB: 3 SF max, r ORP: 2 SF (44.1 = | nearest tenth (6.19 = 6.2, 101 = 101) 44, 191 = 190) |
| | TYPE OF PUMI | | ` . | | ECON FLUIDS USED | | | NG/PU | MP/BLADE | | | | | EQUIPMENT USED |
| SUBM | TALTIC IERSIBLE | | | | LIQUINOX DEIONIZED WATER | TEFLON | N TUBING N TUBING | | | PVC P | EL PUMP MATERI UMP MATERIAL | AL | | MultiRae TER Horiba |
| BLAD | | | _ | | POTABLE WATER NITRIC ACID | X HDPE T | | ıG | | | ROBE SCREEN ON BLADDER | | X TURB. | |
| OTHE | R | | _ | | HEXANE METHANOL | OTHER | UBING | | | OTHE | R | | OTHER | |
| ANALYTIC | CAL PARAM | IETERS | | X | PFAS FREE WATER | OTHER | | | | OTHE | | | FILTER | |
| | PA | ARAME | | | METHOD NUMBER | FIELD FILTERE | | METH | | RE | - | SAMPLE OLLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | | PFAS 1,4-dioxa | | | 537.1 8270-SIM | No No | | Ice | | 5 | 2 L | Yes | No No | |
| X | | PCBs | | | 8082A | No No | | Ice | | 5 | 00 mL | Yes | No | |
| X | ТС | CL Pestic | cides | | 8081B | No | | Ice | e | - 5 | 00 mL | Yes | No | |
| X | Т | TCL SVC | OCs | | 8270D | No | | Ice | e | 5 | 00 mL | Yes | No | |
| X | | TCL VO | | | 8260C | No No | | HC | | _ | 50 mL | Yes | No | |
| Y PURCE OR | SERVATION | Total Met | als | | 6010C, 7470A | A No | | Nitric . | Acid KETCH/N | _ | 00 mL | Yes | No | |
| PURGE WA | TER | YES | NO | | NUMBER OF GALL | ONS 1.2 | 5 | 51 | XETCH/N | OILS | | | | |
| CONTAINE NO-PURGE | | X YES | NO | | GENERATED If yes, purged approxima | tely 1 standing volume [| prior | | | | | | | |
| UTILIZED | | Ш | X | | to sampling or | mL for this sample lo | ocation. | | | | | | | |
| Sampler Sigr | nature: | TAI | 1 | | Print Name: | Stephen Johansson | | | | | | | | |
| Checked By: | Ryan Joi | rrey | | | Date: 6/ | 7/2017 | | | | | | | | |



| | | | LOV | V FLOW GRO | DUNDWA | TER SAM | PLING REC | CORD | | |
|---------------------|--------------------------|---------------------|----------------------------------|--|-------------------------------|---------------------------------------|-------------------------------------|------------------|-------------------------|---|
| | PROJECT NAM | E | ANGERGA | 100 | LO | OCATION ID | | DATE | | |
| | DD O JECT NUM | | NYSDEC Hoosick Falls La | indfill | CITE | HFL-MW | | 6/8/20 |)17 | |
| | PROJECT NUM | BEK | 270939.0000.000 | | | ART TIME 8:3 | 4 | END TIME 9:10 |) | |
| | SAMPLE ID | HFL-MW-1E | | PLE TIME 9:00 | SI | TE NAME/NUM 442 | | PAGE 1 OF | 1 | |
| WELL DIA | METER (INCHES) | 1 | | | | | | | | WELL INTEGRITY |
| | METER (INCHES) | | X 2 4 | [6 | | | | | CAP | YES NO N/A X |
| TUBING ID | | 1/8 | 1/4 X 3/8 | | 5/8 | _ | | | CASING LOCKED | |
| | MENT POINT (MP | y) X TO | OF RISER (TOR) | TOP OF CASINO | | | | | COLLAR | <u>x</u> |
| INITIAL (BMP) | DTW | 1.18 FI | FINAL DTW (BMP) | 1.23 | | OT. CASING ICKUP (AGS) | 0.96 | FT | TOC/TOR DIFFERENCE | E 0.3 FT |
| (BMP) | ЕРТН 2 | 20.85 FT | SCREEN LENGTH | 15 | FT AM | D MBIENT AIR | 0 | PPM | REFILL TIMI SETTING | ER SEC |
| WATER COLUM | | 19.67 FT | | 0.0082 | GAL MO | D WELL OUTH | 0 | PPM | DISCHARGE TIMER SETT | |
| CALCUI | | .2259 | TOTAL VOL. | OTW X well diam. squar 1.69 | DR | AWDOWN/ | 0.00 | 5 | PRESSURE | |
| GAL/VO | L Well diameter squar | GAI red X 0.041) | | tal minutes X 0.00026 ga | | TAL PURGED | | | TO PUMP | PSI |
| | DTW (FT) | | TABILIZATION CRITE | RIA (AS LISTED IN T SP. CONDUCTANCE | : 1 | | | | PUMP | |
| TIME 3-5 Minutes | 0.0-0.33 ft Drawdown | PURGE RA (mL/min | | (mS/cm) (+/- 3%) | pH (units) (+/- 0.1 units) | DISS. O ₂ (mg (+/- 10%) | L) TURBIDITY ((+/- 10% <10 | | INTAKE DEPTH (ft) | COMMENTS |
| 8:34 | BEGIN PUI | RGING | | (1, 2,12) | | | | | (., | |
| 8:40 | 1.23 | 250 | 12.43 | 0.599 | 6.9 | 0 | 0 | 197 | 18 | |
| 8:45 | 1.23 | 250 | 11.44 | 0.610 | 6.96 | 0 | 0 | 195 | 18 | |
| 8:50 | 1.23 | 250 | 11.28 | 0.610 | 6.98 | 0 | 0 | 193 | 18 | |
| 8:55 | 1.23 | 250 | 11.37 | 0.607 | 7.03 | 0 | 0 | 189 | 18 | |
| 9:00 | 1.23 | 250 | 11.63 | 0.606 | 7.07 | 0 | 0 | 185 | 18 | |
| 7.00 | 1.25 | 250 | 11.05 | 0.000 | 7.07 | | | 105 | 10 | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | FINAL STAI | BILIZED FIELD PAR | AMETERS (to app | oropriate sign | ificant figures | [SF]) | | | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) ex. 5.53 = 5.5) |
| | | | 12 | 0.606 | 7.1 | 0 | 0 | 190 | DO: nearest tenth (| ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) |
| - | DOCUMENTATI | ION | | ļ. | 1 | Ļ | | | | |
| | TYPE OF PUMP STALTIC | X | DECON FLUIDS USED LIQUINOX | SILICON | | PUMP/BLADDER S. | <u>IATERIALS</u> STEEL PUMP MATE | RIAL | X WL ME | EQUIPMENT USED ETER |
| SUBM BLAI | MERSIBLE ODER | | DEIONIZED WATER POTABLE WATER | | LINED TUBING | G | C PUMP MATERIAL OPROBE SCREEN | - | X WQ ME | MultiRae ETER Horiba |
| | TERA | | NITRIC ACID HEXANE | X HDPE TUI | | 0 | FLON BLADDER THER | | X PUMP | METER Geopump |
| OTHI | | X | METHANOL PFAS FREE WATER | OTHER OTHER | | | THER | | OTHER FILTER | |
| ANALYTI | CAL PARAMETE | | METHOD | FIELD | PRESE | RVATION | VOLUME | SAMPLE | QC | SAMPLE BOTTLE ID |
| l | PARAM PFA | | NUMBER 537.1 | FILTERED No | | THOD Ice | REQUIRED 500 mL | COLLECTED Yes | COLLECTED No | NUMBERS |
| X | 1,4-di | | 8270-SIM | | | Ice | 2 L | Yes | No | |
| X | PC | Bs | 8082A | No | | Ice | 500 mL | Yes | No | · |
| X | TCL Pe | sticides | 8081B | No | _ | Ice | 500 mL | Yes | No | |
| X | TCL S | | 8270D | No No | | Ice | 500 mL | Yes | No | |
| X | TCL V | | 8260C 6010C, 7470 |)A No | | HCl ic Acid | 150 mL 500 mL | Yes | No No | |
| | BSERVATIONS | | <u> </u> | | | SKETCH/NOTI | | - | | · · · · · · · · · · · · · · · · · · · |
| PURGE WA | | | NUMBER OF GALL GENERATED | LONS 1.69 | | | | | | |
| NO-PURGI | E METHOD YE | ES NO | If yes, purged approxim | nately 1 standing volume pri | | | | | | |
| UTILIZED | | X | to sampling or | mL for this sample loc | auon. | | | | | |
| Sampler Sig | gnature: A | DL | Print Name: | Steohen Johansson | | | | | | |
| Checked By | r: Ryan Jorrey | | Date: 6 | /8/2017 | | | | | | |



| | | | LOW | FLOW GRO | UNDWA | TER SAMPI | LING RECO | RD | | |
|----------------------|-----------------------------|--------------|--|----------------------------|----------------|-----------------------------|---------------------------|------------------|--|--|
| | PROJECT NAME | | The state of the s | 1011 | Lo | OCATION ID | DA | ГЕ | | |
| | DD O FECT AND 4D | | SDEC Hoosick Falls Land | Ifill | en | HFL-MW-4 | ENI | 6/8/20 | 17 | |
| | PROJECT NUMB | EK | 270939.0000.0000 | | 81 | TART TIME 11:35 | ENI | 12:30 | 0 | |
| | SAMPLE ID | HFL-MW-4 | SAMP | LE TIME 12:20 | SI | TE NAME/NUMBE 442007 | R PAG | GE 1 OF | 1 | |
| | | | | <u> </u> | | | | | | WELL INTEGRITY |
| WELL DIAM | METER (INCHES) | 1 X | 2 4 | 6 | 8 | OTHER | | | CAP | YES NO N/A |
| TUBING ID | (INCHES) | 1/8 | 1/4 X 3/8 | 1/2 | 5/8 | OTHER | | | CASING LOCKED | X |
| MEASUREM | MENT POINT (MP) | X TOP OF | RISER (TOR) | TOP OF CASING | (TOC) | OTHER | | | COLLAR | X |
| INITIAL I (BMP) | DTW 20 |).66 FT | FINAL DTW (BMP) | 25.06 | | ROT. CASING FICKUP (AGS) | 2.79 | FT | TOC/TOR DIFFERENCE | 0.3 FT |
| WELL DE (BMP) | ЕРТН 34 | FT FT | SCREEN LENGTH | 15 | FT A | ID MBIENT AIR | 0 | PPM | REFILL TIME SETTING | ER SEC |
| WATER COLUMN | N 13 | 3.95 FT | DRAWDOWN VOLUME | 0.72 | GAL M | D WELL OUTH | 0 | PPM | DISCHARGE TIMER SETT | ING SEC |
| CALCULA GAL/VOL | | .29 GAL | (final DTW - initial DTV TOTAL VOL. PURGED | 2.34 | GAL TO | RAWDOWN/ OTAL PURGED | 0.31 | | PRESSURE TO PUMP | - PSI |
| | well diameter square | - | (mL per minute X total | | | | | | | |
| TIME | DTW (FT) 0.0-0.33 ft | PURGE RATE | TEMP. (°C) | SP. CONDUCTANCE (mS/cm) | pH (units) | DISS. O ₂ (mg/L) | TURBIDITY (ntu) | | PUMP INTAKE | COMMENTS |
| 3-5 Minutes | Drawdown | (mL/min) | (+/- 3 degrees) | (+/- 3%) | (+/- 0.1 units | (+/- 10%) | (+/- 10% <10 ntu) | (+/- 10 mv) | DEPTH (ft) | L |
| 11:35 | BEGIN PUR | GING | T | | 1 | 1 | 1 | | | |
| 11:45 | 22.3 | 250 | 18.4 | 0.881 | 6.59 | 4.53 | 0 | 227 | 32 | |
| 11:50 | 23.08 | 250 | 15.7 | 0.929 | 6.45 | 4.4 | 0 | 249 | 32 | |
| 11:55 | 23.76 | 250 | 13.6 | 0.979 | 6.38 | 4.73 | 0 | 261 | 32 | |
| 12:00 | 23.79 | 200 | 14.9 | 0.95 | 6.29 | 3.1 | 0 | 268 | 32 | |
| 12:05 | 24.2 | 200 | 15.35 | 0.969 | 6.2 | 3.99 | 0 | 273 | 32 | |
| 12:10 | 24.58 | 200 | 14.34 | 0.985 | 6.24 | 3.62 | 0 | 274 | 32 | |
| 12:15 | 24.83 | 200 | 14.38 | 0.979 | 6.27 | 3.69 | 0 | 274 | 32 | |
| 12:20 | 25.06 | 200 | 14.45 | 0.984 | 6.27 | 3.45 | 0 | 273 | 32 | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | TNA COLADA | WED EVEL D DADA | METERS (4 | <u> </u> | *e* | | | TEMP.: nearest deg | |
| | r | INAL STABILI | ZED FIELD PARA | METERS (to app | ropriate sig | nificant figures[S] | F]) | | pH: nearest tenth (e DO: nearest tenth (e | (ex. 3333 = 3330, 0.696 = 0.696) ex. 5.53 = 5.5) ex. 3.51 = 3.5) |
| | | | 15 | 0.984 | 6.3 | 3.5 | 0 | 270 | | nearest tenth (6.19 = 6.2, 101 = 101) |
| - | DOCUMENTATION TYPE OF PUMP | | ECON FLUIDS USED | | TUBING/ | PUMP/BLADDER MAT | TERIALS | | | EQUIPMENT USED |
| X PERIS | STALTIC MERSIBLE | X | LIQUINOX DEIONIZED WATER | SILICON T TEFLON TO | UBING | S. STI | EEL PUMP MATERIAL | L | X WL ME | |
| BLAD | | | POTABLE WATER NITRIC ACID | | INED TUBING | GEOP | ROBE SCREEN ON BLADDER | | | ETER Horiba |
| WATT | | | HEXANE METHANOL | LDPE TUB! | | OTHE | ER | | | Geopump |
| OTHE | R | X | PFAS FREE WATER | OTHER | | OTHE | | | FILTER | |
| ANALYTIC | CAL PARAMETER PARAME | ETER | METHOD NUMBER | FIELD FILTERED | | | | AMPLE LLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | PFAS 1,4-diox | | 537.1 8270-SIM | No No | - | | 500 mL 2 L | Yes Yes | No | |
| X | PCB: | | 8082A | No No | <u> </u> | Ice : | 500 mL | Yes | No No | |
| X | TCL Pesti | | 8081B | No | - | | 500 mL | Yes | No | |
| X | TCL SV | OCs | 8270D | No | | Ice : | 500 mL | Yes | No | |
| X | TCL VC | OCs | 8260C | No | | | 150 mL | Yes | No | |
| X | Total Me | etals | 6010C, 7470A | No | Nit | | 500 mL | Yes | No | |
| PURGE OB PURGE WA | SERVATIONS ATER YES | S NO | NUMBER OF GALLO | NS 2.34 | | SKETCH/NOTES | | | | |
| CONTAINE NO-PURGE | | | GENERATED If yes, purged approximate | | NF. | | | | | |
| UTILIZED | LINOD TES | X | | _mL for this sample locat | | | | | | |
| Sampler Sigr | nature: AA | DL | Print Name: S | tephen Johansson | | | | | | |
| Checked By: | : Ryan Jorrey | | Date: 6/8/ | 2017 | | | | | | |



| | | | | LOV | V FLOW (| GRO | UNDV | VAT | ER S | SAM | PL | ING RE | COI | RD | | | | | | |
|----------------------|----------------------------|--------------------|----------|--|---|--------------------|-----------------------|---------------|---------------|-------------------------------|---------------|------------------------------|------|---------------------------|------------------|----------------------------|--------------------------------------|--------------------------|------------------|-----|
| | PROJECT NAM | E | | | | | | LOC | ATION | ID | | | DATI | E | | | 1 | | | |
| | | | NYSD | DEC Hoosick Falls La | ndfill | | | | | IFL-MV | V-2 | | | 6/8/20 | 17 | | | | | |
| | PROJECT NUM | BER | | 270939.0000.0000 | | | | | RT TIM | 14: | | | | TIME 15:0: | 5 | | | | | |
| | SAMPLE ID | HFL-MW- | 2 | SAM | PLE TIME 14:55 | | | SITE | NAMI | E/NUM 4420 | | | PAGI | E 1 OF | | 1 | | | | |
| WELL DIAN | METER (INCHES | | X | 2 🗖 4 | 6 | _ | 8 | | OTHE | n | | | | | | | WELL I | NTEGRITY | / N/A | |
| | | _ | | | | _ | | | | | | | | | | CAP | X | | IV/A | |
| TUBING ID | (INCHES) IENT POINT (MF | 1/8 | | 1/4 X 3/8 RISER (TOR) | TOP OF CA | | 5/8 (TOC) | | OTHE | | | | | |] | CASING LOCKED COLLAR | | _ | _ | |
| INITIAL | DTW | 2.91 | _ | FINAL DTW | 7.12 | | (100) | | T. CAS | | ſ | 2.45 | | | | /TOR | <u> </u> | 0.34 | | ٦ |
| (BMP) | | 2.91 F1 | | BMP) | 7.12 | | FT | | CKUP (A | AGS) | | 2.43 | | FT | | FERENCI | | 0.34 | F | Γ |
| (BMP) | EPTH 3 | 32.23 F1 | | SCREEN LENGTH | 15 | | FT | PID AMB | SIENT A | AIR | | 0 |] | PPM | | ILL TIM FING | ER | - | SE | C. |
| WATER COLUMN | N 2 | 29.32 F1 | · v | ORAWDOWN VOLUME | 0.69 | | GAL | PID V MOU | WELL JTH | | | 0 |] | PPM | | CHARGE ER SETT | | = | SE | iC. |
| CALCUL | | 4.81 | Т | final DTW - initial D' | TW X well diam. | squared | | | WDOV | | Ī | 0.25 | 5 | | | SSURE | | - | | CI. |
| GAL/VOI (column X | well diameter squar | GA red X 0.041) | | PURGED mL per minute X tota | d minutes X 0.000 | 026 gal/ | GAL mL) | 101 | AL PUI | KGED | L | | | | 101 | PUMP | | | Р | SI |
| | DTW (FT) | | | ILIZATION CRITE | ERIA (AS LISTE SP. CONDUCTA | | THE QAPI | P) | | | 1 | | | | l n | PUMP | 1 | | | |
| TIME 3-5 Minutes | 0.0-0.33 ft Drawdown | PURGE R (mL/mir | | TEMP. (°C) (+/- 3 degrees) | (mS/cm) (+/- 3%) | ANCE | pH (uni (+/- 0.1 u | | | O ₂ (mg/ - 10%) | /L) | TURBIDITY (+/- 10% <10 | | REDOX (mv) (+/- 10 mv) | IN | TAKE PTH (ft) | | COM | MENTS | |
| 14:12 | BEGIN PUI | RGING | <u> </u> | | (2,2) | l | | | | | ! | | | | | | ı | | | |
| 14:20 | 4.82 | 250 | | 18.6 | 0.737 | | 6.71 | | | 0 | | 40.2 | | 141 | | 30 | | | | |
| 14:25 | 5.49 | 250 | | 17 | 0.755 | | 6.61 | | | 0 | | 69.2 | | 116 | | 30 | | | | |
| 14:30 | 5.91 | 250 | | 16.5 | 0.758 | | 6.57 | | | 0 | | 65.1 | | 107 | | 30 | | | | |
| 14:35 | 6.35 | 250 | | 16.1 | 0.768 | | 6.53 | | | 0 | | 60.2 | | 92 | | 30 | | | | |
| 14:40 | 6.61 | 250 | | 15.84 | 0.772 | | 6.46 | | | 0 | | 58.8 | | 81 | | 30 | | | | |
| 14:45 | 6.88 | 250 | | 15.65 | 0.773 | | 6.38 | | | 0 | | 56.4 | | 73 | | 30 | | | | |
| 14:50 | 7.06 | 250 | | 15.58 | 0.779 | | 6.3 | | | 0 | | 51.7 | | 76 | | 30 | | | | |
| 14:55 | 7.12 | 250 | | 15.42 | 0.777 | | 6.28 | | | 0 | | 51.9 | | 72 | | 30 | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | EDIAL OF A | DII 17 | VED EVEL D DAD | AMERICA (| | | | | | FOR | <u> </u> | | | | | egree (ex. 10. | | | |
| | | FINAL STA | BILIZ | ED FIELD PAR | | o appi | | signiii | icant i | | s[Sr] | - | | | pH: ne DO: ne | earest tenth (| (ex. 5.53 = 5.6) (ex. 3.51 = 3.6) | .5) | | |
| FOLIPMENT | DOCUMENTATI | ION | | 15 | 0.777 | | 6.3 | | | 0 | | 51.9 | | 72 | ORP: | 2 SF (44.1 = | nearest tenth = 44, 191 = 1 | n (6.19 = 6.2, 10 90) | 1 = 101) | |
| - | TYPE OF PUMP | ION | DEC | CON FLUIDS USED | | | TUBI | NG/PUN | MP/BLA | DDER M | ИАТЕІ | RIALS | | | | | EQUIPME | ENT USED | | |
| | TALTIC IERSIBLE | X | | QUINOX EIONIZED WATER | | ICON TU LON TU | | | | | | EL PUMP MATE JMP MATERIAI | | | X | WL ME PID | ETER MultiRae | | | |
| BLAD | | | PO | TABLE WATER | TEF | LON LI | NED TUBIN | NG | | Gl | EOPR | OBE SCREEN | - | | X | WQ MI | ETER Hori | ba | | |
| WATT | ΓERA | | | TRIC ACID EXANE | | PE TUBI PE TUBI | | | | | EFLOI THER | N BLADDER | | | X | | METER Geopump | | | |
| OTHE OTHE | | X | _ | ETHANOL AS FREE WATER | OTH OTH | | | | | | THER THER | | | | | OTHER FILTER | | TY | DE | |
| | CAL PARAMETE | | FF | AS FREE WATER | OII | 1EK | | | | | ITEK | | | | | FILTER | <u>KS</u> NO. | | - E | |
| | PARAM | | | METHOD NUMBER | FIE FILTE | | PR | ESERV METH | VATION HOD | N | | LUME UIRED | | MPLE LECTED | COL | QC LECTED | | SAMPLE I NUM | BOTTLE I BERS | D |
| X | PFA | | _ | 537.1 | N | | | Ice | | | | 00 mL | | Yes | | No | _ | | | |
| X | 1,4-dic | | _ | 8270-SIM | N | | | Ice | | | | 2 L | | Yes | | No | | | | |
| X | PCI | | _ | 8082A | N | | _ | Ice | | | | 00 mL | | Yes | | No | | | | |
| X | TCL Pes | | _ | 8081B | N | | _ | Ice | | | | 00 mL | | Yes | | No | _ | | | |
| X | TCL S | | _ | 8270D | N | | _ | Ice | | | | 00 mL | | Yes | | No | | | | |
| X | TCL V | | _ | 8260C | N | | _ | HC | | | | 50 mL | | Yes | | No | | | | |
| X | Total M | ietals | _ | 6010C, 7470 | A N | lo | | Nitric A | | | | 00 mL | | Yes | _ | No | | | | |
| PURGE OB PURGE WA | SERVATIONS ATER YE | ES NO | | NUMBER OF GALL | ONS | | _ | SF | KETCH | I/NOTE | ES | | | | | _ | | _ | | _ |
| CONTAINE | _ | | | GENERATED | 0.10 | 2.8 | | | | | | | | | | | | | | |
| NO-PURGE UTILIZED | E METHOD YE | ES NO X | | f yes, purged approxima o sampling or | tely 1 standing volu mL for this sam | | | | | | | | | | | | | | | |
| | 1.4 | 51 | | | | | | 1 | | | | | | | | | | | | |
| Sampler Sign | nature: | VI_ | | Print Name: | Stephen Johansso | n | | | | | | | | | | | | | | |
| Checked By: | : Ryan Jorrey | | | Date: | 6/8/2017 | | | | | | | | | | | | | | | |



| | | | LUW | FLOW GRO | JUNDWAI | EK SAMPI | ING REC | UKD | | |
|------------------------|-------------------------|--------------|---|--|-----------------|-----------------------------|---------------------------------|---------------------|--|---|
| | PROJECT NAME | NI C | IDDG II . I D II I | 1011 | LO | CATION ID |] | DATE | |] |
| | | | SDEC Hoosick Falls Lar | nariii | | HFL-MW- | | 6/6/20 | 18 | |
| | PROJECT NUMBE | R | 270939.0000.0000 |) | STA | ART TIME 14:40 |] | END TIME 16:3: | 5 | |
| | SAMPLE ID | | SAM | PLE TIME | SIT | E NAME/NUMBE | R I | PAGE | | |
| | | HFL-MW-101 | | 16:10 | | 442007 | ' | l OF | 1 | |
| WELL DIAM | METER (INCHES) | <u> </u> | 2 X 4 | 6 | 8 | OTHER | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID | (INCHES) | 1/8 | 1/4 X 3/8 | 1/2 | 5/8 | OTHER | | | CAP CASING | <u>X</u> |
| | | | <u> </u> | TOP OF CASIN | | | | | LOCKED | <u>X</u> |
| | MENT POINT (MP) | X TOP OF | RISER (TOR) | TOP OF CASIF | | OTHER | | | COLLAR | <u>x</u> |
| INITIAL I (BMP) | DTW 15. | 05 FT | FINAL DTW (BMP) | 16.34 | | OT. CASING CKUP (AGS) | 2.55 | FT | TOC/TOR DIFFERENCE | E 0.29 FT |
| WELL DE (BMP) | ЕРТН 23 | 8 FT | SCREEN LENGTH | 15 | FT AM |) IBIENT AIR | 0 | PPM | REFILL TIME SETTING | ER - SEC |
| WATER COLUMN | N 12. | 95 FT | DRAWDOWN VOLUME | 0.85 | GAL MO | WELL OUTH | 0 | PPM | DISCHARGE TIMER SETT | |
| CALCUL GAL/VOI | L 8 | GAL | (final DTW - initial D' TOTAL VOL. PURGED | 4.16 | GAL TO | AWDOWN/ TAL PURGED | 0.20 | | PRESSURE TO PUMP | - PSI |
| | well diameter squared | | (mL per minute X tota | • | | | | | | |
| TIME | DTW (FT) | PURGE RATE | TEMP. (°C) | SP. CONDUCTANO | | DISS. O ₂ (mg/L) | TURBIDITY (i | ntu) REDOX (mv) | PUMP | |
| 3-5 Minutes | 0.0-0.33 ft Drawdown | (mL/min) | (+/- 3 degrees) | (mS/cm) (+/- 3%) | (+/- 0.1 units) | (+/- 10%) | (+/- 10% <10 r | , , , | INTAKE DEPTH (ft) | COMMENTS |
| 14:40 | BEGIN PURG | SING | | | | | | | | |
| 14:50 | 15.52 | 200 | 12.3 | 0.847 | 7.02 | 0.60 | 36.8 | -67.9 | 31 | |
| 14:55 | 15.64 | 200 | 11.5 | 0.841 | 6.99 | 0.33 | 33.5 | -68.1 | 31 | |
| 15:00 | 15.6 | 200 | 11.2 | 0.842 | 6.99 | 0.27 | 304.1 | -68.7 | 31 | |
| 15:05 | 15.58 | 200 | 10.7 | 0.837 | 6.99 | 0.21 | 384.9 | -68.4 | 31 | |
| 15:10 | 15.54 | 200 | 10.7 | 0.838 | 6.99 | 0.18 | 33.4 | -69.1 | 31 | |
| 15:15 | 15.52 | 200 | 11.4 | 0.837 | 6.99 | 0.21 | 49.8 | -68.7 | 31 | Pump malfunction, stop pumping |
| 15:40 | 15.62 | 200 | 9.5 | 0.838 | 7.05 | 0.96 | 66.2 | -54.8 | 31 | 15:35 - Resume pumping |
| 15:45 | 16.02 | 200 | 9.3 | 0.837 | 6.98 | 0.17 | 62.9 | -60.0 | 31 | |
| 15:50 | 16.2 | 200 | 9.4 | 0.837 | 9.98 | 0.13 | 30.7 | -61.1 | 31 | |
| 15:55 | 16.3 | 200 | 9.3 | 0.833 | 6.98 | 0.10 | 27.2 | -62.1 | 31 | |
| 16:00 | 16.34 | 200 | 9.2 | 0.837 | 6.98 | 0.07 | 30.8 | -63.3 | 31 | |
| | FI | NAL STABILIZ | ED FIELD PARA | METERS (to app | ropriate signif | icant figures[SF |]) | | | egree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | | 9 | 0.837 | 7.0 | 0.07 | 30.8 | -63 | DO: nearest tenth (TURB: 3 SF max, | (ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) |
| EQUIPMENT D | OCUMENTATION | | <u> </u> | | | | | | ORP: 2 SF (44.1 = | 44, 191 = 190) |
| | TYPE OF PUMP | | ECON FLUIDS USED | | | UMP/BLADDER MA | | | | EQUIPMENT USED |
| | STALTIC MERSIBLE | | LIQUINOX DEIONIZED WATER | | TUBING | | EEL PUMP MATEI PUMP MATERIAL | | X WL ME | ETER |
| BLAD | DDER | | POTABLE WATER NITRIC ACID | TEFLON X HDPE T | LINED TUBING | | PROBE SCREEN ON BLADDER | | X WQ MI | ETER Horiba METER |
| WATT | | | HEXANE | LDPE TU | | OTH | ER | | X PUMP | GeoPump |
| OTHE | | | METHANOL PFAS FREE WATER | OTHER OTHER | | OTH | | - | OTHER FILTER | |
| ANALYTICA | AL PARAMETERS | | | | | | | | | |
| | PARAME | TER | METHOD NUMBER | FIELD FILTERE | | | OLUME EQUIRED | SAMPLE COLLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | PFAS | <u> </u> | 537.1 | No | | | 500 mL | Yes | No | |
| X | 1,4-diox | ane | 8270-SIM | No | | Ice | 2 L | Yes | No | |
| X | PCBs | · | 8082A | No | 1 | Ice | 500 mL | Yes | No | <u> </u> |
| X | TCL Pesti | cides | 8081B | No | 1 | lce | 500 mL | Yes | No | |
| X | TCL SVC | OCs | 8270D | No | 1 | Ice | 500 mL | Yes | No | |
| X | TCL VC | OCs | 8260C | No | I | ICI | 150 mL | Yes | No | |
| X | Total Me | tals | 6010C, 7470a | A No | Nitri | ic Acid | 500 mL | Yes | No | <u> </u> |
| PURGE OBS | | | | | 5 | SKETCH/NOTES | | | | |
| PURGE WAT CONTAINER | | NO | NUMBER OF GALL GENERATED | ONS 4.1 | 6 | | | | | |
| NO-PURGE N UTILIZED | | NO X | If yes, purged approximatel | y 1 standing volume prior mL for this sample location | | | | | | |
| UTILIZED | | | to sampling or | ini. ior unis sample location | | | | | | |
| Sampler Signa | ture: Marnie (| Chancy | Print Name: | Marnie Chancey | | | | | | |
| Checked By: | Rvan Jorrev | | Date: | 6/6/2018 | | | | | | |



| | PROJECT NAME | NN/6 | | | JUNDW | | CATION ID | | DATE | | | | | |
|--|-----------------------|--------------|---|-------------------------------|---|----------|-----------------------------|--|---------|-------------------|--|--------------------------------------|-----------------------------|----------|
| | PROJECT NUMBER | | SDEC Hoosick Falls La | | | STA | HFL-MW-10 | | END TIM | 6/6/2 E | 2018 | | | |
| | SAMPLE ID | | 270939.0000.0000 | PLE TIME | | SITE | 17:00 E NAME/NUMBER | | PAGE | 18: | 00 | | | |
| | | HFL-MW-101B | 5.11.2 | 17:50 | | | 442007 | | 1 | OF | 7 1 | | | |
| WELL DIAM | IETER (INCHES) | 1 X | 2 4 | 6 | 8 | | OTHER | | | | | YES | NTEGRITY S NO N/A | |
| TUBING ID (| (INCHES) | 1/8 X | 1/4 3/8 | 1/2 | 5/8 | | OTHER | | | | CAP CASING | X | | |
| MEASUREM | IENT POINT (MP) | X TOP OF | RISER (TOR) | TOP OF CAS | ING (TOC) | | OTHER | | | | LOCKED COLLAR | X | | |
| INITIAL I (BMP) | DTW 52. | 93 FT | FINAL DTW (BMP) | 54.0 | FT | | T. CASING CKUP (AGS) | 2.43 | FT | | TOC/TOR DIFFERENCE | | 0.11 FT | |
| WELL DE | ЕРТН 83 | 55 | SCREEN | 15 | | PID | | 0 | | | REFILL TIME | | 10 | |
| (BMP) | | FT | DRAWDOWN | | FT | | BIENT AIR WELL | [| PM | | SETTING DISCHARGE | | SEC | |
| WATER COLUMN | 30. | 62 FT | VOLUME (final DTW - initial D | 0.18 | GAL | MOU | | 0 | PM | | TIMER SETTI | NG | 5 SEC | |
| CALCULA GAL/VOL | 5.0 |)2 GAL | TOTAL VOL. PURGED | 3.25 | GAL | DRA | AWDOWN/ CAL PURGED | 0.054 | | | PRESSURE TO PUMP | | 80 PSI | |
| (column X | well diameter squared | X 0.041) | (mL per minute X tota | | 6 gal/mL) | | | | | | 1010 | | | |
| TIME | DTW (FT) | PURGE RATE | TEMP. (°C) | SP. CONDUCTAN | | nits) | DISS. O ₂ (mg/L) | TURBIDITY (| ntii) | EDOX | PUMP | | | |
| 3-5 Minutes | 0.0-0.33 ft Drawdown | | (+/- 3 degrees) | (mS/cm) (+/- 3%) | (+/- 0.1 | | (+/- 10%) | (+/- 10% <10 | tu) | mv) 10 mv) | INTAKE DEPTH (ft) | | COMMENTS | |
| 17:00 | BEGIN PURG | ING | | | | | | | | | | | | |
| 17:10 | 53.60 | 250 | 10.5 | 0.370 | 8.5 | 1 | 0.80 | 915 | - | 21.9 | | | | |
| 17:20 | 53.72 | 250 | 10.3 | 0.361 | 8.25 | :5 | 1.68 | 547 | - | 39.9 | | | | |
| 17:25 | 53.78 | 250 | 10.3 | 0.360 | 8.17 | 7 | 1.90 | 355 | | -48 | | | | |
| 17:30 | 53.82 | 250 | 10.4 | 0.358 | 8.04 | 14 | 2.36 | 229 | - | 56.8 | | | | |
| 17:35 | 53.87 | 250 | 10.3 | 0.354 | 8.0 | 1 | 2.53 | 183 | | -56 | | | | |
| 17:40 | 53.92 | 250 | 10.3 | 0.352 | 7.98 | 8 | 2.46 | 110 | - | 56.7 | | | | |
| 17:45 | 53.96 | 250 | 10.4 | 0.351 | 7.96 | 16 | 2.50 | 113 | - | 55.3 | | | | |
| 17:50 | 54.00 | 250 | 10.3 | 0.352 | 7.95 | 5 | 2.47 | 105 | - | 54.4 | | | | |
| | | | | | | | | | _ | | | | | |
| | | | | | | | | | _ | | | | | |
| | | | | | | | | | | | TEMP.: nearest deg | ree (ex. 10 | .1 = 10) | |
| | FIN | AL STABILIZE | ED FIELD PARAN | METERS (to ap | propriate sig | gnifica | ant figures[SF]) | | - | | COND.: 3 SF max (pH: nearest tenth (e | ex. 3333 = x. 5.53 = 5 | 3330, 0.696 = 0.696) 5) | |
| | | | 10 | 0.352 | 8.0 | 0 | 2.5 | 105 | | -54 | DO: nearest tenth (e TURB: 3 SF max, n ORP: 2 SF (44.1 = | earest tent | n (6.19 = 6.2, 101 = 101) | |
| PERIS | TERA | X 1 | ECON FLUIDS USED LIQUINOX DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL | TEFLO TEFLO X HDPE | ON TUBING ON TUBING ON LINED TUBI TUBING TUBING | | PVC PI GEOPE | EL PUMP MATE UMP MATERIAL ROBE SCREEN ON BLADDER R | | | X WL ME | TER MultiRAE TER Hori METER | | <u>_</u> |
| OTHE | R | | PFAS FREE WATER | OTHE | | | OTHE | | | | FILTER | S NO. | TYPE | |
| ANALYTICA | L PARAMETERS PARAMET | ΓER | METHOD NUMBER | FIELI FILTER | | RESERV | | OLUME QUIRED | SAMPLI | | QC COLLECTED | | SAMPLE BOTTLE ID NUMBERS | |
| X | PFAS | | 537.1 | No | ED | Ice | | 00 mL | Yes | ED | No | | NUMBERS | |
| X | 1,4-dioxa | nne | 8270-SIM | No | | Ice | | 2 L | Yes | | No | | | |
| X | PCBs TCL Pestic | nidos | 8082A 8081B | No No | | Ice | | 00 mL 00 mL | Yes | | No No | | | |
| X | TCL SVC | | 8270D | No No | <u> </u> | Ice | | 00 mL | Yes | | No | | | _ |
| X | TCL VO | | 8260C | No | | HC | | 50 mL | Yes | | No | | | |
| X | Total Met | als | 6010C, 7470 | A No | | Nitric A | Acid 5 | 00 mL | Yes | | No | | | |
| PURGE OBSE PURGE WATE CONTAINER! NO-PURGE M UTILIZED | ER YES ZED X | NO NO X | NUMBER OF GALLS GENERATED If yes, purged approximatel to sampling or | J. | 25 or tion. | SI | KETCH/NOTES | | | | | | | |
| Sampler Signate Checked By: | ure: Ryan Jorrey | PL | | Stephen Johansson 6/6/2018 | | | | | | | | | | |



| | | | | | LOV | V FLOW G | ROUNDWA | ATE | ER SAMPLI | NG RECOR | RD | | | |
|------------------------|------------------|--------------------|---------|---------------|---|--|------------------------------|-----------------|-----------------------------|-----------------------------|--------------------|------|-------------------------------------|--|
| | PROJECT | NAME | | NYS | SDEC Hoosick Falls La | ndfill | [| LOCA | ATION ID HFL-MW-101 | | TE 6/6/ | 2018 | | |
| - | PROJECT | NUMBER | | | 270939.0000.0000 |) | | STAR | RT TIME | | D TIME | | | |
| - | SAMPLE I | | | 016 | SAM | PLE TIME | | SITE | NAME/NUMBER | PA | GE | :35 | | |
| L | | Н | FL-MW-1 | 01C | | 16:25 | l l | | 442007 | | 1 0 |)F | 1 | WELL INTEGRITY |
| WELL DIAM | IETER (IN | CHES) | 1 | X | 2 4 | 6 | 8 | | OTHER | | | | CAP | YES NO N/A X |
| TUBING ID (| INCHES) | | 1/8 | X | 1/4 3/8 | 1/2 | 5/8 | (| OTHER | | | | CASING LOCKED | X X |
| MEASUREM | ENT POIN | T (MP) | X | TOP OF | RISER (TOR) | TOP OF CAS | ING (TOC) | (| OTHER | | | | COLLAR | X |
| INITIAL I (BMP) | DTW | 52.0 | 8 | FT | FINAL DTW (BMP) | 52.72 | | | r. CASING KUP (AGS) | 2.55 | FT | | C/TOR FFERENCE | 0.3 FT |
| WELL DE (BMP) | ЕРТН | 100.3 | 39 | FT | SCREEN LENGTH | 28 | | PID AMBI | IENT AIR | 0 | PPM | | FILL TIMI ITING | ER 10 SEC |
| WATER COLUMN | . [| 48.3 | 1 | FT | DRAWDOWN VOLUME | 0.10 | GAL | PID W | | 0 | PPM | | SCHARGE MER SETT | ING 5 SEC |
| CALCULA GAL/VOL | | 7.92 | 2 | 7.41 | (final DTW - initial D' TOTAL VOL. PURGED | 4.88 | | | WDOWN/ | 0.02 | | | ESSURE | 85 PSI |
| (column X | well diamete | er squared X | 0.041) | 3AL | (mL per minute X tota | | gal/mL) | IOIA | AL PURGED | | | 10 | PUMP | PSI |
| TIME | | (FT) | OGRAM S | | TEMP. (°C) | SP. CONDUCTAN | |) | DISS. O ₂ (mg/L) | TURBIDITY (ntu |) REDOX (m | | PUMP | |
| | | Drawdown | (mL/ | | (+/- 3 degrees) | (mS/cm) (+/- 3%) | (+/- 0.1 uni | | (+/- 10%) | (+/- 10% <10 ntu | | , 1 | NTAKE EPTH (ft) | COMMENTS |
| 15:10 | BEGI | N PURGI | NG | | | | | | | ı | , | | | |
| 15:20 | | 2.51 | 25 | | 11.8 | 0.344 | 8.01 | | 4.33 | 387.6 | 72.8 | | | |
| 15:25 | | 1.54 | 25 | | 11.6 | 0.345 | 7.85 | | 3.58 | 554.3 | 49.8 | | | |
| 15:30 | | 2.56 | 25 | | 11.5 | 0.345 | 7.82 | | 3.87 | 377.6 | 41.8 | | | |
| 15:35 | | 1.62 | 25 | | 11.4 | 0.344 | 7.82 | | 4.16 | 340.2 | 42.2 | | | |
| 15:40 | | 1.64 | 25 | | 11.4 | 0.343 | 7.84 | | 4.21 | 324.6 | 45.5 | | | |
| 15:45 | | 2.66 | 25 | | 11.6 | 0.341 | 7.91 | | 4.29 | 297.4 | 53.2 | | | |
| 15:50 | | 2.68 | 25 | | 11.6 | 0.34 | 7.96 | - | 4.35 | 300 | 59.7 | + | | |
| 15:55 16:00 | | 2.69 | 25 | | 11.8 | 0.342 | 8.04 8.14 | | 4.03 | 405 | 63.3 | | | |
| 16:05 | | 2.7 | 25 | | 11.9 | 0.335 | 8.14 | | 4.18 | 410 | 86.8 | - | | |
| 16:10 | | 71 | 25 | | 11.9 | 0.333 | 8.42 | | 4.5 | 431 | 94.4 | | | |
| 16:15 | | 1.72 | 25 | | 11.9 | 0.331 | 8.47 | | 4.54 | 444 | 97.2 | | | |
| 16:20 | | 1.72 | 25 | | 11.9 | 0.33 | 8.5 | | 4.56 | 453 | 98.6 | | | |
| 16:25 | | 1.72 | 25 | | 11.9 | 0.33 | 8.51 | | 4.57 | 449 | 101.3 | | | |
| | | | | | | | | | | | | | | |
| | | FI | NAL ST | TABILI | ZED FIELD PAR | AMETERS (to | appropriate sig | nifica | ant figures[SF]) | | | CON | ND.: 3 SF max | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | | | | 12 | 0.330 | 8.51 | | 4.6 | 449 | 100 | DO: | nearest tenth (c nearest tenth (| ex. 5.53 = 5.5) (ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) |
| EQUIPMENT D | OCUMEN | TATION | | | | | 0.01 | | | | 100 | ORE | P: 2 SF (44.1 = | 44, 191 = 190) |
| | TYPE OF PUTALTIC | UMP | | | ECON FLUIDS USED LIQUINOX | SILICO | TUBIN ON TUBING | G/PUM | MP/BLADDER MATER S. STE | IALS EL PUMP MATERI | AL | X | WL ME | |
| X SUBM X BLADI | IERSIBLE DER | | | | DEIONIZED WATER POTABLE WATER | TEFLO | ON TUBING ON LINED TUBING | | GEOPI | UMP MATERIAL ROBE SCREEN | | X | WQ MI | MultiRae ETER Horiba |
| WATT | | | | | NITRIC ACID HEXANE | LDPE | TUBING TUBING | | OTHE | | | X | PUMP | METER Bladder |
| OTHE | | | | | METHANOL PFAS FREE WATER | OTHE | | _ | OTHE | | | | OTHER FILTER | |
| ANALYTIC | | METERS PARAMETI | ER | | METHOD NUMBER | FIELI FILTER | | SERV. | | | SAMPLE OLLECTED | CO | QC DLLECTED | SAMPLE BOTTLE ID NUMBERS |
| х | | PFAS | | | 537.1 | No | | Ice | 5 | 00 mL | Yes | | No | |
| X | | 1,4-dioxan | ie | | 8270-SIM 8082A | No No | | Ice | | 2 L 00 mL | Yes | | No No | |
| X X | | TCL Pesticio | des | | 8081B | No | | Ice | | 00 mL | Yes | | No | |
| X | | TCL SVO | Cs | | 8270D | No | | Ice | 5 | 00 mL | Yes | _ | No | |
| X | | TCL VOC | | | 8260C 6010C, 7470 | No No | | HCl Nitric A | | 50 mL 00 mL | Yes | _ | No No | |
| PURGE OBS | | ONS | | | - | | | | KETCH/NOTES | | | _ | | |
| PURGE WAT CONTAINER | | YES X | NO | | NUMBER OF GALLO GENERATED | ONS 4. | .88 | | | | | | | |
| NO-PURGE I UTILIZED | METHOD | YES | NO X | | If yes, purged approximatel to sampling or | y 1 standing volume prio mL for this sample locat | | | | | | | | |
| Sampler Signa | ature: | 1AD, | 1 | | Print Name: | Stephen Johansson | | | | | | | | |



| | | | | LOW | FLOW GR | OUND | VAT | ER SAI | MPL | ING RE | CORD | | | | | |
|-------------------------------------|---------------------|-----------------|-----------------------|---|--|-------------------|--------------------|-----------------------------------|-------------------------|---------------------------|-----------|--------------------|---|-----------------------------|--------------------------------|---|
| | PROJEC | T NAME | | NYSDEC Hoosick Falls L | andfill | 1 | LOC | CATION ID | | | DATE | | | 1 | | |
| | PROJEC" | T NUMB | | | | 1 | STA | HFL RT TIME | -MW-1 | 02 | END TIN | 6/7/2 1E | 018 | | | |
| | | | | 270939.0000.000 | | | | | 8:00 | | | 9:0 | 0 | | | |
| | SAMPLE | ID | HFL-MW-102 | | MPLE TIME 8:50 | | SITI | E NAME/NU 4 | J MBER 142007 | l | PAGE 1 | OF | 1 | | | |
| WELL DIAM | METER (IN | NCHES) | 1 | 2 X4 | 6 | | | OTHER | | | 1 | | | WELL : YE | INTEGRITY IS NO N/A | |
| TUBING ID (| (INCHES) | | 1/8 | 1/4 X 3/8 | 1/2 | 5/8 | | OTHER | | | | | CAP CASING | X | - | |
| MEASUREM | IENT POI | NT (MP) | X TOP | OF RISER (TOR) | TOP OF CA | SING (TOC) | | OTHER _ | | | | | LOCKED COLLAR | X | - | |
| INITIAL I (BMP) | DTW | 52 | 36 FT | FINAL DTW (BMP) | 54.87 | FT | | OT. CASING CKUP (AGS | | 2.49 | FT | | TOC/TOR DIFFERENCE | C | 0.0 FT | |
| WELL DE (BMP) | ЕРТН | 71 | .77 FT | SCREEN LENGTH | 15 | FT | PID AMI | BIENT AIR | | 0 | PPM | | REFILL TIME SETTING | ER | 25 SEC | |
| WATER COLUMN | ı | 19 | 9.41 FT | | 1.65 | GAL | MO | WELL UTH | | 0 | PPM | | DISCHARGE TIMER SETT | | 5 SEC | |
| CALCUL | ATED | 12 | 1.73 | (final DTW - initial TOTAL VOL. | DTW X well diam. s 3.25 | quared X 0.04 | | AWDOWN/ | | 0.5 | 1 | 1 | PRESSURE | | 60 | |
| GAL/VOL (column X | | | GAL ed X 0.041) | PURGED (mL per minute X to | | GAL 26 gal/mL) | ТОТ | TAL PURGE | ED | 0.5 | |] | TO PUMP | | PSI | |
| FIELD PAR | | | PROGRAM ST | ABILIZATION CRITE | | | P) | 1 | | 1 | 1 5 | FDOV | DUMAD | | | _ |
| TIME 3-5 Minutes | DTW 0.0-0. | .33 ft | PURGE RA' (mL/min) | | SP. CONDUCTA (mS/cm) | ph (| units) 1 units) | DISS. O ₂ ((+/- 10 | | TURBIDITY (+/- 10% <10 | (ntu) | EDOX (mv) | PUMP INTAKE | | COMMENTS | |
| 8:00 | Drawe BEGI | lN PUR | , , | (iii 3 degrees) | (+/- 3%) | , | | (,, -, | / | , | (+/ | - 10 mv) | DEPTH (ft) | | | _ |
| 8:10 | 53. | | 250 | 10.3 | 0.483 | 7. | 54 | 0.16 | <u> </u> | 262 | | 108.5 | | | _ | |
| 8:15 | 54 | .2 | 250 | 10.2 | 0.482 | 7. | 54 | 0.11 | | 228 | | 105.5 | | | | _ |
| 8:20 | 54. | 34 | 250 | 10.4 | 0.483 | 7. | 54 | 0.14 | | 217 | | 102.3 | | | | _ |
| 8:25 | 54. | 44 | 250 | 10.4 | 0.482 | 7. | 54 | 0.11 | | 241 | | 97 | | | | |
| 8:30 | 54. | 53 | 250 | 10.4 | 0.482 | 7. | 54 | 0.09 |) | 267 | | 93.7 | | | | |
| 8:35 | 54. | 63 | 250 | 10.4 | 0.482 | 7. | 54 | 0.08 | ; | 260 | | 89.4 | | | | |
| 8:40 | 54. | 72 | 250 | 10.4 | 0.481 | 7. | 54 | 0.08 | ; | 271 | | 86.4 | | | | |
| 8:45 | 54 | .8 | 250 | 10.4 | 0.481 | 7. | 54 | 0.07 | • | 280 | | 84.9 | | | | |
| 8:50 | 54. | 87 | 250 | 10.4 | 0.480 | 7. | 54 | 0.07 | • | 277 | | 82.6 | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | TEMP.: nearest de | orga (av. 1 | 0.1 – 10) | _ |
| | | FI | NAL STABI | LIZED FIELD PAR | AMETERS (to a | ppropriate | signifi | icant figur | es[SF] | D | | | COND.: 3 SF max pH: nearest tenth (e | (ex. 3333 = ex. 5.53 = 5 | = 3330, 0.696 = 0.696) 5.5) | |
| | | | | 10 | 0.48 | 7 | .5 | 0.07 | 7 | 277 | | 83 | DO: nearest tenth (TURB: 3 SF max, 1 ORP: 2 SF (44.1 = | nearest ten | th (6.19 = 6.2, 101 = 101) | |
| EQUIPMENT I | DOCUME! TYPE OF PU | | N | DECON FLUIDS USED | | TU | BING/PU | JMP/BLADDE | R MATE | ERIALS | | | | EOUIPM | ENT USED | |
| X PERIS | TALTIC IERSIBLE | | X | LIQUINOX DEIONIZED WATER | | ON TUBING | | | S. STE | EL PUMP MAT | | | X WL ME | | | |
| BLAD | | | | POTABLE WATER | TEFL | ON LINED TU | BING | | GEOPI | ROBE SCREEN | ıL | | X WQ ME | ETER Hor | | |
| WATT | ΓERA | | | NITRIC ACID HEXANE | | TUBING | | | OTHE | ON BLADDER R | | | | METER Geopump | , | |
| OTHE | | | X | METHANOL PFAS FREE WATER | OTH | | | . 🔲 | OTHE | | | | OTHER FILTER | | . TYPE | |
| ANALYTIC | | METERS | | | | | | | | - | | | | | | _ |
| | | PARAMI | ETER | METHOI NUMBER | | | RESER MET | VATION HOD | | OLUME QUIRED | SAMPI | | QC COLLECTED | | SAMPLE BOTTLE ID NUMBERS | |
| X | | PFA | S | 537.1 | No | | Id | ce | | 600 mL | Yes | | No | | | |
| X | | 1,4-dio | xane | 8270-SIN | I No | | Id | ce | | 2 L | Yes | | No | | | |
| X | | PCB | is | 8082A | No | | Id | ce | 5 | 00 mL | Yes | | No | | | |
| X | | TCL Pest | ticides | 8081B | No | | Id | ce | 5 | 00 mL | Yes | | No | _ | | |
| X | | TCL SV | OCs . | 8270D | No | | Id | ce | 5 | 00 mL | Yes | | No | _ | | |
| X | | TCL V | OCs | 8260C | No | | Н | ICI | 1 | 50 mL | Yes | | No | | | |
| X | | Total Mo | etals | 6010C, 747 | 0A No | | Nitric | Acid | 5 | 600 mL | Yes | | No | | | |
| PURGE OBS PURGE WA' CONTAINEI | TER | ONS YES X | S NO | NUMBER OF GAL GENERATED | LONS | .25 | S | KETCH/NO | OTES | | | | | | | |
| | - | | | | | | | | | | | | | | | |
| NO-PURGE UTILIZED | METHOD | YES | NO X | If yes, purged approxist to sampling or | mately 1 standing volus_mL for this sample | | | | | | | | | | | |
| Sampler Sign | nature: | M | DL | Print Name: | Stephen Johansson | | | | | | | | | | | |
| Checked By: | Ryan | Jorrey | | Date: 6 | 5/7/2018 | | | | | | | | | | | |



| | | | | | LO | W F | LOW G | RO | UNDV | VAT | ER SA | MPL | ING RE | COR | D | | | | | | |
|----------------------|----------------------|-------------------|------------------|-------|--------------------------------------|---------|---------------------|---------|--------------------------|-----------------|---------------------------------|----------------|------------------------------|--------|--------------------------|--------|--------------------------|--|--------------------------|----------|------|
| | PROJECT | NAME | | NVC | DEC Hoosick Falls La | ndfill | | T | | LOCA | ATION ID | | | DATE | | | | 7 | | | |
| | PROJECT | NUMRE | 'R | NIS | DEC HOOSICK PallS La | ındımı | | - | | STAR | HFL-I | MW-103 | | END T | 6/6/20 TME | 018 | | - | | | |
| | ROJECI | NUMBE | AK. | | 270939.0000.000 | 0 | | | | SIAN | 1 TIVIL | 10:50 | | LIND I | 11:5 | 50 | | | | | |
| | SAMPLE I | | HFL-MW-1 | 03 | SAM | | TIME 1:35 | | | SITE | NAME/NU | MBER 142007 | | PAGE | l OF | | 1 | | | | |
| | | | | | | | | | • | | | | | | | | | WELL I | NTEGRITY | Y | |
| WELL DIAM | IETER (IN | CHES) | 1 | | 2 X 4 | | 6 | | 8 | | OTHER _ | | | | | , | CAP | YES X | S NO | N/A | |
| TUBING ID (| INCHES) | | 1/8 | | 1/4 X 3/8 | | 1/2 | | 5/8 | | OTHER _ | | | | | | CASING LOCKED | X | _ | _ | |
| MEASUREM | ENT POIN | NT (MP) | Х | OP OF | RISER (TOR) | | TOP OF CAS | SING (| TOC) | | OTHER _ | | | | | | COLLAR | | = | _ | |
| INITIAL I (BMP) | OTW | 6.8 | 31 F | Γ | FINAL DTW (BMP) | | 7.62 | I | | | CASING KUP (AGS | | 3.05 | F | Т | | TOR ERENC | E | 0.31 | | FT |
| WELL DE (BMP) | РТН | 19. | 71 F | Γ | SCREEN LENGTH | | 15 | 1 | | PID AMBI | IENT AIR | | 0 | PP | M | | ILL TIM TING | IER | = | | SEC |
| WATER COLUMN | | 12. | .9 F | Γ | DRAWDOWN VOLUME | | 0.13 | | AL | PID V MOU | | | 0 | PP | M | | CHARGI ER SET | | - | | SEC |
| CALCUL | | 2.12 | | J | (final DTW - initial D TOTAL VOL. | IWA | 2.08 | | | | WDOWN/ | | 0.06 | 5 | | | SSURE | | - | | |
| GAL/VOL (column X | well diamete | er squared | X 0.041) | L | PURGED (mL per minute X total | al minu | ates X 0.0002 | | | TOTA | AL PURGI | D | | | | тог | UMP | | | | PSI |
| | RAMETER DTW | | | | BILIZATION CRIT | | (AS LISTEI | | | | | | I | | | P | UMP | 1 | | | |
| TIME 3-5 Minutes | 0.0-0.3 Drawd | 33 ft | PURGE F (mL/m | | TEMP. (°C) (+/- 3 degrees) | | (mS/cm) (+/- 3%) | | pH (units (+/- 0.1 un | | DISS. O ₂ (+/- 10 | | TURBIDITY (+/- 10% <10 | | EDOX (mv) (+/- 10 mv) |) IN | TAKE PTH (ft) | | COM | MENTS | |
| 10:50 | | N PURG | SING | | l . | | (2,1,) | l | | | | | ı | l | | 1 | () | 1 | | | |
| 10:55 | 7.3 | 12 | 250 | | 9.3 | | 1.094 | | 6.59 | | 0.30 | 5 | 50.2 | | 130.0 | | | | | | |
| 11:00 | 7.5 | i4 | 200 | | 9.3 | | 1.094 | | 6.51 | | 0.22 | 2 | 28.9 | | 131.6 | | | | | | |
| 11:05 | 7.6 | i6 | 200 | | 9.3 | | 1.094 | | 6.47 | | 0.17 | , | 25.7 | | 132.6 | | | | | | |
| 11:10 | 7.7 | | 200 | | 9.4 | | 1.093 | | 6.45 | | 0.14 | | 24.6 | | 133.2 | | | | | | |
| 11:15 | 7.8 | | 200 | | 9.6 | | 1.091 | | 6.44 | | 0.13 | | 23.5 | | 133.9 | | | | | | |
| | | | | | | | | | | | | | | | | | | - | | | |
| 11:20 | 7.8 | | 200 | | 9.9 | | 1.092 | | 6.44 | | 0.14 | | 21.3 | | 134.4 | - | | | | | |
| 11:25 | 7.8 | | 200 | | 10.1 | | 1.091 | | 6.44 | | 0.14 | | 21.0 | | 134.4 | | | 1 | | | |
| 11:30 | 7.6 | 52 | 200 | | 11.0 | | 1.092 | | 6.44 | | 0.13 | 5 | 20.8 | | 134.0 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | F | INAL ST | BILI | ZED FIELD PAR | RAMI | ETERS (to | appr | opriate s | ignifi | cant figu | res[SF] |) | | | CONE | .: 3 SF max | egree (ex. 10 x (ex. 3333 = (ex. 5.53 = 5. | 3330, 0.696 = 0 | .696) | |
| | | | | | 11 | | 1.09 | | 6.4 | | 0.2 | | 20.8 | | 130 | DO: no | arest tenth 3 SF max, | (ex. 3.51 = 3) nearest tenth | .5) 1 (6.19 = 6.2, 10 | 1 = 101) | |
| EQUIPMENT | DOCUME | ENTATIO | ON | | | | | | | | | | | | | ORP: | 2 SF (44.1 : | = 44, 191 = 1 | 90) | | |
| | TYPE OF PU TALTIC | JMP_ | Г | | ECON FLUIDS USED LIQUINOX | Г | SILIC | ON TU | | G/PUM | P/BLADDE | | <u>RIALS</u> EL PUMP MATI | ERIAL | | X | WL M | | ENT USED | | |
| | ERSIBLE | | | Ι | DEIONIZED WATER POTABLE WATER | F | TEFL | ON TUI | | G | | | UMP MATERIA ROBE SCREEN | L | | X | PID WO M | MultiRae ETER Hori | iha | | |
| WATT | | | _ | N | NITRIC ACID HEXANE | - | X HDPE | E TUBIN | NG | | | | ON BLADDER | | | X | TURB | . METER Geopump | | | |
| OTHE | R | | _ [| N | METHANOL PFAS FREE WATER | - | OTHE | ER | | | | OTHE | R | | | | OTHE | R | TY | PE | |
| ANALYTI | | AMETER | | | METHOD | | FIEL | | DDE | CEDV | ATION | | OLUME | CAN | IPLE | | QC | | SAMPLE | | E ID |
| | P | PARAMET | | | NUMBER | | FILTER | RED | | METH | | RE | QUIRED | COLLI | ECTED | COL | LECTED |) | | MBERS | LID |
| X | | PFAS 1,4-dioxa | | _ | 537.1 8270-SIM | | No No | | | Ice Ice | | | 2 L | | es | | No No | | | | |
| X | | PCBs | | _ | 8082A | _ | No | | | Ice | | - 5 | 00 mL | | es | | No | | | | |
| X | Т | ΓCL Pestic | eides | _ | 8081B | | No |) | | Ice | | 5 | 00 mL | Y | es | | No | | | | |
| X | | TCL SVC | | _ | 8270D | | No | | | Ice | | | 00 mL | | es | | No | _ | | | |
| X | | TCL VO | | _ | 8260C 6010C, 7470 | | No No | | | HCl Nitric A | | | 50 mL 00 mL | | es | | No No | | | | |
| PURGE O | | | | _ | 33100, 7470 | _ | | | | | ETCH/NO | | | | | | -10 | | | | |
| PURGE WA | ATER | YES | NO | | NUMBER OF GALL GENERATED | ONS | 2 | 2.08 | | | | | | | | | | | | | |
| NO-PURGI | | | NO | | If yes, purged approximate | | | | _ | | | | | | | | | | | | |
| UTILIZED | | | X | | | | this sample locat | | | ļ | | | | | | | | | | | |
| Sampler Sig | gnature: | Narnie | Chancy | | Print Name: | Marni | ie Chancey | | | | | | | | | | | | | | |
| Checked By | r: I | Rvan Jorre | v | | Date: 6/ | 6/2018 | 8 | | | | | | | | | | | | | | |



| | | | | | LOW | FLOW GR | OUNI | DWATI | ER SAMPLIN | NG RECO | RD | | | | | |
|-------------------------------|------------------|----------------------|-----------|-------|---|---|-----------|-----------------------|-----------------------------|--|---------------------|---------|--|--|-----------------------------|----------|
| | PROJECT | NAME | | NYS | DEC Hoosick Falls La | ndfill | | LOG | CATION ID HFL-MW-10 | 04 | DATE 6 | 5/6/201 | 18 | | | |
| | PROJECT | NUMBER | | | 270939 | | | STA | RT TIME 8:15 | | END TIME | 9:50 | | | | |
| | SAMPLE | | FL-MW-104 | | SAM | PLE TIME 9:30 | | SIT | E NAME/NUMBER 442007 | | PAGE 1 | OF | 1 | | | |
| WELL DIAM | IETED (IN | CHES) | 1 | X | 12 4 | 6 | 8 | | OTHER | | | | | WELL I | INTEGRITY S NO | N/A |
| TUBING ID (| | CHES) | 1/8 | | 1/4 3/8 | 1/2 | 5/8 | | | | | - | CAP CASING | X X X | | N/A |
| MEASUREM | IENT POIN | NT (MP) | X TO | OP OF | RISER (TOR) | TOP OF CAS | SING (TOO | C) | OTHER | | | _ | LOCKED COLLAR | X | = | <u> </u> |
| INITIAL I (BMP) | DTW | 6.16 | FT | r | FINAL DTW (BMP) | 7.48 | FT | | OT. CASING CKUP (AGS) | 2.06 | FT | | TOC/TOR DIFFERENCE | Ē | 0.29 | FT |
| WELL DE | ЕРТН | 24.51 | l FI | | SCREEN LENGTH | 15 | FT | PID AM | BIENT AIR | 0 | 'nРМ | | REFILL TIMI | ER | - | SEC |
| WATER COLUMN | . [| 18.35 | 5 FT | , | DRAWDOWN VOLUME | 0.22 | GAL | | WELL UTH | 0 | 'nРМ | | DISCHARGE TIMER SETT | | - | SEC |
| CALCULA GAL/VOL | ATED | 3.01 | | _ | (final DTW - initial D TOTAL VOL. | TW X well diam. so | | 0.041) DR A | AWDOWN/ | 0.064 | | | PRESSURE | ING | - | PSI |
| (column X | well diamete | er squared X (| | | PURGED (mL per minute X tota | | 6 gal/mL) | • | FAL PURGED | | | | TO PUMP | | | P31 |
| TIME | | WITH PRO W (FT) | PURGE RA | | TEMP. (°C) | SP. CONDUCTAN (mS/cm) | NCE | P) oH (units) | DISS. O ₂ (mg/L) | TURBIDITY | (ntu) REDOX | (mv) | PUMP INTAKE | | COMME | NTS |
| 3-5 Minutes 8:15 | | t Drawdown N PURGIN | (mL/mir | n) | (+/- 3 degrees) | (+/- 3%) | (+/- | - 0.1 units) | (+/- 10%) | (+/- 10% <10 | ntu) (+/- 10 | mv) | DEPTH (ft) | <u> </u> | | |
| 8:20 | | 7.56 | 300 | | 9.8 | 0.745 | | 7.03 | 0.50 | 250.3 | 95.1 | ı | 24 | | | |
| 8:25 | | 1.47 | 200 | | 10.0 | 0.744 | | 7.00 | 0.36 | 188.7 | 88.3 | | 24 | | | |
| 8:30 | 7 | 7.41 | 200 | | 10.0 | 0.744 | | 7.00 | 0.29 | 119.3 | 82.9 |) | 24 | | | |
| 8:35 | 7 | 7.40 | 200 | | 10.2 | 0.745 | | 7.00 | 0.23 | 96.7 | 80.1 | l | 24 | | | |
| 8:40 | 7 | 7.40 | 200 | | 10.0 | 0.744 | | 7.01 | 0.20 | 82.3 | 78.3 | 3 | 24 | | | |
| 8:45 | 7 | 7.41 | 200 | | 10.2 | 0.74 | | 7.01 | 0.20 | 73.8 | 77 | | 24 | | | |
| 8:50 | 7 | 7.40 | 200 | | 10.1 | 0.737 | | 7.00 | 0.19 | 36.2 | 73.4 | 1 | 24 | | | |
| 8:55 | 7 | 7.40 | 200 | | 9.9 | 0.735 | | 6.99 | 0.17 | 29.3 | 65.7 | 7 | 24 | | | |
| 9:00 | 7 | 7.43 | 200 | | 9.9 | 0.736 | | 7.00 | 0.16 | 25.2 | 62 | | 24 | | | |
| 9:05 | 7 | 7.46 | 200 | | 10.1 | 0.738 | | 7.01 | 0.14 | 25.7 | 59.1 | l | 24 | | | |
| 9:10 | 7 | 7.48 | 200 | | 10.1 | 0.74 | | 7.01 | 0.13 | 22.3 | 56.6 | 5 | 24 | <u> </u> | | |
| 9:15 | | 7.48 | 200 | | 10.0 | 0.742 | | 7.02 | 0.12 | 22.4 | 55.9 | | 24 | | | |
| 9:20 | 7 | 7.48 | 200 | | 10.0 | 0.741 | | 7.03 | 0.12 | 21.8 | 54 | | 24 TEMP.: nearest de | | | |
| | | FIN | AL STAB | ILIZ | ED FIELD PARA | | ppropri | | <u> </u> | *** | | | pH: nearest tenth (e DO: nearest tenth (e | ex. 5.53 = 5.5 ex. 3.51 = 3. | .5) | |
| EQUIPMENT I | DOCUMEN | TATION | | | 10 | 0.741 | | 7.0 | 0.1 | 21.8 | 54 | | TURB: 3 SF max, 1 ORP: 2 SF (44.1 = | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | 1 (6.19 = 6.2, 101 = 90) | 101) |
| SUBM BLADI WATT OTHE | TERA IR IR | | X | I | ECON FLUIDS USED LIQUINOX DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL PFAS FREE WATER | TEFLO TEFLO X HDPE | | G G | PVC I GEOF | EEL PUMP MATE PUMP MATERIAI PROBE SCREEN ON BLADDER ER ER | | - | X WL ME X PID X WQ ME X TURB. | MultiRAE ETER Hori METER Geopump | iba | |
| ANALYTIC | AL PARAN | METERS PARAMETE | ER | | METHOD NUMBER | FIELI FILTER | | PRESER MET | | OLUME QUIRED | SAMPLE COLLECTED | , | QC COLLECTED | | SAMPLE BO | |
| X | | PFAS | | _ | 537.1 | No | | Id | ce : | 500 mL | Yes | | No | | | |
| X | | 1,4-dioxano | e | _ | 8270-SIM 8082A | No No | | Io | | 2 L 500 mL | Yes Yes | | No No | - — | | |
| X | | TCL Pesticio | les | _ | 8081B | No | | Id | | 500 mL | Yes | | No | · <u> </u> | | |
| X | | TCL SVOC | | _ | 8270D | No No | | Id | | 500 mL | Yes | | No | - — | | |
| X | | TCL VOC | | - | 8260C 6010C, 7470. | A No | | H Nitrio | | 150 mL 500 mL | Yes Yes | | No No | . — | | |
| PURGE OBS | TER | YES X | NO | _ | NUMBER OF GALL GENERATED | ONS 3. | .38 | S | SKETCH/NOTES | | | | | | | |
| NO-PURGE I UTILIZED | | YES | NO X | | If yes, purged approximately | y 1 standing volume prior mL for this sample locat | | | | | | | | | | |
| Sampler Signa | ature: | MADI | 1 | | Print Name: | Stephen Johansson | | | | | | | | | | |
| Checked By: | 1 | Rvan Jorrev | | | Date: 6/ | 5/2018 | | 1 | | | | | | | | |



| | | | LOV | V FLOW GR | OUNDWA | ATER SAME | LING RECO | ORD | | |
|----------------------|------------------------------|----------------|--|---|---|-------------------------------|---|---------------------|--|--|
| | PROJECT NAM | Е | NYSDEC Hoosick Falls La | ndfill | | LOCATION ID | | DATE | | |
| | PROJECT NUM | | 270939.0000.000 | | | HFL-MV START TIME | | 6/6/2 END TIME | 018 | |
| | SAMPLE ID | | | IPLE TIME | | 10: SITE NAME/NUM | | PAGE | 45 | |
| | SAM LE ID | HFL-MW-104C | | 11:35 | | 4420 | | 1 01 | F 1 | |
| WELL DIAM | IETER (INCHES | 1 | X 2 4 | 6 | 8 | OTHER | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID | (INCHES) | 1/8 | X 1/4 3/8 | 1/2 | 5/8 | OTHER | | | CAP CASING | <u>X</u> |
| MEASUREM | IENT POINT (MI | Y TO | OF RISER (TOR) | TOP OF CASI | NG (TOC) | OTHER | | | LOCKED COLLAR | |
| INITIAL I (BMP) | DTW | 28.62 FT | FINAL DTW (BMP) | 30.59 | | PROT. CASING STICKUP (AGS) | 2.75 | FT | TOC/TOR DIFFERENCE | E 0.24 FT |
| WELL DE (BMP) | СРТН | 97.48 FT | SCREEN LENGTH | 28 | | PID AMBIENT AIR | 0 | PPM | REFILL TIMI SETTING | ER 10 SEC |
| WATER COLUMN | 1 | 68.86 FT | DRAWDOWN VOLUME (final DTW - initial D | 0.32 | GAL | PID WELL MOUTH | 0 | PPM | DISCHARGE TIMER SETT | |
| CALCULA GAL/VOL | | 11.29 GAL | TOTAL VOL. | 3.58 | | DRAWDOWN/ TOTAL PURGED | 0.09 | | PRESSURE TO PUMP | 85 PSI |
| | well diameter squa | • | (mL per minute X tot | | | | | | | |
| TIME | DTW (FT) | PURGE RA | | SP. CONDUCTANO (mS/cm) | | DISS. O ₂ (mg | | | PUMP INTAKE | COMMENTS |
| 3-5 Minutes | 0.0-0.33 ft Drawd | own (mL/min) | (+/- 3 degrees) | (H/- 3%) | (+/- 0.1 uni | (+/- 10%) | (+/- 10% <10 n | tu) (+/- 10 mv) | DEPTH (ft) | COMMENTS |
| 10:40 | BEGIN PUI | RGING | | T | | 1 | | | 1 | |
| 10:45 | 29.38 | 250 | 10.9 | 0.583 | 7.42 | 0.76 | 10 | 46.9 | | |
| 10:50 | 29.69 | 250 | 11.0 | 0.583 | 7.41 | 0.59 | 2.2 | 33.7 | | |
| 11:00 | 29.97 | 250 | 10.9 | 0.581 | 7.41 | 0.46 | 1.6 | 15.1 | | |
| 11:05 | 30.13 | 250 | 10.9 | 0.58 | 7.41 | 0.38 | 0.5 | 0.70 | | |
| 11:10 | 30.26 | 250 | 10.9 | 0.58 | 7.41 | 0.35 | 3.2 | -5.4 | | |
| 11:15 | 30.39 | 250 | 10.7 | 0.579 | 7.41 | 0.29 | 1.2 | -13.3 | | |
| 11:20 | 30.45 | 250 | 10.8 | 0.58 | 7.41 | 0.33 | 2.9 | -15.3 | | |
| 11:25 | 30.5 | 250 | 10.6 | 0.578 | 7.41 | 0.32 | 6.7 | -18.1 | | |
| 11:30 | 30.55 | 250 | 10.7 | 0.577 | 7.40 | 0.3 | 5.2 | -18.9 | | |
| 11:35 | 30.59 | 250 | 10.5 | 0.577 | 7.40 | 0.31 | 3.9 | -19.2 | | |
| | | | | | | | | | | |
| | | FINAL STAD | ILIZED FIELD PAR | AMETERS (to a | annonvioto sic | mificant figures | SIFI) | | | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | FINAL STAD | | <u> </u> | 1 | 1 | - | | pH: nearest tenth (e | ex. 5.53 = 5.5) |
| | | WO.11 | 10.5 | 0.577 | 7.4 | 0.31 | 3.9 | -19 | TURB: 3 SF max, r ORP: 2 SF (44.1 = | nearest tenth (6.19 = 6.2, 101 = 101) 44, 191 = 190) |
| PERIS | TYPE OF PUMP TALTIC JERSIBLE | X | DECON FLUIDS USED LIQUINOX DEIONIZED WATER POTABLE WATER | TEFLO | TUBING N TUBING N TUBING N LINED TUBING | P | ATERIALS STEEL PUMP MATER VC PUMP MATERIAL EOPROBE SCREEN | RIAL | X WL ME X PID | EQUIPMENT USED STER MultiRae STER Horiba |
| WATT | | | NITRIC ACID HEXANE | X HDPE T | UBING | T | EFLON BLADDER THER | | X TURB. | METER Bladder |
| OTHE OTHE | R | X | METHANOL PFAS FREE WATER | OTHER OTHER | | 0 | THER THER | | OTHER | ł. |
| | CAL PARAMET | | • | | | | | GAN EN E | | <u> </u> |
| | | METER | METHOD NUMBER | FIELD FILTERE | | SERVATION METHOD | - | SAMPLE COLLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | | FAS | 537.1 8270-SIM | No No | | Ice | 500 mL 2 L | Yes | No No | |
| X | | CBs | 8082A | No | | Ice | 500 mL | Yes | No | |
| X | TCL F | esticides | 8081B | No | | Ice | 500 mL | Yes | No | |
| X | | SVOCs | 8270D | No | | Ice | 500 mL | Yes | No | |
| X | | VOCs Metals | 8260C 6010C, 7470 | A No | | HCl litric Acid | 150 mL 500 mL | Yes | No No | |
| Ш | BSERVATIONS | | 00100, 7470 | | | SKETCH/NOTI | | . 00 | | |
| PURGE W. | | S NO | NUMBER OF GALI GENERATED | ONS 3.5 | 8 | | | | | |
| NO-PURGI UTILIZED | E METHOD YI | S NO X | If yes, purged approxim to sampling or | ately 1 standing volume mL for this sample 1 | | | | | | |
| Sampler Sig | gnature: | DL | Print Name: | Stephen Johansson | | | | | | |
| Checked By | y: Ryan Jo | rrey | Date: 6/ | 6/2018 | | | | | | |



| | | | LOV | V FLOW GRO | DUNDWA | TER SAMPI | ING REC | ORD | | |
|----------------------|-------------------------------|-------------|--|---|----------------------|-----------------------------|---|---------------------|--|--|
| | PROJECT NAME | NY | SDEC Hoosick Falls La | ndfill | LO | OCATION ID | | DATE | | |
| | PROJECT NUMBER | | | | ST | HFL-MW- | 105 | 6/5/20 END TIME | 018 | |
| | SAMPLE ID | | 270939.0000.0000 | PLE TIME | er | 14:00 | 0 | PAGE | 40 | |
| | | HFL-MW-105 | SAM | 15:30 | 31 | 442007 | | 1 OF | 1 | |
| WELL DIAM | METER (INCHES) | 1 X | 2 4 | 6 | 8 | OTHER | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID | | | 1/4 3/8 | 1/2 | 5/8 | OTHER | | | CAP CASING | X |
| | IENT POINT (MP) | | F RISER (TOR) | TOP OF CASINO | | OTHER | | _ | LOCKED COLLAR | <u>X</u> <u>X</u> |
| INITIAL | DTW | | FINAL DTW | | | ROT. CASING | | | TOC/TOR | |
| (BMP) | 22.3 | FT FT | (BMP) | 22.73 | | TCKUP (AGS) | - | FT | DIFFERENCE | 0.01 FT |
| WELL DI (BMP) | ЕРТН 29.3 | 32 FT | SCREEN LENGTH | 15 | FT A! | D MBIENT AIR | 0 | PPM | REFILL TIME SETTING | - SEC |
| WATER COLUMN | 6.9 | 6 FT | DRAWDOWN VOLUME | | GAL M | D WELL OUTH | 0 | PPM | DISCHARGE TIMER SETT | |
| CALCUL GAL/VOI | L 1.14 | GAL | TOTAL VOL. PURGED | | GAL TO | RAWDOWN/ DTAL PURGED | 0.01 | 4 | PRESSURE TO PUMP | - PSI |
| | well diameter squared | | | A (AS LISTED IN TH | | | | | | _ |
| TIME | DTW (FT) | PURGE RATE | TEMP. (°C) | SP. CONDUCTANCE (mS/cm) | pH (units) | DISS. O ₂ (mg/L) | | ntu) REDOX (mv | PUMP INTAKE | COMMENTS |
| 3-5 Minutes | 0.0-0.33 ft Drawdown | (mL/min) | (+/- 3 degrees) | (+/- 3%) | (+/- 0.1 units) | (+/- 10%) | (+/- 10% <10 | ntu) (+/- 10 mv) | DEPTH (ft) | |
| 14:00 | BEGIN PURG | | 1 | | | T | | 1 | 1 | |
| 14:05 | 22.41 | 200 | 12.40 | 0.533 | 8.62 | 3.72 | 192.3 | 203.1 | 29 | |
| 14:10 | 22.41 | 200 | 12.38 | 0.532 | 8.60 | 3.52 | 195.7 | 199.7 | 29 | |
| 14:15 | 22.42 | 200 | 12.30 | 0.523 | 8.60 | 3.39 | 211.9 | 198.4 | 29 | |
| 14:20 | 22.48 | 200 | 12.26 | 0.519 | 8.52 | 3.32 | 203.4 | 195.7 | 29 | |
| 14:25 | 22.5 | 200 | 12.18 | 0.519 | 8.54 | 3.29 | 173.2 | 195.5 | 29 | |
| 14:30 | 22.57 | 200 | 12.12 | 0.513 | 8.51 | 3.21 | 155.6 | 192.3 | 29 | |
| 14:35 | 22.62 | 200 | 12.09 | 0.513 | 8.49 | 3.19 | 132.9 | 194.6 | 29 | |
| 14:40 | 22.7 | 200 | 12.04 | 0.514 | 8.49 | 3.13 | 118.4 | 191.1 | 29 | |
| 14:45 | 22.72 | 200 | 11.98 | 0.512 | 8.45 | 3.12 | 90.1 | 190.8 | 29 | |
| 14:50 | 22.73 | 200 | 11.91 | 0.511 | 8.45 | 3.08 | 49.7 | 187.6 | 29 | |
| 14:55 | 22.73 | 200 | 11.90 | 0.512 | 8.45 | 3.04 | 32.2 | 188.4 | 29 | |
| 15:00 | 22.73 | 200 | 11.89 | 0.512 | 8.44 | 3.01 | 19.9 | 184.3 | 29 | |
| 15:05 | 22.73 | 200 | 11.89 | 0.511 | 8.42 | 2.97 | 13.6 | 182.9 | 29 | |
| 15:10 | 22.73 | 200 | 11.87 | 0.51 | 8.42 | 2.84 | 10.1 | 181.7 | 29 | |
| 15:15 | 22.73 | 200 | 11.86 | 0.509 | 8.40 | 2.86 | 9.3 | 180.9 | 29 | |
| 15:20 | 22.73 | 200 | 11.84 | 0.509 | 8.37 | 2.74 | 7.4 | 181.0 | 29 | |
| 15:25 | 22.73 | 200 | 11.84 | 0.507 | 8.35 | 2.69 | 8.3 | 180.1 | 29 | |
| | | 1 | IZED FIELD PAR | | l . | | 1 | | TEMP.: nearest deg | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | IVAL STABIL | 1 | | 1 | 1 | 1 | 100 | pH: nearest tenth (ex DO: nearest tenth (ex | x. 5.53 = 5.5) x. 3.51 = 3.5) |
| FOUIDMENT | OOCUMENTATION | | 12 | 0.507 | 8.4 | 2.7 | 8.3 | 180 | TURB: 3 SF max, n ORP: 2 SF (44.1 = 4 | nearest tenth (6.19 = 6.2, 101 = 101) 44, 191 = 190) |
| X PERIS | TYPE OF PUMP STALTIC MERSIBLE | | DECON FLUIDS USED LIQUINOX DEIONIZED WATER | SILICON TEFLON | TUBING | | ERIALS TEEL PUMP MAT PUMP MATERIA | | X WL ME | EQUIPMENT USED ETER MultiRae |
| BLAD | DDER | = | POTABLE WATER NITRIC ACID | X HDPE TU | LINED TUBING BING | | OPROBE SCREEN LON BLADDER | | | ETER Horiba METER |
| OTHE | R | | HEXANE METHANOL | LDPE TUI OTHER | BING | OT | HER HER | | OTHER | |
| ANALYTIC | AL PARAMETERS | X | PFAS FREE WATER | OTHER | | OT | IER_ | | FILTER | RS NO. TYPE |
| | PARAMET | ER | METHOD NUMBER | FIELD FILTERED | | | VOLUME EQUIRED | SAMPLE COLLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | PFAS | | 537.1 | No | | Ice | 500 mL | Yes | No | |
| X | 1,4-dioxai | ne | 8270-SIM 8082A | No No | | Ice | 2 L 500 mL | Yes Yes | No No | |
| X | TCL Pestici | ides | 8081B | No | | Ice | 500 mL | Yes | No | |
| X | TCL SVO | | 8270D | No | | Ice | 500 mL | Yes | No | |
| X | TCL VOC | | 8260C 6010C, 7470A | No No | | HCl ic Acid | 150 mL 500 mL | Yes | No No | |
| ш | SERVATIONS | | 00100, 74/07 | . INU | INITI | SKETCH/NOTES | JOO IIIL | 103 | 110 | |
| PURGE WA' | TER YES | NO | NUMBER OF GALLO GENERATED | ONS 4.42 | _ | | | | | |
| NO-PURGE UTILIZED | METHOD YES | NO X | If yes, purged approximately to sampling or | 1 standing volume prior nL for this sample location. | | | | | | |
| Sampler Sign | nature: Marine C | hancy | Print Name: | Marnie Chancey | | | | | | |
| Checked By: | Ryan Jorrey | | Date: | 6/5/2018 | | | | | | |



| | | | LOW I | ELOW GRO | UNDWAT | ER SAMPL | ING RECO | ORD | | |
|----------------------|--------------------------------------|------------------------|---|--|------------------------------|--|--------------------------------|---------------------|--|---|
| | PROJECT NAME | NY | SDEC Hoosick Falls La | ndfill | LC | OCATION ID | | DATE | |] |
| | PROJECT NUMBER | | 270939.0000.0000 | | ST | HFL-MW-1 | | 6/5/2 END TIME | 018 | |
| | SAMPLE ID | | | PLE TIME | SI | 14:10 FE NAME/NUMBE | R I | PAGE | 55 | |
| | H | IFL-MW-105C | | 16:45 | | 442007 | | 1 OF | |] |
| WELL DIAM | METER (INCHES) | 1 X | 24 | 6 | 8 | OTHER | | | | WELL INTEGRITY YES NO N/A |
| TUBING ID | (INCHES) | 1/8 X | 1/4 3/8 | 1/2 | 5/8 | OTHER | | | CAP CASING LOCKED | <u>X</u> |
| MEASUREM | MENT POINT (MP) | X TOP O | F RISER (TOR) | TOP OF CAS | ING (TOC) | OTHER | | | COLLAR | <u>X</u> |
| INITIAL (BMP) | DTW 23.0 |)7 FT | FINAL DTW (BMP) | 27.63 | | OT. CASING ICKUP (AGS) | - | FT | TOC/TOR DIFFERENCE | 0.22 FT |
| WELL DI | ЕРТН 154. | 84 FT | SCREEN LENGTH | 28 | FT AM | D MBIENT AIR | 0 | PPM | REFILL TIME | ER 10 SEC |
| WATER COLUM | N 131. | 77 FT | DRAWDOWN VOLUME | 0.75 | | D WELL OUTH | 0 | PPM | DISCHARGE TIMER SETT | |
| CALCUL | | | (final DTW - initial D' TOTAL VOL. | TW X well diam. sq | uared X 0.041) | RAWDOWN/ | 0.25 | | PRESSURE | 90 |
| GAL/VOI (column X | L 21.01 K well diameter squared X | GAL (0.041) | PURGED (mL per minute X tota | | | OTAL PURGED | 0.23 | | TO PUMP | PSI |
| | RAMETERS WITH PR | | | . (AS LISTED IN T SP. CONDUCTAN | CE | | | REDOX | PUMP | |
| TIME 3-5 Minutes | DTW (FT) 0.0-0.33 ft Drawdown | PURGE RATE (mL/min) | TEMP. (°C) (+/- 3 degrees) | (mS/cm) (+/- 3%) | pH (units) (+/- 0.1 units | DISS. O ₂ (mg/L) (+/- 10%) | TURBIDITY (r (+/- 10% <10 n | itu) (mv) | INTAKE DEPTH (ft) | COMMENTS |
| 14:10 | BEGIN PURGI | 1 | 1 1 | | 1 | T | 1 | 1 | 1 | T |
| 14:20 | 24.82 | 100 | 12.2 | 0.733 | 10.03 | 2.57 | 1225 | -128.7 | 154 | |
| 14:30 | 25.39 | 100 | 11.6 | 0.732 | 9.99 | 2.56 | 905 | -153.6 | 154 | |
| 14:40 | 25.51 | 100 | 11.1 | 0.72 | 9.92 | 6.67 | 969 | -110.9 | 154 | |
| 14:50 | 25.73 | 100 | 10.9 | 0.719 | 9.92 | 7.57 | 1203 | -89.1 | 154 | |
| 15:00 | 26.32 26.19 | 100 | 11.1 | 0.719 | 9.9 | 11.75 | 1020 | -39.5 -25 | 154 | |
| 15:10 | 20.19 | 100 | 11.1 | | SI to recalibrate. | 15.55 | 11/3 | -23 | 134 | |
| 15:30 | 26.52 | 100 | 11.5 | 0.717 | 9.8 | 17.3 | 859 | 15.9 | 154 | |
| | | | | | _ | + | + | 18.5 | - | |
| 15:40 15:45 | 26.5 26.5 | 100 | 12 | 0.715 | 9.78 | 17.21 | 843 862 | 21.3 | 154 | |
| 15:43 | 26.7 | 100 | 12 | 0.713 | 9.76 | 18.82 | 832 | 22.6 | 154 | |
| 15:55 | 20.7 | 100 | Issue with pump. Bri | | | | 032 | 22.0 | 154 | |
| 16:10 | 26.79 | 100 | 11.4 | 0.73 | 9.99 | 19.3 | 635 | 26.7 | 154 | |
| 16:15 | 27.24 | 100 | 10.6 | 0.743 | 10.06 | 21.7 | 675 | 39.1 | 154 | |
| 16:20 | 27.19 | 100 | 10.5 | 0.721 | 9.8 | 21.11 | 767 | 46.2 | 154 | |
| 16:30 | 27.54 | 100 | 10.5 | 0.711 | 9.57 | 19.5 | 815 | 27.4 | 154 | |
| 16:35 | 27.6 | 100 | 10.7 | 0.712 | 9.54 | 20.48 | 753 | 26 | 154 | |
| 16:40 | 27.62 | 100 | 10.9 | 0.712 | 9.52 | 20.54 | 769 | 27.7 | 154 | |
| 16:45 | 27.63 | 100 | 11 | 0.711 | 9.51 | 20.87 | 725 | 28.3 | 154 | |
| | FIN | AL STABILIZI | ED FIELD PARAM | IETERS (to app | ropriate signif | icant figures[SF] |) | | COND.: 3 SF max | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | | 11 | 0.711 | 9.5 | 20.9 | 725 | 28 | pH: nearest tenth (c DO: nearest tenth (c TURB: 3 SF max, ORP: 2 SF (44.1 = | (ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) |
| EQUIPMENT | DOCUMENTATION | | | | | | | | | |
| | TYPE OF PUMP STALTIC | | DECON FLUIDS USED LIQUINOX | | ON TUBING | | EEL PUMP MATE | | X WL MI | |
| X SUBN X BLAI | MERSIBLE ODER | | DEIONIZED WATER POTABLE WATER | | ON TUBING ON LINED TUBING | | PUMP MATERIAL PROBE SCREEN | | | MultiRae IETEF Horiba |
| | TERA | _ 🗏 | NITRIC ACID HEXANE | X HDPE | TUBING TUBING | | ON BLADDER | | X TURB. | METER Bladder |
| OTHE | ER | 日 | METHANOL | OTHE | R | OTH | ER | | OTHE | R |
| ANALYTIC | ER CAL PARAMETERS | X | PFAS FREE WATER | OTHE | К | OTH | E <u>K</u> | | FILTE | RS NO. TYPE |
| | PARAMET | ER | METHOD NUMBER | FIELI FILTER | | | OLUME EQUIRED (| SAMPLE COLLECTED | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | PFAS 1,4-dioxa | | 537.1 8270-SIM | No No | | Ice | 500 mL 2 L | Yes | No No | <u> </u> |
| X | PCBs | nie | 8082A | No No | | | 500 mL | Yes | No | <u> </u> |
| X | TCL Pestic | ides | 8081B | No | | | 500 mL | Yes | No | · - |
| X | TCL SVO | Cs | 8270D | No | | Ice | 500 mL | Yes | No | |
| X | TCL VOC | | 8260C | No | | | 150 mL | Yes | No | |
| PURGE OF | Total Meta | ıls | 6010C, 7470A | A No | Niti | SKETCH/NOTES | 500 mL | Yes | No | <u>- </u> |
| PURGE WA | ATER YES | NO | NUMBER OF GALLO | ONS 3 | | | | | | |
| CONTAINE NO-PURGE | | NO | GENERATED If yes, purged approximately | | | | | | | |
| UTILIZED | | X | | y 1 standing volume prior mL for this sample locati | | | | | | |
| Sampler Sig | nature: AAD, | | Print Name: | Stephen Johansson | | | | | | |
| Checked By: | : Ryan Jorrey | | Date: | 6/5/2018 | | | | | | |



| | PROJECT NAME NYSDEC Hoosick Falls Landfill | | | | | LOCATION ID DATE 6/5/2018 | | | |] | |
|--|---|--------------|--|---|-----------------|---------------------------------|------------------------|-------------------------------|---|---|--|
| PROJECT NUMBER | | | 270939.0000.0000 | | ST | START TIME END | | END TIME | 2018 | | |
| SAMPLE ID | | | SAMPLE TIME | | SIT | 10:30 TE NAME/NUMBE | R | PAGE | 55 | | |
| | | HFL-MW-106 | | 12:10 | <u> </u> | 442007 | | 1 O | F 1 |] | |
| WELL INTEGRITY WELL DIAMETER (INCHES) 1 X 2 4 6 8 OTHER YES NO N/A | | | | | | | | | | | |
| TUBING ID | (INCHES) | 1/8 X | 1/4 3/8 | 1/2 | 5/8 | OTHER | | | CAP CASING LOCKED | <u>X</u> <u>X</u> | |
| MEASUREM | MENT POINT (MP) | X TOP OF | FRISER (TOR) | TOP OF CASING | NG (TOC) OTHER | | | | COLLAR | | |
| INITIAL DTW 19.31 FT | | | FINAL DTW (BMP) | 19.67 | | OT. CASING ICKUP (AGS) | - FT | | TOC/TOR DIFFERENCE | E 0.41 FT | |
| WELL DI (BMP) | ЕРТН 27 | 7.39 FT | SCREEN LENGTH | 15 | FT AM | D MBIENT AIR | 0 | PPM | REFILL TIM SETTING | ER - SEC | |
| WATER COLUM! | N 8 | .08 FT | DRAWDOWN VOLUME (final DTW - initial D | 0.06 TW X well diam. square | GAL MO | D WELL DUTH | 0 | PPM | DISCHARGE TIMER SETT | | |
| CALCULATED 1.33 3AL | | | TOTAL VOL. PURGED | 6.2 | DDAWDOU | | 0.0 | 10 | PRESSURE TO PUMP | - PSI | |
| | well diameter squar | red X 0.041) | | ll minutes X 0.00026 gal | /mL) | | | - | | | |
| TIME | DTW (FT) 0.0-0.33 ft | PURGE RATE | TEMP. (°C) | SP. CONDUCTANCE (mS/cm) | pH (units) | DISS. O ₂ (mg/L) | TURBIDITY | | | COMMENTS | |
| 3-5 Minutes | Drawdown | (mL/min) | (+/- 3 degrees) | (+/- 3%) | (+/- 0.1 units) | (+/- 10%) | (+/- 10% <10 |) ntu) (+/- 10 mv) | DEPTH (ft) | COMMENTS | |
| 10:30 | BEGIN PUF | 1 | 0.2 | 0.524 | 0.54 | 0.50 | 112.2 | 10.2 | 25 | Г | |
| 10:40 | 19.38 | 250 250 | 9.3 | 0.526 | 8.56 8.55 | 0.59 | 112.3 124.3 | -19.2 -38.5 | 25 25 | | |
| | | | | | | + | | | _ | | |
| 10:50 | 19.52 19.54 | 250 250 | 9.5 9.4 | 0.516 | 8.49 8.49 | 0.57 | 245.7 151.6 | -32.6 -33.9 | 25 25 | | |
| | | | | | | - | | | | | |
| 11:00 | 19.54 | 250 | 9.5 9.5 | 0.514 | 8.47 8.45 | 0.51 | 94.7 | -40.7 | 25 25 | | |
| 11:10 | 19.6 | 250 250 | 9.5 | 0.513 | 8.44 | 0.55 | 89.6 | -44.6 -39.7 | 25 | | |
| | | 250 | | 0.513 | 8.45 | 0.54 | - | | _ | | |
| 11:15 | 19.67 | - | 9.6 | | | - | 74.5 | -42.3 | 25 | | |
| 11:20 | 19.67 19.67 | 250 250 | 9.6 9.7 | 0.514 | 8.44 8.44 | 0.54 | 77.9 64.3 | -44.5 -40.7 | 25 25 | | |
| 11:30 | 19.67 | 250 | 9.7 | 0.513 | 8.43 | 0.51 | 54.7 | -36.1 | 25 | | |
| 11:35 | 19.67 | 250 | 9.5 | 0.512 | 8.41 | 0.5 | 54.1 | -27.8 | 25 | | |
| 11:40 | 19.67 | 250 | 9.9 | 0.509 | 8.41 | 0.49 | 24.5 | -26.8 | 25 | | |
| 11:45 | 19.67 | 250 | 9.9 | 0.509 | 8.41 | 0.45 | 17.6 | -29.3 | 25 | | |
| 11:50 | 19.67 | 250 | 9.9 | 0.507 | 8.4 | 0.43 | 10.6 | -24.8 | 25 | | |
| 11:55 | 19.67 | 250 | 9.7 | 0.504 | 8.4 | 0.44 | 9.9 | -21.4 | 25 | | |
| 12:00 | 19.67 | 250 | 9.7 | 0.501 | 8.4 | 0.4 | 6.5 | -20.7 | 25 | | |
| 12:05 | 19.67 | 250 | 9.7 | 0.501 | 8.4 | 0.41 | 7.8 | -19.1 | 25 | | |
| | | | | AMETERS (to app | | <u> </u> | | | | egree (ex. 10.1 = 10) : (ex. 3333 = 3330, 0.696 = 0.696) | |
| | | | 10 | 0.501 | 8.4 | 0.4 | 7.8 | -19 | pH: nearest tenth (c DO: nearest tenth (| ex. 5.53 = 5.5) | |
| EQUIPMENT DOCUMENTATION | | | | | 0.4 | 0.4 | 7.0 | -17 | ORP: 2 SF (44.1 = | | |
| | TYPE OF PUMP STALTIC | | ECON FLUIDS USED LIQUINOX | SILICON T | | PUMP/BLADDER MAT S. ST | ERIALS EEL PUMP MAT | TERIAL | X WL MI | EQUIPMENT USED ETER | |
| SUBMERSIBLE BLADDER X | | | DEIONIZED WATER POTABLE WATER | TER TEFLON TUB | | | | PUMP MATERIAL PROBE SCREEN | | X PID MultiRae X WQ METEF Horiba X TURB. METER | |
| WATTERA | | | NITRIC ACID HEXANE | X HDPE TUB LDPE TUB | | | | ON BLADDER ER | | . METER Geopump | |
| OTHE | | | METHANOL OTHER | OTHER OTHER | | OTH | | | OTHE FILTE | | |
| ANALYTIC | CAL PARAMETER | FIELD | RVATION V | OLUME | SAMPLE | QC | SAMPLE BOTTLE ID | | | | |
| | PARAME PFAS | | NUMBER 537.1 | FILTERED No | | THOD RE | QUIRED 1.5 L | COLLECTED Yes | COLLECTED Yes | NUMBERS | |
| X | 1,4-diox | | 8270-SIM | No | | Ice | 6 L | Yes | Yes | · · · · · · · · · · · · · · · · · · · | |
| X | X PCBs | | 8082A | No | | Ice | 1.5 L 1.5 L | Yes | Yes | | |
| X TCL Pesticides X TCL SVOCs | | | | 8081B No 8270D No | | Ice | | Yes | Yes | <u> </u> | |
| X TCL VOCs | | | | 8260C No | | Ice HCl | | Yes Yes | Yes | <u> </u> | |
| X Total Metals | | etals | | 6010C, 7470A No | | Nitric Acid | | Yes | Yes | | |
| PURGE OBSERVATIONS PURGE WATER YES NO NUMBER OF GALLONS Blind field duplicate sample collected | | | | | | | | | | <u> </u> | |
| CONTAINE | ERIZED X | | NUMBER OF GALLONS GENERATED 6.2 | | Blir | nu neia duplicate sam | pie collected | | | | |
| NO-PURGE UTILIZED | E METHOD YE | S NO X | If yes, purged approximato sampling or | tely 1 standing volume prio mL for this sample locat | | | | | | | |
| | m | e Chancus | | | | | | | | | |
| Sampler Signature: Print Name: Marnie Chancey | | | | | | | | | | | |
| Checked By: | : Ryan Jorrey | | Date: 6/ | 5/2018 | | | | | | | |
| | | | | | | | | | | | |

LOW FLOW GROUNDWATER SAMPLING RECORD



| DATE | | | |
|--|----------|--|--|
| PROJECT NUMBER 270939.0000.0000 START TIME END TIME 8:40 9:50 | | | |
| | | | |
| SAMPLE ID SAMPLE TIME SITE NAME/NUMBER PAGE | | | |
| WELL INTEGRITY | | | |
| WELL DIAMETER (INCHES) 1 X 2 4 6 8 OTHER YES NO CAP X | N/A | | |
| TUBING ID (INCHES) 1/8 X 1/4 3/8 1/2 5/8 OTHER CASING X LOCKED X | <u>=</u> | | |
| | | | |
| INITIAL DTW (BMP) 13.18 FT (BMP) 20.5 FT PROT. CASING TOC/TOR 0.29 | FT | | |
| | SEC | | |
| WATER COLUMN 125.45 FT VOLUME 1.2 GAL PID WELL 0 DISCHARGE 5 TIMER SETTING | SEC | | |
| (final DTW - initial DTW X well diam. squared X 0.041) CALCULATED 20.57 TOTAL VOL. 3.9 DRAWDOWN/ 0.31 PRESSURE 90 | par | | |
| GAL/VOL GAL PURGED GAL (column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL) | PSI | | |
| FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP) THAT DTW (FT) NIPCE PATE STATE SPECIAL CONDUCTANCE HE | | | |
| TIME 3-5 Minutes 0.0-0.33 ft Drawdown D | ENTS | | |
| 8:40 BEGIN PURGING | | | |
| 8:50 16.38 250 9.4 0.426 7.88 0.29 22.2 -179.2 130 | | | |
| 8:55 17.43 250 9.4 0.425 7.89 0.15 24.3 -338.5 130 | | | |
| 9:00 17.79 250 9.5 0.426 7.89 0.17 44.3 -412.6 130 | | | |
| 9:05 18.42 250 9.4 0.425 7.89 0.16 51.6 -433.9 130 | | | |
| 9:10 18.63 250 9.4 0.424 7.89 0.11 54.8 -440.7 130 | | | |
| 9:15 19.18 250 9.4 0.423 7.87 0.09 103.5 -446.2 130 | | | |
| 9:20 19.58 250 9.3 0.423 7.86 0.05 127.2 -439.3 130 | | | |
| 9:25 19.92 250 9.4 0.423 7.86 0.04 138.2 -442.8 130 | | | |
| 9:30 20.28 250 9.5 0.424 7.85 0.04 25.5 -445.4 130 | | | |
| 9:35 20.41 200 9.7 0.425 7.85 0.1 24.6 -440.7 130 | | | |
| 9:40 20.5 200 9.7 0.425 7.85 0.11 23.9 -446.1 130 TEMP: nearest degree (ex. 10.1 = 10) | | | |
| FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF]) COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.6 pH: nearest tenth (ex. 5.53 = 5.5) | | | |
| 10 0.425 7.9 0.1 23.9 -450 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 ORP: 2 SF (44.1 = 44, 191 = 190) | = 101) | | |
| EQUIPMENT DOCUMENTATION TYPE OF PUMP DECON FLUIDS USED TUBING/PUMP/BLADDER MATERIALS PERISTALTIC SUBMERSIBLE DEIONIZED WATER SUBMERSIBLE DEIONIZED WATER TEFLON TUBING PVC PUMP MATERIAL X WL METER X PID MuliRae REPLON TUBING GEOPROBE SCREEN X WQ METER Horiba NITRIC ACID NITRIC ACID WATTERA HEXANE LDPE TUBING OTHER OTHER OTHER OTHER | | | |
| OTHER X PFAS FREE WATER OTHER OTHER TYPE | 3 | | |
| ANALYTICAL PARAMETERS PARAMETER PARAMETER METHOD FIELD PRESERVATION VOLUME SAMPLE QC SAMPLE BY NUMBER FILTERED METHOD REQUIRED COLLECTED COLLECTED NUMBER NO SOUTH VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME NO NO VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME SAMPLE VOLUME NUMBER NO VOLUME SAMPLE SAMP | | | |
| X 1,4-dioxane 8270-SIM No Ice 2 L Yes No | | | |
| X PCBs 8082A No Ice 500 mL Yes No | | | |
| X | | | |
| X TCL VOCs 8260C No HCl 150 mL Yes No | | | |
| X Total Metals 6010C, 7470A No Nitric Acid 500 mL Yes No | | | |
| PURGE OBSERVATIONS PURGE WATER YES NO NUMBER OF GALLONS 3.9 CONTAINERIZED X GENERATED NO-PURGE METHOD YES NO If yes, purged approximately 1 standing volume prior to sampling ormL for this sample location. | | | |
| Sampler Signature: Print Name: Stephen Johansson Checked By: Ryan Jorrey Date: 6/6/2018 | | | |



| | PROJECT NAME | | SDEC Hoosick Falls La | ındfill | L | OCATION ID HFL-MW | 1R | DATE | 6/6/2018 | |] |
|-----------------------|-------------------------|------------------------|---------------------------------------|-------------------------------------|------------------------------|---|-----------------------------|-----------------------------|----------|---|---|
| | PROJECT NUMB | ER | 270939 | | S | TART TIME | | END TIME | : | | |
| | SAMPLE ID | | | IPLE TIME | SI | 12: TE NAME/NUM | | PAGE | 13:20 | | |
| | | HFL-MW-1B | , , , , , , , , , , , , , , , , , , , | 13:10 | | 4420 | | 1 | OF | 1 | |
| WELL DIAM | METER (INCHES) | 1 2 | 2 4 | 6 | 8 | OTHER | | | _ | CAP | WELL INTEGRITY YES NO N/A X |
| TUBING ID | (INCHES) | 1/8 | 1/4 X 3/8 | 1/2 | 5/8 | OTHER | | | | CASING LOCKED | X |
| MEASUREM | IENT POINT (MP) | X TOP O | F RISER (TOR) | TOP OF CASIN | NG (TOC) | OTHER | | | _ | COLLAR | |
| INITIAL I (BMP) | DTW 3. | .24 FT | FINAL DTW (BMP) | 3.34 | | ROT. CASING FICKUP (AGS) | 0.96 | 0.96 FT | | | E 0.3 FT |
| WELL DE (BMP) | 20 |).85 FT | SCREEN LENGTH | 15 | | ID MBIENT AIR | 0 | PPM | RE SE | ER - SEC | |
| WATER COLUMN | 17 | 7.61 FT | DRAWDOWN VOLUME | 0.02 | GAL M | D WELL OUTH | 0 | PPM | | SCHARGE MER SETT | |
| CALCUL | | .89 | TOTAL VOL. | TW X well diam. squa | D | RAWDOWN/ | 0.0 | 06 | | RESSURE | |
| GAL/VOL (column X | well diameter square | GAL ed X 0.041) | PURGED (mL per minute X total | al minutes X 0.00026 g | | OTAL PURGED | | | тс |) PUMP | PSI |
| | DTW (FT) | | BILIZATION CRITE | RIA (AS LISTED IN SP. CONDUCTANO | Έ | | | | | PUMP | |
| TIME 3-5 Minutes | 0.0-0.33 ft Drawdown | PURGE RATE (mL/min) | TEMP. (°C) (+/- 3 degrees) | (mS/cm) (+/- 3%) | pH (units) (+/- 0.1 units | DISS. O ₂ (mg. s) (+/- 10%) | (+/- 10% <1 | (ntu) REDC 0 ntu) (+/- 1 | (0 my) | INTAKE DEPTH (ft) | COMMENTS |
| 12:30 | BEGIN PUR | GING | | (17 370) | | | | | | , LI 111 (II) | |
| 12:40 | 3.34 | 250 | 10.7 | 0.533 | 7.35 | 0.23 | 4.6 | 17 | 73.0 | | |
| 12:45 | 3.34 | 250 | 10.7 | 0.53 | 7.35 | 0.09 | 3.4 | 18 | 31.4 | | |
| 12:50 | 3.34 | 250 | 10.7 | 0.528 | 7.34 | 0.02 | 1.8 | 18 | 35.7 | | |
| 12:55 | 3.34 | 250 | 10.6 | 0.528 | 7.35 | 0 | 2 | 18 | 36.2 | | |
| 13:00 | 3.34 | 250 | 10.7 | 0.526 | 7.34 | 0 | 3 | 18 | 36.5 | | |
| 13:05 | 3.34 | 250 | 10.7 | 0.525 | 7.34 | 0 | 3.7 | 18 | 35.9 | | |
| 13:10 | 3.34 | 250 | 10.7 | 0.525 | 7.35 | 0 | 5.2 | 18 | 35.0 | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Fl | INAL STABIL | ZED FIELD PAR | AMETERS (to ap | propriate sigi | nificant figures | [SF]) | , | co | ND.: 3 SF max | egree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) |
| | | | 11 | 0.525 | 7.4 | 0 | 5.2 | 1 | DO | nearest tenth (nearest tenth (RB: 3 SF max, | |
| EQUIPMENT I | DOCUMENTATIO | N | | | | | | | OR | P: 2 SF (44.1 = | = 44, 191 = 190) |
| | YPE OF PUMP TALTIC | X | DECON FLUIDS USED LIQUINOX | SILICON | TUBING/ N TUBING | PUMP/BLADDER N | MATERIALS STEEL PUMP MAT | FERIAL. | Х | _ | EQUIPMENT USED |
| | IERSIBLE | | DEIONIZED WATER POTABLE WATER | TEFLON | TUBING | PV | C PUMP MATERI. | AL | X | PID | MultiRae ETER Horiba |
| WATT | | _ | NITRIC ACID HEXANE | X HDPE TO | UBING | TI | EFLON BLADDER THER | | X | TURB. | METER Geopump |
| OTHE | R | X | METHANOL PFAS FREE WATER | OTHER | | Or | THER THER | | = | OTHER | 3 |
| | AL PARAMETERS | | | <u> </u> | pppg | | | 0.13 fby F | | | |
| | PARAMI | | METHOD NUMBER | FILTERE | | ERVATION ETHOD | VOLUME REQUIRED | SAMPLE COLLECTI | | QC OLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | PFA: | | 537.1 8270-SIM | No No | | Ice Ice | 500 mL 2 L | Yes | | No No | <u> </u> |
| X | PCB | | 8082A | No No | | Ice | 500 mL | Yes | | No | - |
| X | TCL Pest | icides | 8081B | No | | Ice | 500 mL | Yes | | No | <u> </u> |
| X | TCL SV | OCs | 8270D | No | | Ice | 500 mL | Yes | | No | |
| X | TCL VO | | 8260C | No No | | HCl | 150 mL | Yes | | No | <u> </u> |
| PURGE OBS | Total Me | ctals | 6010C, 7470 | A No | Ni | SKETCH/NOTE | 500 mL | Yes | | No | <u> </u> |
| PURGE WAT | TER YES | | NUMBER OF GALL | LONS 2.6 | j | | | | | | |
| CONTAINER NO-PURGE | | S NO | | ately 1 standing volume p | prior | | | | | | |
| UTILIZED | | X | to sampling or | mL for this sample lo | ocation. | | | | | | |
| Sampler Signa | ature: | DL | Print Name: | Stephen Johansson | | | | | | | |
| <i>a</i> | D 1 | | D. | 6/6/2019 | | | | | | | |



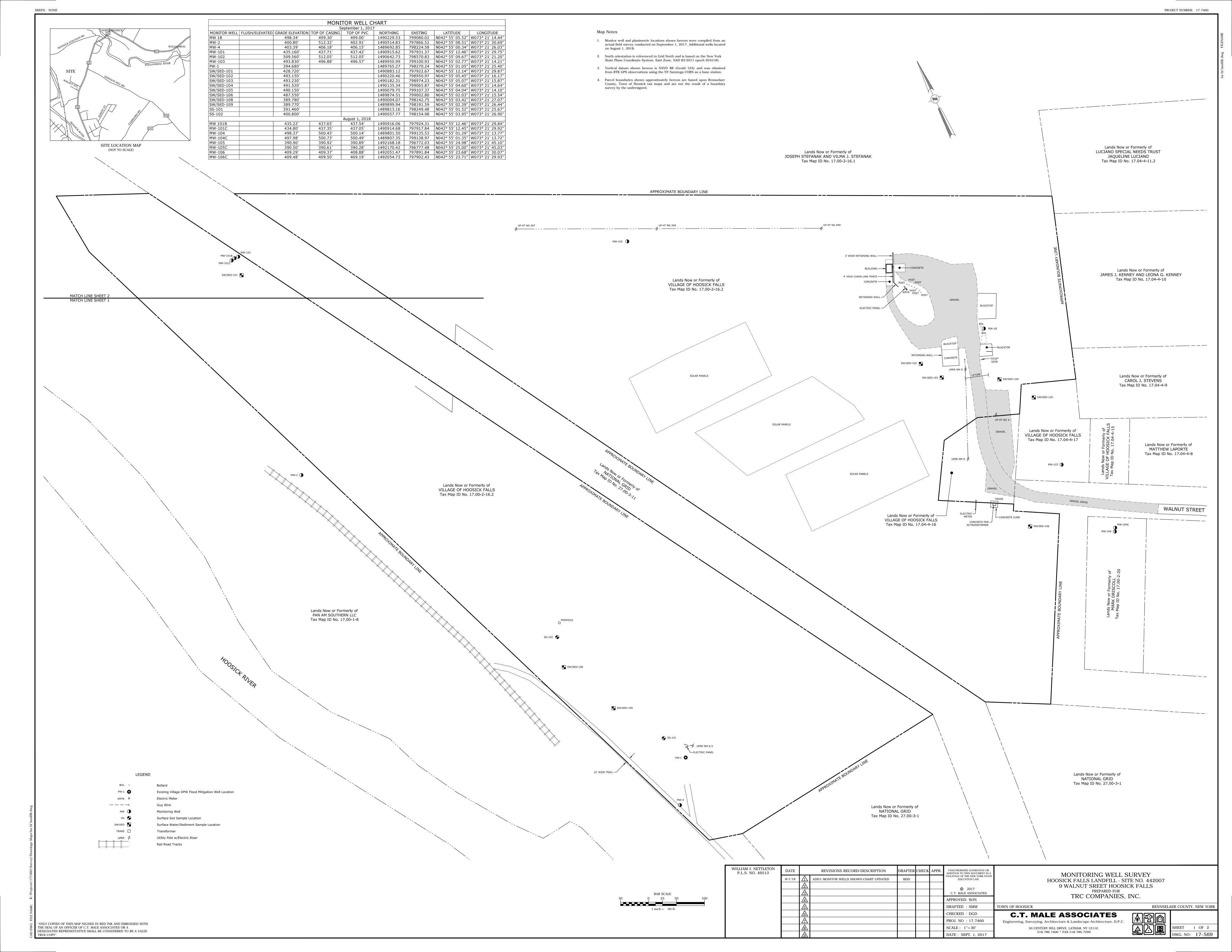
| | PROJECT NAME | | SDEC Hoosick Falls La | ndfill | | LOCA | TION ID HFL-MW | 4 | DAT | E 6/7/20 | 18 | |
|----------------------------------|-------------------------------------|------------------------|---|--|----------------------------------|----------------|--|-----------------------------|--------------------------|---------------------------|---|---------------------------------------|
| | PROJECT NUMB | ER | 270020 0000 0000 | | | START | T TIME | -4 | END | TIME | 10 | |
| | | | 270939.0000.0000 | | | | 7:4: | | | 9:05 | | |
| | SAMPLE ID | HFL-MW-4 | SAM | PLE TIME 8:40 | | SITEN | NAME/NUMI 4420 | | PAG | 1 OF | 1 | |
| WELL DIAM | METER (INCHES) | 1 2 | 2 4 | 6 | 8 | 0 | THER | | | | CAP | WELL INTEGRITY YES NO N/A X |
| TUBING ID | (INCHES) | 1/8 | 1/4 X 3/8 | 1/2 | 5/8 | O | THER | | | | CASING LOCKED | X |
| MEASUREM | IENT POINT (MP) | X TOP OF | RISER (TOR) | TOP OF CASI | NG (TOC) | O | THER | | | | COLLAR | |
| INITIAL I (BMP) | DTW 21 | 42 FT | FINAL DTW (BMP) | 25.03 | PROT. CASING FT STICKUP (AGS) | | | 2. | 2.79 FT TOC/TOR DIFFEREN | | | 0.3 FT |
| WELL DE (BMP) | ЕРТН 34 | l.69 FT | SCREEN LENGTH | 15 | FT | PID AMBII | ENT AIR | |) | PPM | REFILL TIME SETTING | ER - SEC |
| WATER COLUMN | 13 | 3.27 FT | DRAWDOWN VOLUME (final DTW - initial D' | 0.59 | GAL | PID WI | | |) | PPM | DISCHARGE TIMER SETT | |
| CALCULA GAL/VOL (column X | | .18 GAL | TOTAL VOL. PURGED (mL per minute X tota | 2.6 | GAL | | DOWN/ L PURGED | | 0.23 | | PRESSURE TO PUMP | - PSI |
| | | | BILIZATION CRITE | | |) | | | | | | |
| TIME 3-5 Minutes | DTW (FT) 0.0-0.33 ft Drawdown | PURGE RATE (mL/min) | TEMP. (°C) (+/- 3 degrees) | SP. CONDUCTAN (mS/cm) (+/- 3%) | CE pH (unit | | OISS. O ₂ (mg/ (+/- 10%) | L) TURBID (+/- 10% | | REDOX (mv) (+/- 10 mv) | PUMP INTAKE DEPTH (ft) | COMMENTS |
| 7:45 | BEGIN PUR | GING | | | • | • | | • | | | | |
| 7:55 | 22.76 | 200 | 10.8 | 1.177 | 6.79 | | 0.51 | 65 | i.5 | 70 | 34 | |
| 8:00 | 23.36 | 200 | 11.1 | 1.181 | 6.76 | | 0.59 | 40 | 0.1 | 77.1 | 34 | |
| 8:05 | 23.84 | 200 | 11.1 | 1.184 | 6.75 | | 0.29 | 33 | .5 | 82.4 | 34 | |
| 8:10 | 24.15 | 200 | 11.2 | 1.184 | 6.75 | | 0.22 | 28 | 28.8 85.1 | | 34 | |
| 8:15 | 24.56 | 200 | 11.3 | 1.188 | 6.75 | | 0.2 | 24 | .8 | 85.9 | 34 | |
| 8:20 | 24.81 | 200 | 11.5 | 1.186 | 6.76 | | 0.2 | 23 | 23.3 85.1 | | 34 | |
| 8:25 | 25.03 | 200 | 11.5 | 1.189 | 6.76 | | 0.2 | 2 | | 85.1 | 34 | |
| 8:30 | 25.03 | 200 | 11.8 | 0.188 | 6.76 | _ | 0.2 | | 20.9 82 | | 34 | |
| 8:35 | 25.03 | 200 | 11.8 | 0.189 | 6.76 | | 0.2 | 20 | 0.6 | 81.5 | 34 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | TEMP.: nearest de | gree (ex. 10.1 = 10) |
| | F | INAL STABIL | IZED FIELD PARA | AMETERS (to a | ppropriate s | ignific | ant figures | [SF]) | | | COND.: 3 SF max pH: nearest tenth (DO: nearest tenth (| |
| | | | 12 | 0.189 | 6.8 | | 0.2 | 20 | .6 | 82 | | nearest tenth (6.19 = 6.2, 101 = 101) |
| | DOCUMENTATION OF PUMP | I | DECON FLUIDS USED | | | NG/PUM | P/BLADDER N | | | | | EQUIPMENT USED |
| SUBM | TALTIC IERSIBLE | X | LIQUINOX DEIONIZED WATER | TEFLO | N TUBING N TUBING | | PV | STEEL PUMP N C PUMP MATI | RIAL | | | MultiRae |
| BLAD | | _ 🖽 | POTABLE WATER NITRIC ACID | X HDPE 7 | N LINED TUBII TUBING | NG | TE | OPROBE SCRI FLON BLADD | | | X TURB. | ETER Horiba METER |
| WATT OTHE | R | 🖯 | HEXANE METHANOL | LDPE T OTHER | ! | | TO | HER HER | | | OTHER | |
| OTHE | | X | PFAS FREE WATER | OTHER | ! | | TO | HER | | | FILTER | RS NO. TYPE |
| ANALYTIC | CAL PARAMETER PARAMI PFA | ETER | METHOD NUMBER | FIELD FILTERE | | SERVA METHO | | VOLUME REQUIRED | | AMPLE LECTED Yes | QC COLLECTED | SAMPLE BOTTLE ID NUMBERS |
| X | 1,4-diox | | 537.1 8270-SIM | No No | | Ice | | 500 mL 2 L | _ | Yes | No No | |
| X | PCB | s | 8082A | No | | Ice | | 500 mL | | Yes | No | |
| X | TCL Pest | icides | 8081B | No | | Ice | | 500 mL | | Yes | No | |
| X | TCL SV | 'OCs | 8270D | No | | Ice | | 500 mL | | Yes | No | |
| X | TCL V | | 8260C | No | | HCl | | 150 mL | | Yes | No | |
| X | Total Me | etals | 6010C, 7470. | A No | | Nitric Ac | | 500 mL | | Yes | No | |
| PURGE OB PURGE WA CONTAINE | | | NUMBER OF GALL GENERATED | ONS 2. | 6 | SKE | ETCH/NOTE | s | | | | |
| NO-PURGE UTILIZED | METHOD YES | S NO X | If yes, purged approximate to sampling or | ntely 1 standing volume _mL for this sample | | | | | | | | |
| | 100 | | · · · · · · · · · · · · · · · · · · · | 1 | | | | | | | | |
| Sampler Sign | nature: | Chancy | Print Name: | Marnie Chancey | | | | | | | | |
| Checked By: | Ryan Jorn | rey | Date: 6/ | 7/2018 | | | | | | | | |



| | | | | | LOV | V FLOW GR | OUNDV | VAT | TER SAM | PL | ING RECO | RD | | | |
|----------------------|--|-----------------|---------|---------------------|--|----------------------|--------------------------|-------------------------------|--|--------------|--------------------------------------|---------------------------|--|--|--|
| | PROJEC | T NAME | | NV | SDEC Hoosick Falls La | ndfill | | LOC | CATION ID | | DAT | ГЕ | | | |
| | PROJEC | T NUMB | FR | NI | SDEC HOOSICK Palls La | ilidilii | | STA | HFL-MW RT TIME | 7-2 | ENI | 6/7/20 TIME | 18 | | |
| | | | | | 270939.0000.0000 | | | | 10:0 | | | 11:0 | 0 | | |
| | SAMPLE ID HFL-MW-2 SAMPLE TIME 10:40 | | | | | | SITE | E NAME/NUMI 4420 | | PAG | GE 1 OF | 1 | | | |
| | | | | | | | | | | | | | | WELL INTEGRITY | |
| WELL DIAM | IETER (I | NCHES) | 1 | X | 2 4 | 6 | 8 | | OTHER | | | | CAP | YES NO N/A X | |
| TUBING ID | (INCHES |) | 1 | /8 | 1/4 X 3/8 | 1/2 | 5/8 | | OTHER | | | | CASING LOCKED | X | |
| MEASUREM | IENT POI | INT (MP) | 2 | X TOP OF | RISER (TOR) | TOP OF CASI | NG (TOC) | | OTHER | | | | COLLAR | | |
| INITIAL I (BMP) | DTW | 4. | .68 | FT | FINAL DTW (BMP) | 8.12 | FT | PROT. CASING STICKUP (AGS) | | | 2.45 FT | | TOC/TOR DIFFERENCE | 0.34 FT | |
| WELL DE (BMP) | WELL DEPTH (BMP) 32.07 FT | | FT | SCREEN LENGTH | 15 | FT AM | | BIENT AIR | | 0 PPM | | REFILL TIME SETTING | ER - SEC | | |
| WATER COLUMN | ſ | 27 | 1.39 | FT | DRAWDOWN VOLUME | 0.56 | GAL | MOU | WELL UTH | | 0 | PPM | DISCHARGE TIMER SETT | | |
| CALCUL | | 4. | .49 | | (final DTW - initial D TOTAL VOL. | 1.82 | | DRA | WDOWN/ | Γ | 0.31 | | PRESSURE | | |
| GAL/VOL (column X | | eter square | d X 0.0 | GAL (41) | PURGED (mL per minute X total | al minutes X 0.00026 | GAL gal/mL) | тот | AL PURGED | L | | | TO PUMP | PSI | |
| | | RS WITH | | | BILIZATION CRITE | SP. CONDUCTANO | TE | | | 1 | | 1 | PUMP | | |
| TIME 3-5 Minutes | 0.0-0 | 0.33 ft down | | RGE RATE mL/min) | TEMP. (°C) (+/- 3 degrees) | (mS/cm) (+/- 3%) | pH (un (+/- 0.1 t | | DISS. O ₂ (mg/ (+/- 10%) | | TURBIDITY (ntu) (+/- 10% <10 ntu) | REDOX (mv) (+/- 10 mv) | INTAKE DEPTH (ft) | COMMENTS | |
| 10:00 | | IN PUR | GING | ļ | 1 | (+/- 3/0) | | | | | | . | DLI III (II) | | |
| 10:10 | 6. | .24 | | 200 | 11.9 | 0.981 | 7.43 | ; | 0.42 | | 8.0 | -79.5 | | | |
| 10:15 | 6. | .96 | | 200 | 11.9 | 0.984 | 7.41 | | 0.29 | | 9.3 | -83.4 | | | |
| 10:20 | | .44 | | 200 | 12.0 | 0.985 | 7.41 | | 0.22 | | 8.5 | -84.9 | | | |
| | | | | | | | | | | | | | | | |
| 10:25 | | .82 | | 200 | 12.1 | 0.985 | 7.40 | | 0.18 | | 7.7 -85.7 | | | | |
| 10:30 | 8. | .12 | | 200 | 11.8 | 0.987 | 7.40 |) | 0.16 | | 7.5 | -85.6 | | | |
| 10:35 | 8. | .12 | | 200 | 12.3 | 0.986 | 7.40 |) | 0.17 | | 6.0 | -86.0 | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | l | F | INAL | STABIL | IZED FIELD PAR | AMETERS (to a | opropriate | signi | ficant figures | (SF) |) | ı | | gree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) | |
| | | | | | 12 | 0.986 | 7.4 | 1 | 0.2 | | 6 | -86 | pH: nearest tenth (ex. 5.53 = 5.5) DO: nearest tenth (ex. 3.51 = 3.5) TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101) ORP: 2 SF (44.1 = 44, 191 = 190) | | |
| EQUIPMENT | | | ON | | -1 | | | | | | | ļ | | | |
| X PERIS | <u>TYPE OF P</u> TALTIC | UMP_ | | X | ECON FLUIDS USED LIQUINOX | | N TUBING | NG/PU | | STEE | L PUMP MATERIAI | L | X WL ME | | |
| SUBM BLAD | ERSIBLE DER | | | | DEIONIZED WATER POTABLE WATER | TEFLO | N TUBING N LINED TUBI | NG | GE | EOPRO | MP MATERIAL OBE SCREEN | | X WQ ME | MultiRae ETER Horiba | |
| WATT | | | | | NITRIC ACID HEXANE | LDPE T | UBING UBING | | TO | THER | N BLADDER | | X PUMP | METER | |
| OTHE | | | _ | | METHANOL PFAS FREE WATER | OTHER OTHER | | | | THER THER | | | OTHER FILTER | | |
| ANALYTIC | | | | | METHOD | FIELD | PR | ESER' | VATION | VOI | LUME S | AMPLE | QC | SAMPLE BOTTLE ID | |
| | | PARAME | | | NUMBER 537.1 | FILTERE | | MET | HOD | REQ | UIRED CO | LLECTED Yes | COLLECTED | NUMBERS | |
| X | | 1,4-diox | | | 8270-SIM | No No | | Ic | | | 0 mL 2 L | Yes | No No | | |
| X | | PCB | | | 8082A | No | | Ic | | | 0 mL | Yes | No | | |
| х | | TCL Pest | icides | | 8081B | No | | Ic | ce | 50 | 0 mL | Yes | No | | |
| X | | TCL SV | | | 8270D | No | | Ic | | | 0 mL | Yes | No | | |
| X | | TCL VC | | | 8260C 6010C, 7470 | A No | | He Nitric | | | 0 mL 0 mL | Yes | No No | | |
| PURGE OB | SERVAT | | -cus | | 00100, 7470 | 110 | | | KETCH/NOTE | | V.11L. | 103 | 110 | | |
| PURGE WA | TER | YES | | O | NUMBER OF GALL | ONS 1.8 | 2 | | | | | | | | |
| CONTAINE NO-PURGE | | X O YES | S N | 10 | GENERATED If yes, purged approximately appr | | | | | | | | | | |
| UTILIZED | | |] [] | X | to sampling or | mL for this sample l | ocation. | - | | | | | | | |
| Sampler Sign | nature: | Marnie | Cha | neug | Print Name: | Marnie Chancey | | | | | | | | | |
| Checked By: | Ryan | . Iorrev | | | Date: | 6/7/2018 | | | | | | | | | |



APPENDIX C SITE SURVEY





Map Notes

1. Monitor well and planimetric locations shown hereon were compiled from an actual field survey conducted on September 1, 2017. Additional wells located

on August 1, 2018. 2. North orientation is referenced to Grid North and is based on the New York State Plane Coordinate System, East Zone, NAD 83/2011 epoch 2010.00.

3. Vertical datum shown hereon is NAVD 88 (Geoid 12A) and was obtained from RTK GPS observations using the NY Saratoga CORS as a base station.

4. Parcel boundaries shown approximately hereon are based upon Rensselaer County, Town of Hoosick tax maps and are not the result of a boundary survey by the undersigned.

LEGEND Existing Village DPW Flood Mitigation Well Location EMTR ▶ Guy Wire ---MW (Monitoring Well ss 🕀 Surface Soil Sample Location SW/SED Surface Water/Sediment Sample Location TRANS Transformer UPER \$ Utility Pole w/Electric Riser Rail Road Tracks

| | 1 | BAR SCAL | Е | | | | | | | | |
|-----------------|---|----------|--------|----|--|--|--|--|--|--|--|
| 50 | 0 | 25 | 50 | 10 | | | | | | | |
| | | | | | | | | | | | |
| 1 inch = 50 ft. | | | | | | | | | | | |
| | | | | | | | | | | | |

| WILLIAM J. NETTLETON P.L.S. NO. 49513 | DATE | | REVISIONS RECORD/DESCRIPTION | DRAFTER | СНЕСК | APPR. | UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A | MONITORING WELL SURVEY |
|--|--------|-------------------------|---|---------|-------|-------|--|---|
| | 8/1/18 | $\overline{\mathbb{V}}$ | ADD'L MONITOR WELLS SHOWN/CHART UPDATED | MDD | | | VIOLATION OF THE NEW YORK STATE EDUCATION LAW. | HOOSICK FALLS LANDFILL - SITE NO. 442007 |
| | | <u>2</u> | | | | | © 2017 C.T. MALE ASSOCIATES | 9 WALNUT SREET HOOSICK FALLS PREPARED FOR |
| | | 4 | | | | | APPROVED: WJN | TRC COMPANIES, INC. |
| | | <u>\$</u> | | | | | DRAFTED : SMW | TOWN OF HOOSICK RENNSELAER COUNTY, NEW YORK |
| | | <u>6</u> | | | | | CHECKED : DGD | C.T. MALE ASSOCIATES MAN |
| | | \triangle | | | | | PROJ. NO: 17.7460 | Engineering, Surveying, Architecture & Landscape Architecture, D.P.C. |
| | | 8 | | | | | SCALE: 1"=30' | 50 CENTURY HILL DRIVE, LATHAM, NY 12110 SHEET 2 OF 2 |
| | | <u></u> | | | | | DATE: SEPT. 1, 2017 | 518.786.7400 * FAX 518.786.7299 DWG. NO: 17-569 |

"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A
DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID
TRUE COPY".

APPENDIX D WASTE DISPOSAL RECORDS

PHONE: 631.608.8810 FAX: 631.608.8811



Transporter Permit #1A-644 EPA ID #NYR000081661 BIC # 2935

| A | NON-HAZARDOUS MANIFEST | 1. Customer's US EPA I Not: Re | DNO equired | Docume | ent No | 2. Ps | age 1 of | | | | | | | |
|-----------|--|--|--|--|--|--|-----------------|-----------|---------------|----------------|--------------|------------|--|--|
| | 3 Generator Site Address and Mailing Address NYS | EC-Hoosie | ck Falls Land | F: 11 | | | ocument No | | , | | | | | |
| | Route 22, Hoosick Fall | | | | | _ | E190 late ID | 11 1- | - 1 | | | | | |
| | 4 Phone 518-688-3154 | | | | | | | | | | | | | |
| | 5. Transporter 1 Company Name Brookside Environmental, Inc. | 1 | 6. US EPA ID Number NYR000081661 | | | C State Transporter's Phone (631) 608-8810 | | | | | | | | |
| | 7. Transponer 2 Company Name | | 8. US EPA ID Number | | | | | | (031)0 | <u>ua-05</u> , | | | | |
| | 7. Haraponer 2 Cumpany Name | | | EPA ID Number E. State Transporter's ID F. Transporter's Phone | | | | | | | | | | |
| П | 9. Designated Facility Name and Site Address | | 10. US EPA ID Number | | | G. Si | tate Facility | s ID | | | ····· | | | |
| | Clean Water of New York | | NYD000968545 | | | | | | | | | | | |
| | 3249 Richmond Terrace | | 1 | | | H Fa | acility's Pho | | | | | | | |
| | Staten Island, NY 10303 | | | | 40 0 | <u></u> | (/18) | 981-4 | 1600 | | | | | |
| П | 11 US DOT Description (Including Proper Shipping Name |) | | | 12. Containe | irs. | 13 Tota | | 14 Unit | 14. | L aste No | | | |
| | | | | | No. | Туре | Quan | Lity | Wt/Vol | ** | 2216 140 | | | |
| Ġ E | Non-hazardous waste solid, nos | | | | 012 | DM | 1 | پنجار پ | þ | | | | | |
| 1 % E | Non-RCRA/Non-DOT Hazardous | | (| | 77 | | 600 | H.Z | ٤ | | | | | |
| R | b | - A | The state of the s | 37 | | | | | | | | | | |
| T 0 | Non-hazardous waste liquid, no | 5 | | (| OP CO | MC | inf 5 | 0 | G | | | | | |
| R | Non-RCRA/Non-DOT Hazardous | | | | | | | | | | | | | |
| | c. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | d. | | | | | | | | | | | | | |
| | | | | | l | | | | | | | | | |
| | | | | | | | | | | | | W | | |
| | J. Additional Descriptions for Materials Listed Above | | | | [| Hand | lang Codes | TOF Waste | s Listed Ab | ove | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | 15 Special Handling Instructions and Additional Informati | DN. | | | | | | | | | | | | |
| | a) App# 237-028 b) App# 237-029 | | | | | | | | | | | | | |
| H | 5) Appr 237-023 | | | | | | | | | | | | | |
| | 16 GENERATOR'S CERTIFICATION: I hereby declare that the | a contents of this conside | ment are fully and accurately | described | above by pro | per ship | ppìng name | and are | classified, p | acked, m | arked, ar | nd | | |
| | labeled, and are in all respects in proper condition for | transport by highway ac | cording to applicable internation | onal and na | ational govern | ment re | gulations. | | | | DATE | | | |
| Ų | Primed / Type Name X Mary Flandager dates as | | Signature | J. J. J. J. J. J. J. J. J. J. J. J. J. J | The state of the s | . 601 | our F | . N | 750FC | Month | Day 7 | Year 77 | | |
| - | 17. Transporter 1 Acknowledgement of Receipt of Materia | | | | 383 | J | <u>X. (</u> | | <u> </u> | | DATE | | | |
| R | Printed / Type Name | | Signature | /s | 161 | 7 | | | | Month | Day | Year | | |
| S | Nicholas Holdener | | Mickel | <u> </u> | <u> 4-27 (/_</u> | <u> L</u> | . \ | | | f | 7 | 17 | | |
| Ó | 18. Transporter 2 Acknowledgement of Receipt of Materia | ts . | T.G | | | | | | | | DATE | | | |
| ANSPORTER | Printed / Type Name | | Signature | | | | | | | Month | Day | Year | | |
| R | | | L | | | | | | | <u></u> | | | | |
| F | | | | | | | | | | | | | | |
| Â | | | | | | | | | | | | | | |
| 1 | 19. Facility Owner or Operator: Certification of receipt of v | vasta materiale coverent h | ov this manifest except as note | d. | | | | | | | | | | |
| L | 18. Paciny Owner or Operator. Centrication of receipt of a | THE PERSON NAMED IN THE PE | ., z | | | | | | | | DATE | | | |
| Ϋ́ | Printed / Typed Name | n., | proprietary . | 11 11 | | | | | | Month | Day | Year | | |
| | Printed / Typed Name | 100 | X- | yku ykuzawi | and the second | | | | | 9 | K. | 17 | | |

16. Generator/Offeror's Cartification: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded and are in all respects proper condition for transport according to applicable international and national governmental regulations.

Printed/Typed Name

17. Transporter 1 Acknowledgment of Receipt of Materials

Signature

Printed/Typed Name

18. Transporter 2 Acknowledgment of Receipt of Materials

Signature

Printed/Typed Name

19. Discrepancy Indication Space (to be completed by Designated Facility)

20. Discrepancy Facility: Certification of receipt of the materials fovered by this shipping paper except as noted in itspir 19

Printed/Typed Name

13.278-40-5

13278-40-5

Straight Rill of Lading

| se type or print | | Generator EPA ID # (If applicable) | 2. Page 1 of | 3. Emerger | ncy Response | # 4. Document T | racking Number | _ |
|-----------------------------------|------------------------------------|--|--|--------------------|------------------------------|---|----------------------|-----------------------|
| A(| CV | vsqg | 1 | 908-354 | | ACV | | 9 |
| 5. Generator N NYSDE C/O TR | lame and Mallin | CK FALLS LANDFILL FIN RD | | Generator's | HOOSIC RT 22 | (If different) CK FALLS LANDFILL CK FALLS, NY 12090 | | |
| Generator Pho | one: 3° | 15-671-4049 | | ACV Job N | umber: | | | |
| 6. Tranjapofter, | A PemperyNe | MeVAC | | US EPA | ID Number (i | f applicable NJD003812047 | | |
| 7. Transporter | 2 Company Na | ame | | US EPA | ID Number (i | fapplicable) | | |
| CYCLE 217 SC | CHEM, IN | TSTREET | | US EPA | ID Number (I | f applicable) NJD002200046 | 3 | |
| 8. Designated | Facility Phone | 908-355-5800 | 4 | | | | | 1 |
| 9a. HM | (Proper | 9b. Material Description shipping name required if DOT Hazardous Ma | terial) | 10. Contair No. | Type | 11. Total Quantity | 12. Unit (Wt/Vol) | 13. Waste Codes |
| | 1.NON REC | GULATED MATERIAL | 0 | 60 | DM | 43,000 | P | 72 |
| 2 | 2. | | | | | | | * |
| 3 | 3. | - | ~_ | | | * | | |
| 4 | 4. | | | | | | | |
| | | | | L | Pass | * I I I | | |
| | | SROUNDWATER | nt D7951 Sales | Order 70 | 19 | Tel 61 perof 0 | 19 16815 | |
| 16. Generato packaged, ma | r/Offeror's Cert arked and labe | ification: I hereby declare that the contents of the ded/placarded and are in all respects proper contents of the ded/placarded and are in all respects proper contents. | nis consignment are full adition for transport acco | y and accurate | ely described cable internat | above by the proper shipping na | me and are clas | |
| | oten J | o Francism Agenta (NYS | Signature Signature | A | >/ | , | Month // | Day / |
| Printed Typed | er 2 Acknowled | Martista gment of Receipt of Materials | Signature | As | ISN. | | Month // | 1/1/ |
| | | pace (to be completed by Designated Facility) | | | | | | |
| 20. Discrepan | | tification of receipt of the materials covered by | this shipping paper exce Signature | ept as noted in | item 19 | 0. | Monti | n Day |
| | V | JUDEDNI | | 1 . | 42e | pu | 11 | ed January |

APPENDIX E DATA USABILITY SUMMARY REPORTS

APPENDIX F FOR REFERENCE PURPOSES ONLY THAYER'S POND FISH SAMPLING RESULTS SUMMARY FOR PFOA AND PFOS

FOR REFERENCE PURPOSES ONLY

Thayers Pond Fish Sampling Results Summary for PFOA¹ and PFOS²

(Based on October 2016 and April 2017 Sampling Events by NYSDEC Division of Fish and Wildlife)

| SPECIES | SAMPLE PREP | NUMBER of | PFOA ¹ | PFOS ² | |
|-----------------|-----------------|-----------|--------------------------|--------------------------|--|
| | TYPE | SAMPLES | CONCENTRATION | CONCENTRATION | |
| | | ANALYZED | RANGE ³ (ppb) | RANGE ³ (ppb) | |
| Black Crappie | Carcass | 6 | 6.82 – 14.3 | 99.4 – 328 | |
| | Standard Fillet | 6 | 3.02 – 7.18 | 50.2 – 166 | |
| | Viscera | 6 | 11.7 – 30.1 | 191 – 670 | |
| | Whole Body | 7 | 6.47 – 31.4 | 72.4 – 311.76 | |
| Bluegill | Whole Body | 8 | 1.98 – 9.78 | 32.4 – 105 | |
| Brown Bullhead | Carcass | 10 | 0.688 – 2.11 | 1.14 – 4.85 | |
| | Standard Fillet | 10 | < 0.469 - 0.945 | < 0.99 – 2 | |
| | Viscera | 10 | 1.97 – 4.5 | 16.7 – 33.4 | |
| | Whole Body | 10 | 0.93 – 2.18 | 3.6 – 7.39 | |
| Largemouth Bass | Carcass | 5 | 0.918 – 1.97 | 117 – 165 | |
| | Standard Fillet | 5 | < 0.493 – 1.15 | 43.4 – 65.3 | |
| | Viscera | 5 | 1.02 – 3.31 | 179 – 417 | |
| | Whole Body | 5 | 0.74 – 1.88 | 106.43 – 157.46 | |
| Pumpkinseed | Carcass | 8 | 3.6 - 17 | 12.2 – 21.6 | |
| | Standard Fillet | 8 | 1.63 – 7.45 | 4.63 – 9.29 | |
| | Viscera | 8 | 7.69 – 24.2 | 19.3 – 34.5 | |
| | Whole Body | 10 | 3.47 – 15.14 | 11.77 – 21.4 | |
| Rock Bass | Carcass | 3 | 0.541 - 0.93 | 28.8 – 41.4 | |
| | Standard Fillet | 3 | < 0.498 - 0.913 | 15.9 – 19.2 | |
| | Viscera | 3 | 1.46 - 6.56 | 32 – 69.6 | |
| | Whole Body | 3 | 0.6 – 1.55 | 26.73 – 38.89 | |

¹ PFOA = Perfluorooctanoic acid

² PFOS = Perfluorooctanesulfonic acid

³ ppb = parts per billion, ng/g