NEW YORK STATE OF OPPORTUNITY. Department of Transportation

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Regional Director

May 5, 2020

VIA EMAIL

RE: PIN 8806.51.301
HARRISON LANDFILL AREA
NYSDOT HARRISON SUBRESIDENCY
WESTCHESTER COUNTY
FIFTH QUARTER SAMPLING RESULTS
JANUARY 2020

To the eccs:

Enclosed is an electronic copy of the subject report, dated April 24, 2020, prepared by Cashin Associates.

If you have any questions, please feel free to contact me at 845.431.5826 or gretchen.fitzgerald@dot.ny.gov.

Sincerely,

Gretchen Fitzgerald
Regional Construction Environmental Coordinator, Region 8

ecc: Gregory Greene, Cashin Associates
Daniel Lanners, NYSDEC, Central Office
James Lansing, NYSDEC, Region 3
Chris Kappeller, NYSDOT, Highway Maintenance Group, Region 8
Carl Kochersberger, NYSDOT, Office of Transportation Maintenance, Main Office
Dave Newell, NYSDOT, Consultant Management Bureau, Main Office
David Quentin, NYCDEP
Maureen Schuck, NYSDOH

Cashin Associates, P.C.
Engineering • Planning • Construction Management

April 24, 2020

Ms. Gretchen Fitzgerald
New York State Department of Transportation - Region 8
4 Burnett Boulevard
Poughkeepsie, NY 12603

RE: Harrison Sub-Residency Landfill Site
West Harrison, New York
Fifth-Quarter January 2020 Monitoring Report

REF: Cashin Associates, P.C. PIN S000.19.101
Assignment No: D037853.01
Harrison Landfill Monitoring PIN 8806.51.101

Dear Ms. Fitzgerald:

This letter report summarizes the field investigative procedures and results of the fifth-quarter monitoring performed by Cashin Associates, P.C. (CA) at the Harrison Landfill site (Figure 1) on January 16, 2020 and January 17, 2020 on behalf of the New York State Department of Transportation (NYSDOT). The Harrison Sub-Residency is located at the intersection of New York Route 120 and King Street

The operation and maintenance efforts conducted at the Harrison Landfill were performed in order to meet the requirements of the New York State Department of Conservation (NYSDEC) for post-closure monitoring. The sampling was performed in accordance with CA's Scope of Work dated December 4, 2019 and approved by NYSDOT on December 11, 2019. The scope was developed in accordance with the NYSDOT's *Operation and Maintenance Plan for the Harrison Sub-Residency, Landfill and Petroleum Spill Area, February 2010.*

Monitoring efforts at the Harrison Landfill included the collection of groundwater samples from the five existing monitoring wells (PC-1, PC-2, PC-3, LMW-2 and LMW-4), surface water and sediment samples from the on-site stream sample locations (SW/SD-1 through SW/SD-4), gas monitoring at the four existing gas vents (V-1 through V-4) and up-wind and down-wind areas, and a visual inspection of vector and vermin. Figure 1 provides a Site location map. Site maps and sample locations are shown on Figures 2 through 5. The sampling methodology performed by CA was consistent with the methodology used in prior sampling events at the site, as discussed below.

Groundwater Sampling
Groundwater samples were collected from the following five (5) monitoring wells (locations shown on Figure 3) listed below with regard to their relationship to the landfill:

On-Site/Up-gradient/Background	On-Site/Downgradient	Off-Site/Downgradient
LWM-2	LMW-4	PC-3
	PC-1	
	PC-2	

Prior to sampling, a round of static water level measurements and total depth measurements from the groundwater monitoring wells were recorded.

All of the monitoring well casings and well heads were inspected for any signs of damage or tampering. Prior to sampling, groundwater was purged until the hydraulic equilibrium between casing water and the aquifer was achieved in order to obtain a representative sample of the aquifer. This was accomplished by calculating the relative contribution from stagnant casing water to the total discharged from the well. The well was purged of three well volumes or until dryness using a Whale pump equipped with a Rheostat (for adjustable flow) and dedicated tubing. A peristaltic pump was used to purge and sample monitoring well PC-2 due to the historic bent well casing. Groundwater samples were collected when the well recovered to approximately 75% of its initial volume or within two hours (whichever came first) using a dedicated disposable polyethylene bailer. Well purge water was discharged immediately downgradient of the well. Field parameters of temperature (°C), turbidity (NTUs), dissolved oxygen (mg/L), pH, specific conductivity, (mS/cm) and oxidation-reduction potential (millivolts) were recorded for each well during purging and at the time of sample collection using a Horiba U52 water quality monitor equipped with an in-line flow-through cell.

Groundwater samples were transferred to clean, pre-preserved, laboratory-supplied containers for analysis of target compound list (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), and dissolved target analyte list (TAL) metals (filtered only), including cyanide and chloride. CA requested that the laboratory filter the groundwater liquid samples for dissolved TAL metals.

Surface Water/Sediment Sampling
Surface water (SW) and sediment (SD) samples (locations shown on Figure 4) were collected from the following four locations listed below with regard to their relationship to the landfill:

On-Site/Up-gradient/Background	On-Site/Downgradient	Off-Site/Downgradient
SW/SD-1	SW/SD-2	SW/SD-4
	SW/SD-3	

Prior to sample collection, CA recorded the approximate stream flow and stream depth at each station. Surface water samples from each respective location were collected first, in order to minimize turbidity, using a clean stainless steel ladle. Field parameters of temperature, turbidity, DO, pH and specific conductivity were collected during sampling at each location. Sediment

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samples were collected following the collection of the surface water samples, from within the same general area using new dedicated disposable plastic scoops.

Surface water and sediment samples were transferred to clean, pre-preserved laboratory-supplied containers for laboratory analysis of TCL VOCs, TCL SVOCs, and TAL metals (unfiltered only), including cyanide and chloride.

For quality assurance/quality control (QA/QC) purposes, a field blank was collected at the conclusion of sampling to ensure no cross contamination during sampling activities. The field blank was conducted by pouring distilled water into the ladle used for sample collection and then from the ladle to the sample bottles. The field blank was analyzed for TCL VOCs, TCL SVOCs, dissolved TAL metals, cyanide and chloride. A blind duplicate sample (labeled as GW-DUP) was collected from LMW-4 and analyzed for TCL VOCs, TCL SVOCs, dissolved TAL metals, cyanide and chloride. One (1) trip blank sample was prepared by the laboratory, it contained two sealed 40 ml vials with hydrochloric acid (HCL) and reagent water. The trip blank was stored in the sampling cooler during sampling activities and accompanied the sample shipment to the laboratory and was analyzed for TCL VOCs. Sampling was performed in accordance with NYSDEC Analytical Services Protocol (ASP).

All samples were preserved on ice and analyzed by Phoenix Environmental Laboratories, Inc., a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified analytical laboratory (NY ID number 11301). At the conclusion of sampling, the sampling cooler was picked up by a courier from Phoenix under proper chain-of-custody procedures and delivered to their laboratory in Manchester, CT.

Gas Monitoring

CA conducted gas monitoring at each of the four (4) gas vents (V-1 through V-4) (locations shown on Figure 5) and at up-wind and down-wind areas of the landfill. Prior to the collection of measurements at each location, ambient readings were recorded. Each location was monitored for methane and other explosive gases through the use of a combustible gas indicator (Landtec GEM 5000). Gas vent readings were obtained by inserting the instrument detector probe into each vent. The gas meter was set to alarm if readings exceeded 10% of the lower explosive limit (LEL) of methane. In addition, alarms were set at 10% of the LEL of hydrogen sulfide, 25 parts per million (ppm) of carbon monoxide and 19.5% and 23.5% of oxygen. A MiniRAE 3000 photoionization detector (PID) (with a 10.6 eV lamp) and a flame ionization detector (FID) (with and without a methane filter) were used to monitor for VOCs at each of the four gas vents and at up-wind and down-wind locations of the landfill. All of the field instruments were calibrated by Pine Environmental (CA's Equipment Rental Vendor) upon receipt and use.

Field Survey

The monitoring of the Harrison Landfill site included a visual inspection of site for the presence of vector/vermin. CA did not observe any vector/vermin at the site during sampling. However, it should be noted that locating monitoring well PC-3 was very difficult; as the area surrounding the well, as well as the path leading to the well, was extremely overgrown. No signs of well damage or evidence of tampering were noted during visual inspection of the wells.

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Analytical Results

Groundwater Monitoring Well Samples

Results of the groundwater samples were compared to the NYSDEC Class GA Standards or Guidance Values (NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, June 1998) and are summarized in Table 1.

No floating product or sheen was detected in any of the wells during purging, consistent with previous sampling events by other environmental consultants.

The complete list of the groundwater laboratory analytical results is attached as Appendix A. Water quality parameters of temperature, pH, specific conductivity and turbidity are included in Table 1 as well as in the groundwater sampling logs attached as Appendix B.

There were no VOCs detected above the respective laboratory reporting limits in the groundwater samples. Trace amounts of the following Petroleum Aromatic Hydrocarbons (PAHs) were detected below NYSDEC Class GA standards/guidance value in groundwater sample LMW-2 (On-site/up-gradient well): Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, and Indeno(1,2,3-cd)pyrene. No other SVOC's were detected above the respective laboratory reporting limits in any of the other monitoring wells. Total cyanide was not detected above its respective standard of 200 mg/L in any of the groundwater samples. Chloride was not detected above its respective standard of 250 mg/L in any of the groundwater samples except for sample PC-3 which slightly exceeded the standard at 255 mg/L. It should be noted that PC-3 is located off-site and downgradient of the landfill. Concentrations of iron and manganese exceeded the Class GA groundwater standards at monitoring wells LMW-4 (and its duplicate GW-DUP), PC-2, and PC-3. Sodium concentrations exceeded the Class GA standards in all five of the monitoring wells.

The iron and manganese groundwater standards are both established for protection from aesthetic considerations. The sodium groundwater standards is established for the protection of sources of drinking water, however, the on-site groundwater is not used for drinking water purposes. Several other metals (aluminum, barium, cadmium, calcium, potassium, lead) were detected in on-site downgradient wells; however, none of the groundwater concentrations for these metals exceeded Class GA standards.

Surface Water Samples

The analytical results of the surface water samples were compared to both NYSDEC Ambient Water Quality Class GA Groundwater Standards/Guidance Values and NYSDEC Class A Surface Water Standards/Guidance Values, where available. Both standards were used since the drainage swales on the Site from which the surface waters were sampled serve as tributaries to the Kensico Reservoir, which is a source of drinking water. Where appropriate, the most conservative Standard or Guidance Value was used for comparison purposes.

Class A standards are established for surface water drinking protection (Type H(WS)), human consumption of fish (Type H(FC))), fish propagation (Type A(C)), fish survival (Type A(A)), protection of wildlife (Type (W)), and aesthetics (Type (E)). Some Class A metals standards are

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dependent on a water sample's specific hardness concentration, which was measured by the laboratory for each surface water sample.

There were no VOCs or SVOC detected above the laboratory reporting limits in the surface water samples. Cyanide and chloride were not detected above their respective standards in any of the surface water samples. Concentrations of aluminum were found to exceed the NYSDEC Class GA groundwater standards and Class A surface water standards established for fish propagation in surface water samples SW-1 and SW-4. Iron was also found to exceed the NYSDEC Class GA groundwater standards and Class A surface water standards established for fish propagation and protection of aesthetics considerations in surface water samples SW-1, SW-2, and SW-3. Manganese was found to exceed the NYSDEC Class GA groundwater standards and Class A surface water standards established for protection of aesthetic considerations in surface water samples SW-1 and SW-3. Additionally, sodium was detected in SW-3 at a concentration exceeding the Class GA groundwater standard (no surface water criterion).

The analytical results of the surface water samples are presented in Table 2. Water quality parameters of dissolved oxygen, turbidity, temperature, pH, specific conductivity and stream flow taken during sampling are also included in Table 2 as well as in the groundwater sampling logs attached as Appendix B.

The highest aluminum, iron and manganese concentrations were detected at the upstream sample location SW-1. Sodium, which was detected in the groundwater at an elevated level in on-site downgradient well PC-1, was also detected at an elevated concentration at the downstream surface water station SW-3. In addition to the metals detected in the surface water above established standards, several other metals were detected in the surface water samples including barium, calcium, chromium, cobalt, lead, magnesium, potassium, and zinc; however, none of these metals exceeded established criteria and their concentrations did not vary significantly between sampling locations.

Sediment Samples

Sediment sample results were compared to the NYSDEC Screening and Assessment of Contaminated Sediment Guidance Values (SGVs) and are summarized in Table 3 (metals) and Table 4 (VOCs and SVOCs) below. Based on the NYSDEC guidance, sediments are considered to be low risk to aquatic life if concentrations detected are less than the Class A SGVs. Sediments with concentrations greater than Class C SGVs are considered likely to pose a risk to aquatic life. For Class B sediments (i.e., sediments with concentrations equal to or greater than Class A SGVs but less than or equal to Class C SGVs) additional testing is required to evaluate the potential risks to aquatic life.

Two VOC compounds were detected above the laboratory reporting limits. Acetone was reported at 1,300 mg/kg and is typically associated with laboratory contamination. Methyl ethyl ketone (MEK) was detected at a concentration of 0.450 mg/kg. There are no NYSDEC SGVs for these two VOC compounds. Trace amounts of the following SVOCs were detected below SGVs within one or both of sediment samples SD-2 and SD-3: phenanthrene, pyrene, and benzaldehyde.

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Five (5) metals, cadmium, copper, lead, nickel, and zinc were detected at levels greater than the Class A SGVs in sediment samples collected at the SD-1 and SD-3 locations, except for nickel in SD-3. Nickel was also detected at levels greater than the Class A SGVs in SD-4. Although all of these detections were above Class A SGVs and within the Class B range, none of the detected metals exceeded the Class C SGVs. The highest metals concentrations were detected in on-site sediment sample SD-1 except for lead which was reported highest (120 mg/Kg) in sediment sample SD-3. In general, the highest metals concentrations were detected at the on-site up-gradient/site background sediment sample location SD-1 indicating the Site appears to be receiving certain elevated metal concentrations from an up-gradient source.

Gas Monitoring

A combustible gas indictor (Landtec GEM 5000) was used to measure combustible gases at the four (4) landfill gas vents. Carbon monoxide (CO) and hydrogen sulfide (H_2S) gases were non-detect (0.0 ppm) in the four gas vents. Methane (% CH_4) was also non-detect in the four gas vents. Oxygen (% O_2) and carbon dioxide (% CO_2) readings were in the normal range. The use of a photoionization detector (PID) to measure volatile organic vapors and a flame ionization detector (FID) to measure hydrocarbons were also non-detect (0.0 ppm) in the four gas vents. Ambient air gas monitoring at the upwind and downwind locations yielded typical background levels for oxygen and carbon dioxide; and methane, hydrogen sulfide, carbon monoxide, and VOCs were not detected at either the upwind or downwind portions of the Site. Results of the gas monitoring is presented in Table 5.

Quality Assurance (QA)/Quality Control (QC) Sampling Results

A duplicate sample (labeled as GW-DUP) was collected from groundwater monitoring well LMW-4 for quality assurance/quality control (QA/QC) purposes. A trip blank (supplied by the laboratory) was present during the entire sampling process for QA/QC purposes. Additionally, a field blank sample was collected at the conclusion of field sampling on January 17, 2020 at 12:55 p.m. to ensure no cross-contamination occurred during sampling/monitoring activities.

To determine the relative percent difference (RPD) between the duplicate sample and the monitoring well sample from which it was collected can be calculated using the following formula:

$$\% \text{ RPD} = \text{ABS}\left(\frac{X_1 - X_2}{\frac{X_1 + X_2}{2}}\right) * 100\%$$

Where: X_1 is the original value (LMW-4), and
X_2 is the duplicate value (GW-DUP)

For groundwater samples, the greatest calculated RPD was for aluminum at 28.6%. Iron also registered an elevated RPD of 27.4%. As a result, the aluminum and iron groundwater samples concentrations would likely be qualified as estimated (J flagged) in data validation. The low precision of the metals results may be due to turbidity at the time of sampling. Typically turbidity increases after the well is purged through the use of a dedicated bailer. Analytical results of the trip blank was non-detect for VOCs. The results of the QA/QC samples confirm the

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adequacy of decontamination, handling and transportation procedures to meet quality requirements for the monitoring program.

Conclusions and Recommendations

CA updated the database of historical surface water and sediment sample data summary tables prepared by NYSDOT previous sampling consultant TRC to assess historical data trends at the Site. The database charts for the historical surface water and sediment sampling data is provided in Table 6 of this letter report. The historical groundwater data charts could not be updated as the sample data summary tables were not shown in the previous fifth-quarter reports by TRC; however, CA extrapolated the groundwater data from TRC's trending graphs and calculated contaminant data trends. The following presents the conclusions of this round of monitoring, including a review of the documented data trends for groundwater, surface water and sediment sample data.

Groundwater

The four downgradient groundwater monitoring wells are identified as PC-1, PC-2, PC-3 and LMW-4. As discussed in previous reports, groundwater flow is generally east to west for this Site. The up-gradient well is identified as LMW-2.

There were no VOCs or SVOCs detected above the NYSDEC Class GA standards or Guidance Values in the groundwater samples. Total cyanide was not detected above its respective standard of 200 mg/L in any of the groundwater samples. Chloride was not detected above its respective standard of 250 mg/L in any of the groundwater samples except for off-site monitoring well PC-3 which slightly exceeded the standard at 255 mg/L. Iron and manganese were not detected in the up-gradient background well LMW-2 and on-site downgradient well PC-1; however, both analytes were detected at elevated levels above the Class GA standards in the on-site downgradient wells PC-2 and LMW-4 and off-site downgradient well PC-3. The highest iron concentration was found in LMW-4 at 53,600 ug/L and the highest manganese concentration was found in PC-2 at 13,100 ug/L. The iron and manganese groundwater standards are both established for protection from aesthetic considerations. Sodium concentrations exceeded the Class GA standards in all five of the monitoring wells. The highest sodium concentration was detected at the downgradient off-site well PC-3 at 110,000 ug/L. The sodium groundwater standard is established for the protection of sources of drinking water; however, the Site groundwater is not used for drinking water purposes.

In August 2018, the NYSDEC was petitioned by NYSDOT to allow for the discontinuation of groundwater testing for VOCs, SVOCs, and cyanide, at the Site. Given the results of this round of monitoring, CA recommends that a subsequent request be filed with NYSDEC to discontinue VOC, SVOC, and cyanide groundwater testing in future monitoring events. The contaminant data trends for metals in groundwater remain mostly steady or on an overall downward trend.

Surface Water

There were no VOCs or SVOCs detected above the NYSDEC Class GA standards or NYSDEC Class A Surface Water standards in the surface water samples. The concentrations of iron exceeded the NYSDEC Class GA groundwater standards and Class A surface water standards established for fish propagation and from aesthetic considerations. The concentrations of manganese exceeded the NYSDEC Class GA groundwater standards and Class A surface water

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standards established from aesthetic considerations. Additionally, aluminum was detected in the upstream and downstream samples (SW-1 and SW-4 respectively) at concentrations exceeding the Class A surface water standard for fish propagation. The highest aluminum, iron, and manganese surface water concentrations were detected at the upstream sample location SW-1 at 1,020 ug/L, 26,700 ug/L, and 16,100 ug/L, respectively. The concentration of sodium in downstream location SW-3 exceeded the NYSDEC Class GA groundwater standard at 103,000 ug/L. Therefore, it is unlikely the landfill is contributing to the elevated levels of aluminum, iron, and manganese detected in the surface water.

According to TRC's 2018 sampling event, CA's 2020 sampling event, and based on the historical monitoring data and contaminant trend data, no VOCs or SVOCs have been detected in the Site surface water samples since 2008 and 2009, respectively. Additionally, no VOCs or SVOCs have been detected in sediments since 2013. In August 2018, the NYSDEC was petitioned to allow for the discontinuation of surface water testing for VOCs, SVOCs, and cyanide at the Site. Given the results of this round of monitoring and as previously recommended by TRC Consultants, CA recommends that a subsequent request be filed with NYSDEC to discontinue VOC, SVOC, and cyanide surface water testing in future monitoring events.

The contaminant data trends for metals in surface water remain steady or on a general downward trend with the exception of aluminum, iron and manganese levels at SW-1 where a significant increase in the concentrations were reported.

Sediment

Five (5) metals, cadmium, copper, lead, nickel, and zinc were detected at levels greater than the Class A SGVs in sediment samples collected at the SD-1 and SD-3 locations, except for nickel in SD-3. Nickel was also detected at levels greater than the Class A SGVs in SD-4. Although all of these detections were above Class A SGVs and within the Class B range, none of the detected metals exceeded the Class C SGVs. The highest metals concentrations were detected in on-site sediment sample SD-1 except for lead which was reported highest (120 mg/Kg) in sediment sample SD-3. Compared to the previous sampling rounds overall metal concentrations has remained steady across the site, including at the on-site up-gradient/background location.

Trace amounts of VOCs and SVOCs were detected in background sediments and on-site downgradient sediments. Trace levels of two (2) VOC compounds, acetone (typically a laboratory contaminant) and methyl ethyl ketone (MEK) were detected in up-gradient SD-1 location. Trace levels of three (3) SVOC compounds were detected in the sediment samples but a levels below Class A SGVs. Phenanthrene and pyrene were detected at trace levels below the Class A and Class C SGVs in SD-2 and benzaldehyde was detected below the Class A and Class C SGVs in SD-2. Although trace levels of VOCs and SVOCs have been detected in this round of sampling and during previous sampling events, insignificant estimated concentrations have been reported and do not appear to be Site contaminants of concern. Based on this current sampling event and contaminant trend data for VOCs and SVOC in sediments from previous sampling events, CA recommends that the NYSDOT petition NYSDEC to discontinue sediment sampling and testing for VOCs and SVOC at the landfill Site.

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Landfill Gas

Carbon monoxide (CO) and hydrogen sulfide (H_2S) gases were non-detect (0.0 ppm) in the four gas vents. Methane (% CH_4) was also non-detect in the four gas vents. Oxygen (% O_2) and carbon dioxide (% CO_2) readings were in the normal range in the four gas vents. PID and FID measuring hydrocarbons were also non-detect (0.0 ppm) in the four gas vents. Ambient air gas monitoring at the upwind and downwind locations yielded typical background levels for oxygen and carbon dioxide; and methane, hydrogen sulfide, carbon monoxide, and VOCs were not detected at either the upwind or downwind portions of the Site. To more accurately measure the gases emanating out of the landfill gas vents, CA recommends that gas monitoring ports (with valves) be installed at the base of the vents just above the ground surface.

Field Survey

CA did not observe any vector/vermin at the site during sampling. However, it should be noted that locating monitoring well PC-3 was very difficult as the area surrounding the well, as well as the path leading to the well, was extremely overgrown. A path should be cleared to access the well and the well area flagged to easily locate the well. No signs of well damage or evidence of tampering were noted during visual inspection of the wells.

The post-closure monitoring of the Harrison Landfill Site should be continued on a fifth-quarter basis unless otherwise decided by NYSDEC. If NYSDEC agrees to the above findings and conclusions and approves the discontinuation of select analytical parameters suggested above, a revised or addendum Sampling Work Plan would have to be prepared by NYSDOT environmental consultant and approved by the NYSDEC. The next monitoring round is anticipated to take place in April 2021.

If you have any questions, or require any additional information, please feel free to contact me.

Very truly yours,

CASHIN ASSOCIATES, P.C.

Paul DiMaria, P.E.
Vice President

cc: Mr. David Newell, P.E. – NYSDOT Consultant Manager
Mr. Christopher S. Kappeller – NYSDOT Environmental Specialist

ATTACHMENTS:

Tables

Table 1 – Analytical Results of Groundwater Samples
Table 2 – Analytical Results of Surface Water Samples
Table 3 – Analytical Results of Sediment Samples for Metals
Table 4 – Analytical Results of Sediment Samples for VOCs and SVOCs
Table 5 – Gas Monitoring Results
Table 6 – Surface Water and Sediment Contaminant Trending Data

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Figures
Figure 1 – Site Location Map
Figure 2 – Site Map
Figure 3 – Groundwater Well Locations
Figure 4 – Surface Water and Sediment Sample Locations
Figure 5 – Gas Vent Locations

Appendices
Appendix A – Analytical Data
Appendix B – Sampling Logs

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Table 1. Analytical Results of Groundwater Samples

		Well ID:	LMW-2	PC-1	PC-2	LMW-4	PC-3	GW-DUP	Field Blank	Trip Blank
		Depth to Water:	9.86	3.45	4.3	2.61	9.27	2.61	NA	NA
		Location:	Upgradient background	dow ngradient	dow ngradient	dow ngradient	off-site dow ngradient	LMW-4	DI Water	Sampling Cooler
		Depth of Well:	20	16.73	9.5	12.0	18.37	12.0	NA	NA
Analyte	**Units**	**NYSDEC CLASS GA STD/GV [1]**								
Volatiles										
None	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND
SemiVolatiles										
Benzo(a)anthracene	ug/L	NS	0.06	ND	ND	ND	ND	ND	ND	NA
Benzo(a)pyrene	ug/L	NS	0.05	ND	ND	ND	ND	ND	ND	NA
Benzo(b)fluoranthene	ug/L	NS	0.07	ND	ND	ND	ND	ND	ND	NA
Benzo(k)fluoranthene	ug/L	NS	0.07	ND	ND	ND	ND	ND	ND	NA
Chrysene	ug/L	NS	0.08	ND	ND	ND	ND	ND	ND	NA
Indeno(1,2,3-cd)pyrene	ug/L	NS	0.04	ND	ND	ND	ND	ND	ND	NA
Bis(2-ethylhexyl)phthala	ug/L	5	ND	ND	ND	ND	ND	ND	2.9	NA
Diethyl phthalate	ug/L	NS	ND	ND	ND	ND	ND	ND	3.5 J	NA
Metals (Dissolved)										
Mercury	ug/L	0.7	ND	ND	ND	ND	ND	ND	ND	NA
Aluminum	ug/L	2,000	28	43	38	28	32	21	19	NA
Antimony	ug/L	3	ND	ND	ND	ND	ND	ND	ND	NA
Arsenic	ug/L	25	ND	ND	ND	ND	ND	ND	ND	NA
Barium	ug/L	1,000	111	103	97	99	165	86	ND	NA
Beryllium	ug/L	3	ND	ND	ND	ND	ND	ND	ND	NA
Cadmium	ug/L	5	ND	1 J	1 J	1 J	ND	1 J	ND	NA
Calcium	ug/L	NS	74,500	103,000	87,600	42,500	84,400	42,400	20	NA
Chromium	ug/L	50	ND	ND	ND	ND	ND	ND	ND	NA
Cobalt	ug/L	NS	1 J	ND	2 J	13	2 J	13	ND	NA
Copper	ug/L	200	3 J	3 J	ND	ND	ND	ND	ND	NA
Iron	ug/L	300 / 500[2]	20	ND	**40,800**	**53,600**	**2,230**	**40,700**	100	NA
Lead	ug/L	25	ND	ND	3	3	ND	2	ND	NA
Magnesium	ug/L	35,000	25,500	15,600	19,400	17,200	21,800	17,200	60	NA
Manganese	ug/L	300 / 500[2]	163	3 J	**13,100**	**12,500**	**791**	**13,200**	ND	NA
Nickel	ug/L	100	3 J	1 J	1 J	2 J	2 J	1 J	ND	NA
Potassium	ug/L	NS	4,000	3,500	3,800	3,400	7,200	3,400	ND	NA
Selenium	ug/L	10	ND	ND	ND	ND	ND	ND	ND	NA
Silver	ug/L	50	ND	ND	ND	ND	ND	ND	ND	NA
Sodium	ug/L	20,000	**23,700**	**81,400**	**32,900**	**26,600**	**110,000**	**26,800**	130	NA
Thallium	ug/L	0.5	ND	ND	ND	ND	ND	ND	ND	NA
Vanadium	ug/L	NS	2 J	ND	ND	ND	ND	ND	ND	NA
Zinc	ug/L	2,000	ND	2 J	4 J	5 J	ND	5 J	ND	NA
Chloride	mg/L	250	9.2	129	18.7	19.8	**255**	20.5	1.9 J	NA
Cyanide	mg/L	200	ND	ND	ND	ND	ND	ND	ND	NA
Water Quality Parameters - At Time of Sampling										
pH			6.31	6.98	6.3	6.24	6.69	6.24	NA	NA
Temperature	Celsius		9.93	4.92	7.64	8.19	7.94	8.19	NA	NA
Conductivity	ms/cm		0.552	0.849	0.799	0.696	1.09	0.696	NA	NA
Dissolved Oxygen	mg/L		2.52	3.81	1.3	2.15	1.99	2.15	NA	NA
Turbidity	NTUs		20.3	3.3	16.5	41.3	0.3	41.3	NA	NA
ORP			82	-18	-62	-56	3	-56	NA	NA

Notes:
[1] – NYSDEC Class GA Standards and Guidance Values are from the Division of Water Technical and Operation Guidance Series (1.1.1) dated June 1998, revised April 2000
[2] – Standard of 500 ug/L applies to the sum of Iron and Manganese
BOLD - indicates a concentration exceeding NYSDEC Standard or Guidance Value
ND - not detected at analytical detection limit
NS - no standard
NA – not applicable
J – Estimated below reporting level
ug/L – micrograms per liter
mg/L – milligrams per liter

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Table 2. Analytical Results of Surface Water Samples

			Sample ID:	SW-1	SW-2	SW-3	SW-4
			Depth:	0-4"	0-4"	0-4"	0-4"
Analyte	Units	NYSDEC Class GA GW Std. [7]	NYSDEC Class A Surface Water Std. [1]				
Volatiles							
Acetone	ug/L	50	50	2.6 J, S	ND	ND	ND
SemiVolatiles							
None	ug/L	NA	NA	ND	ND	ND	ND
Metals							
Mercury	ug/L	0.7	0.7[1], 7e-4[5], 0.77[2], 1.4[3], 0.0026[6]	ND	ND	ND	ND
Aluminum	ug/L	NS	100[2]	**1,020 ***	89 *	56 *	**113 ***
Antimony	ug/L	3	3[1]	ND	ND	ND	ND
Arsenic	ug/L	25	50[1], 150[2], 340[3]	ND	ND	ND	ND
Barium	ug/L	1,000	1,000[1]	210	23	82	21
Beryllium	ug/L	3	3[1]	ND	ND	ND	ND
Cadmium	ug/L	5	5[1]	ND	ND	ND	ND
Calcium	ug/L	NS	NS	68,500	36,600	129,000	33,000
Chromium	ug/L	50	50[1]	2	ND	ND	ND
Cobalt	ug/L	NS	5[2]	5	ND	ND	ND
Copper	ug/L	200	200[1]	3 J	ND	ND	ND
Iron	ug/L	300 / 500 [8]	300[2,4]	**26,700**	**390**	**580**	260
Lead	ug/L	25	50[1]	6	ND	ND	ND
Magnesium	ug/L	35,000	35,000[1]	16,500	10,700	18,500	10,200
Manganese	ug/L	300 / 500 [8]	300[4]	**16,100**	262	**554**	99
Nickel	ug/L	100	100[1]	ND	ND	ND	ND
Potassium	ug/L	NS	NS	5,000	3,200	4,200	2,900
Selenium	ug/L	10	10[1], 4.6[2]	ND	ND	ND	ND
Silver	ug/L	50	50[1]	ND	ND	ND	ND
Sodium	ug/L	20,000	NS	14,300	13,000	**103,000**	17,900
Thallium	ug/L	0.5	0.5[1], 8[2]	ND	ND	ND	ND
Vanadium	ug/L	NS	14[2]	ND	ND	ND	ND
Zinc	ug/L	2,000	2,000[1], 5,000[4]	45	2 J	ND	ND
Chloride	mg/L	250	250,000[1]	8	9	156	15
Cyanide	mg/L	200	200[1], 9000[5], 5.2[2], 22[3]	ND	ND	ND	ND
Water Quality Parameters - At Time of Sampling							
pH				6.67	6.54	7.10	7.38
Temperature	Celsius			6.57	6.90	4.54	6.07
Conductivity	ms/cm			0.557	0.269	1.04	0.286
Dissolved Oxygen	mg/L			2.24	10.85	2.19	12.31
Turbidity	NTUs			142	1.2	4.7	10.9
Flow	CFS			0	1.5	0	1.5

Notes:
[1] NYSDEC Class A Standards for Surface Water as a source of Drinking Water
[2,3,4,5,6] Other NYSDEC Class A Surface Water Standards: Fish Propagation[2], Fish Survival[3], Aesthetic[4], Human Consumption of Fish[5], Wildlife Protection [6]
[7] NYSDEC Class GA Standards and Guidance Values are from the Division of Water Technical and Operation Guidance Series (1.1.1) dated June 1998, revised April 2000
[8] Standard of 500 ug/L applies to the sum of Iron and Manganese
BOLD - indicates a concentration exceeding NYSDEC Standard or Guidance Value
ND - not detected at analytical detection limit
NS - no standard
NA – not applicable
J – Estimated below reporting level
S – Laboratory solvent, contamination is possible
* - Relative Percent Difference (RPD) between sample & duplicate
ug/L – micrograms per liter
mg/L – milligrams per liter

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Table 3. Analytical Results of Sediment Samples for Metals

			Sample ID:	SD-1	SD-2	SD-3	SD-4
		NYSDEC Guidance					
Analyte	**Units**	**Class A SGV[1]**	**Class C SGV[1]**				
Metals							
Mercury	mg/Kg	0.2	1	0.09 J, N	ND N, *	0.06 J, N	ND N, *
Aluminum	mg/Kg	NS	NS	14,400	7,260	15,900	8,800
Antimony	mg/Kg	NS	NS	ND	ND	ND	ND
Arsenic	mg/Kg	10	33	2.4	1.18	2.3	1.32
Barium	mg/Kg	NS	NS	256	89.6	90.7	57.9
Beryllium	mg/Kg	NS	NS	ND	ND	0.43 J	0.17 J
Cadmium	mg/Kg	1	5	**2.3**	0.86	**2.1**	0.99
Calcium	mg/Kg	NS	NS	9,340 *	18,200 *	25,500 *	3,210 *
Chromium	mg/Kg	43	110	31.7	13.3	23.4	12.8
Cobalt	mg/Kg	NS	NS	18.2	7.26	12.2	11.9
Copper	mg/Kg	32	150	**39.1 ***	22.1 *	**36.3 ***	15.1 *
Iron	mg/Kg	NS	NS	36,900	20,800	20,300	24,100
Lead	mg/Kg	36	130	**40.2**	13.8	120	32
Magnesium	mg/Kg	NS	NS	5,550	13,800	18,800	5,340
Manganese	mg/Kg	NS	NS	15,000 N	2,550 N	797 N	1,110 N
Nickel	mg/Kg	23	49	**25.6**	11.9	22.2	**25**
Potassium	mg/Kg	NS	NS	3,540 N	2,730 N	1,800 N	730 N
Selenium	mg/Kg	NS	NS	ND	ND	ND	ND
Silver	mg/Kg	1	2.2	ND	ND	ND	ND
Sodium	mg/Kg	NS	NS	227 *	140 *	528 *	66 *
Thallium	mg/Kg	NS	NS	ND	ND	ND	ND
Vanadium	mg/Kg	NS	NS	50.2	ND	36	13.2
Zinc	mg/Kg	120	460	**137**	58.8	**131**	89.5
Chloride	mg/Kg	NS	NS	ND	ND	202	ND
Cyanide	mg/Kg	NS	27	ND	ND	ND	ND

Notes:
(1) - NYSDEC Class A and Class C Sediment Guidance Values are from NYSDEC Bureau of Habitat Screening and Assessment of Contaminated Sediment Guidance, dated June 24, 2014
NS - No Standard
ND - Not detected
J – Estimated below reporting level
* - Relative Percent Difference (RPD) between sample & duplicate
N - MS/MSD outside the recommended recovery window
mg/kg – milligrams per kilogram
Bolded values exceed Class A SGV; **bolded** and underline results exceed Class C SGV

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Table 4. Analytical Results of Sediment Samples for VOCs and SVOCs

Analyte	Freshwater Class A SGV[1] mg/Kg	Freshwater Class C SGV[1] mg/Kg	SD-1 mg/Kg	SD-2 mg/Kg	SD-3 mg/Kg	SD-4 mg/Kg
Volatiles						
Acetone	NS	NS	1,300 S	ND	ND	ND
Methyl ethyl ketone (MEK)	NS	NS	0.450	ND	ND	ND
Semi-Volatiles						
Phenanthrene *	11.94	11.94	ND	0.180	ND	ND
Pyrene *	13.96	13.96	ND	0.170 J	ND	ND
Benzaldehyde	NS	NS	ND	ND	0.350J	ND

Notes:
(1) NYSDEC Class A and Class C Sediment Guidance Values are from NYSDEC Bureau of Habitat Screening and Assessment of Contaminated Sediment Guidance, dated June 24, 2014
NS - No Standard
ND - Not detected
J – Estimated below reporting level
S – Laboratory solvent, contamination is possible
mg/kg – milligrams per kilogram
* These compounds are PAHs; Sediment Guidance Values listed are from the NYSDEC document listed above, Table 7

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Table 5. Gas Monitoring Results

Station ID	PID (ppm)	FID (ppm)	CH_4 (ppm)	CO_2 (%)	O_2 (%)	H2S (ppm)	CO (ppm)
GV-1	0.0	0.0	0.0	0.1	18.4	0.0	0.0
GV-2	0.0	0.0	0.0	0.2	19.1	0.0	0.0
GV-3	0.0	0.0	0.0	0.1	21	0.0	0.0
GV-4	0.0	0.0	0.0	0.1	20.7	0.0	0.0
Upwind Ambient Air	0.0	0.0	0.0	0.1	20	0.0	0.0
Downwind Ambient Air	0.0	0.0	0.0	0.1	18.9	0.0	0.0

Notes:
ppm – parts per million

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Table 6. Surface Water and Sediment Contaminant Trending Data

Cadmium

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	ND	*	ND	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*
SW-4	ND	ND	ND	ND	ND	ND	ND	ND
SD-1	ND	ND	ND	ND	ND	ND	ND	ND
SD-2	ND	0.16	ND	0.38	ND	ND	ND	ND
SD-3	ND	ND	ND	ND	ND	ND	ND	ND
SD-4	ND	ND	ND	0.39	ND	ND	ND	0.98

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	0.77	1.4	ND	ND	ND	ND	ND	ND
SW-2	0.88	1.1	ND	ND	ND	ND	ND	ND
SW-3	*	1.3	*	*	ND	ND	ND	ND
SW-4	0.87	1	ND	ND	ND	ND	ND	ND
SD-1	ND	ND	ND	ND	ND	ND	ND	ND
SD-2	ND	ND	ND	ND	ND	ND	ND	ND
SD-3	ND	ND	ND	ND	ND	ND	ND	ND
SD-4	ND	ND	ND	ND	0.61	0.49	ND	ND

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	ND	0.8	0.098	ND	ND	ND	ND	ND
SW-2	ND	ND	ND	*	ND	5.3	ND	ND
SW-3	ND	*	0.18	*	ND	*	*	ND
SW-4	ND	ND	ND	ND	ND	3.9	ND	ND
SD-1	0.40	0.13	0.53	ND	ND	ND	ND	ND
SD-2	0.29	0.18	0.36	*	ND	ND	ND	ND
SD-3	1.00	0.55	0.017	*	ND	*	2.5	ND
SD-4	0.56	0.24	0.071	ND	ND	ND	ND	ND

	4/13/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	ND	ND	ND	ND
SW-2	ND	ND	ND	ND
SW-3	ND	*	ND	ND
SW-4	ND	ND	ND	ND
SD-1	ND	ND	ND	2.3
SD-2	ND	ND	ND	0.86
SD-3	2.6	*	1.2	2.1
SD-4	ND	ND	1.9	0.99

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Copper

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	ND	15	ND	5.1	ND	ND	0.88
SW-2	ND	*	4.7	ND	ND	ND	ND	0.9
SW-3	*	*	4	*	*	ND	*	*
SW-4	ND	ND	120	ND	ND	ND	ND	0.61
SD-1	15	*	33	17	15	14	16	12
SD-2	11	13	10	29	18	12	7.6	10
SD-3	14	*	11	12	23	17	18	19
SD-4	10	10	11	980	13	8.5	8.7	10

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	5.7	3.3	ND	ND	39	ND	ND	ND
SW-2	ND	3.2	ND	ND	4.1	ND	ND	ND
SW-3	*	6.7	*	*	5.9	ND	ND	ND
SW-4	ND	ND	ND	ND	5.4	ND	ND	ND
SD-1	9.6	24	25	23	31	35	25	31
SD-2	69	18	12	10	16	11	5.8	36
SD-3	9.7	*	18	11	27	12	16	13
SD-4	8.1	9	14	7.8	16	14	7.5	13

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	ND	97	12	ND	ND	ND	ND	ND
SW-2	ND	22	28	*	ND	160	ND	ND
SW-3	ND	*	14	*	ND	*	*	ND
SW-4	ND	35	12	ND	ND	81	ND	ND
SD-1	16	17	74	20	27	11	15	13
SD-2	11	11	84	*	48	37	13	29
SD-3	24	22	21	*	11	*	35	45
SD-4	18	18	11	7.4	17	25	12	20

	4/13/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	ND	ND	ND	3
SW-2	ND	ND	ND	ND
SW-3	ND	*	ND	ND
SW-4	ND	ND	ND	ND
SD-1	50	54	15	39.1
SD-2	97	80	45	22.1
SD-3	46	*	45	36.3
SD-4	11	11	45	15.1

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Iron

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	69	ND	ND	500	ND	ND	84
SW-2	ND	*	ND	ND	ND	ND	ND	28
SW-3	*	*	ND	*	*	ND	*	*
SW-4	ND	ND	ND	ND	ND	ND	110	31
SD-1	11000	*	13000	16000	16000	15000	18000	14000
SD-2	13000	13000	13000	27000	20000	15000	12000	13000
SD-3	11000	*	13000	14000	18000	15000	15000	15000
SD-4	13000	13000	15000	85000	17000	14000	15000	11000

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	80	41	210	ND	ND	120	140	380
SW-2	ND	460	80	ND	ND	ND	130	ND
SW-3	*	240	ND	*	ND	ND	ND	ND
SW-4	40	110	190	ND	ND	ND	160	160
SD-1	11000	12000	26000	21000	25000	30000	21000	25000
SD-2	16000	17000	20000	23000	15000	16000	8700	15000
SD-3	15000	*	18000	11000	22000	13000	11000	15000
SD-4	14000	16000	23000	16000	19000	16000	13000	16000

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	700	78000	510	850	310	7,100	1,900	170
SW-2	610	450	440	*	410	140,000	520	ND
SW-3	180	*	190	*	170	*	*	ND
SW-4	570	8200	530	570	170	85,000	300	380
SD-1	16,000	9900	66000	19,000	28,000	16,000	15,000	22,000
SD-2	12,000	11000	67000	*	58,000	78,000	20,000	35,000
SD-3	17,000	13000	16000	*	15,000	*	23,000	47,000
SD-4	14,000	12000	16000	12,000	19,000	33,000	16,000	34,000

	4/13/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	200	1,400	1,800	26,700
SW-2	ND	650	330	390
SW-3	310	*	1200	580
SW-4	180	980	20000	260
SD-1	43,000	78,000	31,000	36,900
SD-2	110,000	110,000	34,000	20,800
SD-3	43,000	*	35000	20,300
SD-4	20,000	27,000	44,000	24,100

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Lead

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	ND	*	ND	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*
SW-4	ND	ND	ND	ND	ND	ND	ND	ND
SD-1	11	*	33	8.9	14	12	13	21
SD-2	25	31	17	160	60	18	7.1	19
SD-3	92	*	43	62	22	64	180	210
SD-4	11	23	29	370	24	14	28	19

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	ND	ND	ND	ND	ND	ND	ND	ND
SW-2	ND	ND	ND	ND	ND	ND	ND	ND
SW-3	*	ND	*	*	ND	ND	ND	ND
SW-4	ND	ND	ND	ND	ND	ND	ND	ND
SD-1	35	14	32	33	35	51	36	48
SD-2	15	30	15	29	11	17	11	13
SD-3	50	*	93	120	53	96	140	7.5
SD-4	16	35	27	22	29	27	16	21

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	ND	140	ND	ND	ND	ND	1.1	ND
SW-2	ND	ND	ND	*	ND	130	1.9	ND
SW-3	ND	*	ND	*	ND	*	*	ND
SW-4	ND	15	ND	ND	ND	160	ND	ND
SD-1	26	18	87	ND	26	ND	ND	15
SD-2	14	11	100	*	68	61	12	30
SD-3	94	120	52	*	9.7	*	270	78
SD-4	18	19	49	9.4	32	57	20	13

	4/12/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	ND	ND	ND	6
SW-2	ND	ND	ND	ND
SW-3	ND	*	ND	ND
SW-4	ND	ND	24	ND
SD-1	29	52	21	40.2
SD-2	120	100	51	13.8
SD-3	91	*	150	120
SD-4	13	13	73	32

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Manganese

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	65	99	46	95	80	340	1500	160
SW-2	8.3	*	15	30	ND	12	460	2
SW-3	ND	*	ND	*	*	11	*	*
SW-4	150	59	22	61	27	16	110	9.7
SD-1	240	*	910	220	270	180	250	280
SD-2	360	290	650	450	780	700	660	720
SD-3	200	*	240	340	800	330	240	250
SD-4	690	600	1000	540	990	370	350	740

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	620	95	260	16000	330	820	10000	660
SW-2	8.7	6.5	22	15000	ND	16	10000	19
SW-3	*	99	*	*	ND	11	11000	12
SW-4	64	55	120	16000	25	63	9200	26
SD-1	170	330	410	320	380	650	440	430
SD-2	850	2800	870	880	1300	1300	670	1500
SD-3	730	*	370	300	550	200	180	310
SD-4	610	450	530	370	820	1400	850	1300

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	670	5400	550	700	260	14,000	1,700	340
SW-2	500	520	220	*	210	33,000	340	41
SW-3	110	*	21	*	210	*	*	62
SW-4	240	2600	180	130	50	31,000	230	70
SD-1	490	130	20000	990	4,200	3,700	580	2,200
SD-2	630	1600	25000	*	29,000	5,800	2,500	10,000
SD-3	420	200	310	*	390	*	700	930
SD-4	810	590	600	1,600	3,400	12,000	1,500	1,800

	4/13/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	400	1,300	1,500	16,100
SW-2	25	370	280	262
SW-3	280	*	1100	554
SW-4	60	700	4600	99
SD-1	110	5,800	17,000	15,000
SD-2	41,000	52,000	18,000	2,550
SD-3	870	*	430	797
SD-4	1,100	1,900	1,300	1,110

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Nickel

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	ND	ND	ND	47	ND	ND	ND
SW-2	ND	*	ND	ND	ND	ND	ND	ND
SW-3	*	*	ND	*	*	ND	*	*
SW-4	ND	ND	ND	ND	ND	ND	ND	ND
SD-1	7.6	*	11	12	11	14	14	13
SD-2	9.5	12	10	36	21	13	8.9	12
SD-3	7.5	*	9.3	11	17	15	14	16
SD-4	7.5	9.2	11	36	12	12	10	12

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	ND	ND	ND	ND	2.1	ND	ND	ND
SW-2	ND	2.7	ND	ND	ND	ND	ND	ND
SW-3	*	ND	*	*	1.4	ND	ND	ND
SW-4	ND	ND	ND	ND	2.9	ND	ND	ND
SD-1	8.9	9.5	20	17	22	23	16	22
SD-2	9.9	14	14	13	14	13	25	12
SD-3	9.8	*	16	9.1	20	9.6	11	11
SD-4	8.5	8.5	16	11	15	14	9	13

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	ND	46	0.66	ND	ND	ND	ND	ND
SW-2	ND	ND	0.37	*	ND	75	ND	ND
SW-3	ND	*	0.54	*	ND	*	ND	ND
SW-4	ND	5.9	0.66	ND	ND	51	ND	ND
SD-1	15	7.4	33	16	20	11	11	15
SD-2	13	8.1	43	*	ND	ND	11	17
SD-3	19	12	15	*	11	*	22	28
SD-4	14	9.1	11	10	20	23	13	36

	4/13/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	ND	ND	ND	ND
SW-2	ND	ND	ND	ND
SW-3	ND	*	ND	ND
SW-4	ND	ND	ND	ND
SD-1	40	47	ND	25.6
SD-2	65	45	ND	11.9
SD-3	39	*	35	22.2
SD-4	18	22	30	25

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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Zinc

	3/1/2001	6/1/2001	9/1/2001	12/1/2001	3/1/2002	6/1/2002	9/1/2002	12/1/2002
SW-1	ND	ND	25	17	16	ND	ND	9.6
SW-2	ND	*	4.1	18	10	ND	ND	ND
SW-3	*	*	ND	*	*	53	*	*
SW-4	ND	ND	4.1	11	7.2	ND	ND	ND
SD-1	48	*	230	46	44	46	51	87
SD-2	38	53	34	150	72	47	28	24
SD-3	44	*	46	38	51	72	76	78
SD-4	26	48	58	220	60	41	47	500

	3/1/2003	6/1/2003	9/1/2003	12/1/2003	3/1/2004	6/1/2004	9/1/2004	12/1/2004
SW-1	13	120	ND	ND	41	64	ND	51
SW-2	9.8	37	ND	ND	29	ND	ND	ND
SW-3	*	19	*	*	40	54	ND	ND
SW-4	ND	ND	ND	ND	37	61	ND	ND
SD-1	40	390	84	67	82	130	86	96
SD-2	39	59	45	50	37	67	33	35
SD-3	42	*	71	63	74	60	60	28
SD-4	45	60	79	54	77	82	45	53

	10/29/2005	7/20/2007	10/29/2008	1/13/2010	4/20/2011	7/24/2012	10/24/2013	1/20/2015
SW-1	57	270	ND	ND	ND	ND	ND	ND
SW-2	5.8	ND	ND	*	ND	ND	ND	ND
SW-3	7.1	*	ND	*	ND	ND	ND	ND
SW-4	ND	38	ND	ND	ND	ND	ND	ND
SD-1	40	35	360	45	94	35	32	70
SD-2	32	33	360	*	270	240	52	160
SD-3	120	81	60	*	32	*	190	140
SD-4	57	56	53	44	93	140	50	150

	4/12/2016	7/10/2017	10/17/2018	1/16/2020
SW-1	ND	ND	ND	45
SW-2	ND	ND	ND	2
SW-3	ND	*	ND	ND
SW-4	ND	ND	110	ND
SD-1	130	180	69	137
SD-2	590	520	260	58.8
SD-3	170	*	200	131
SD-4	84	81	260	89.5

Notes:
ND – Not Detected
* - Historical Data Not Available
Surface Water (SW) samples are in ug/L, unless otherwise noted
Sediment (SD) samples are in mg/Kg

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FIGURE 1

Harrison Subresidency Post Closure
Quarterly Monitoring Report
Site Location

NYSDOT PIN: 8806.51.101

Cashin Associates, P.C.
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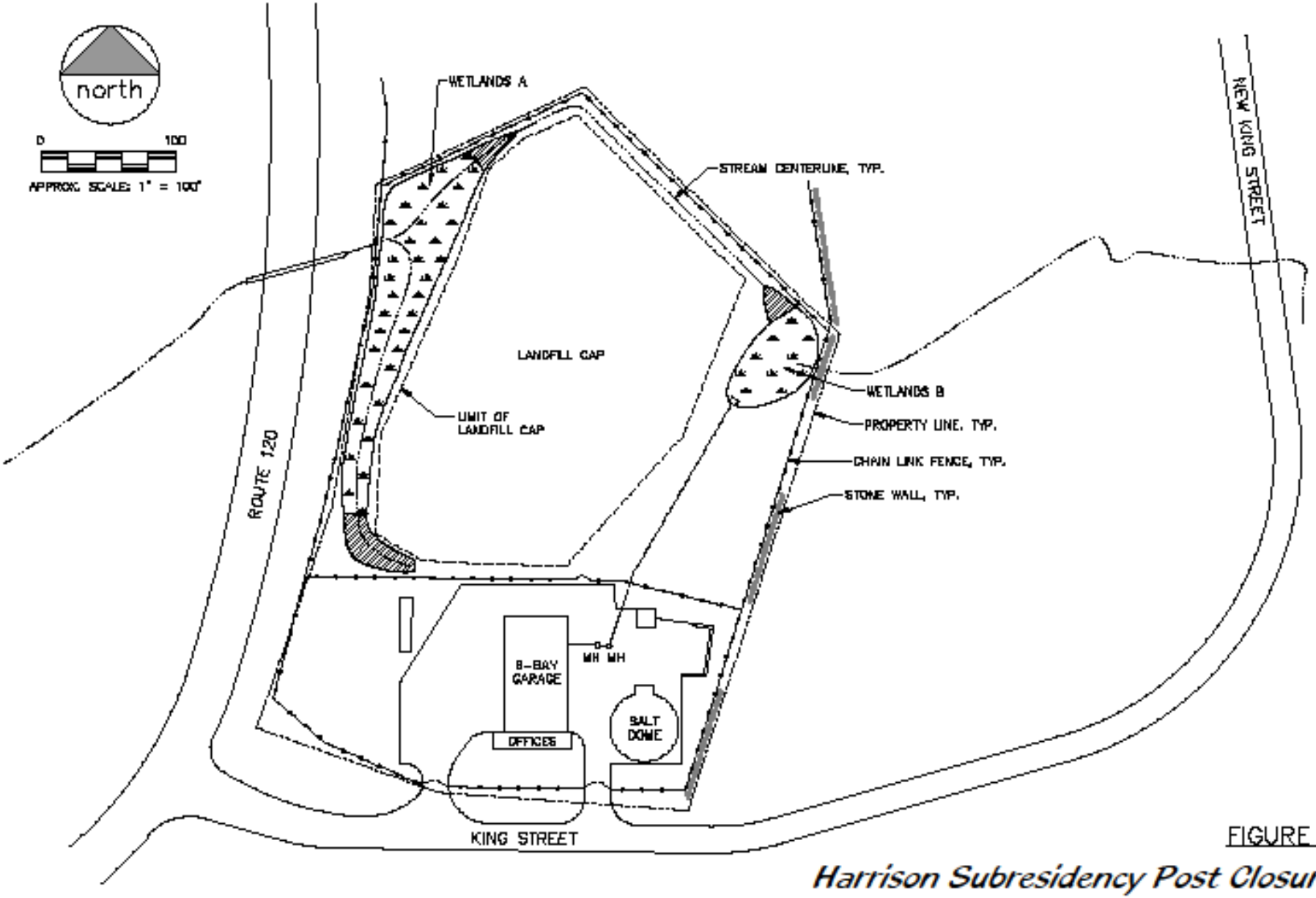

FIGURE 2

Harrison Subresidency Post Closure
Quarterly Monitoring Report
Site Map

NYSDOT PIN: 8806.51.101

Cashin Associates, P.C.
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1001.003

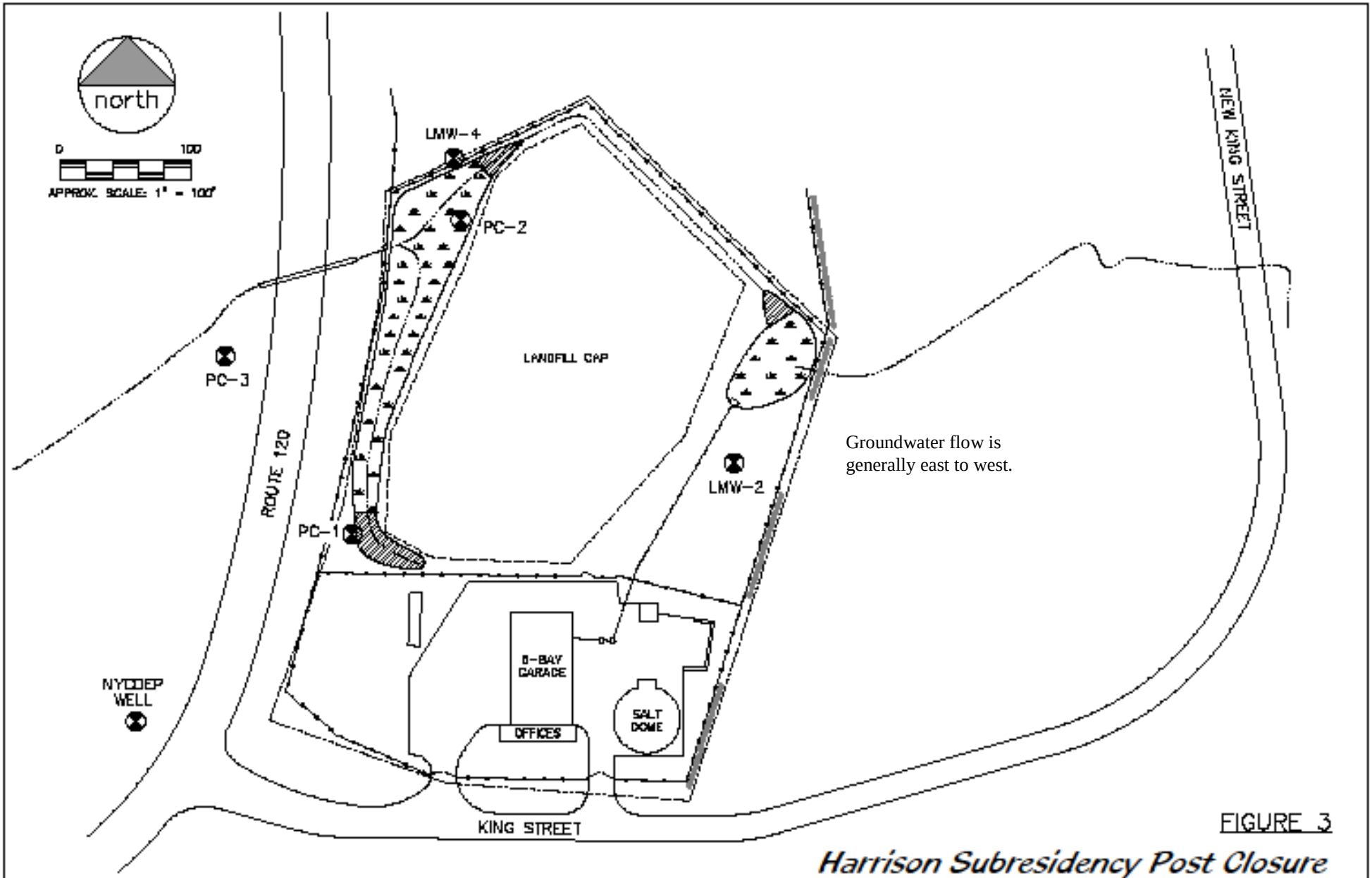

FIGURE 3

Harrison Subresidency Post Closure
Quarterly Monitoring Report
Groudwater Monitoring Well Locations

NYSDOT PIN: 8806.51.101

Cashin Associates, P.C.
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1001.003

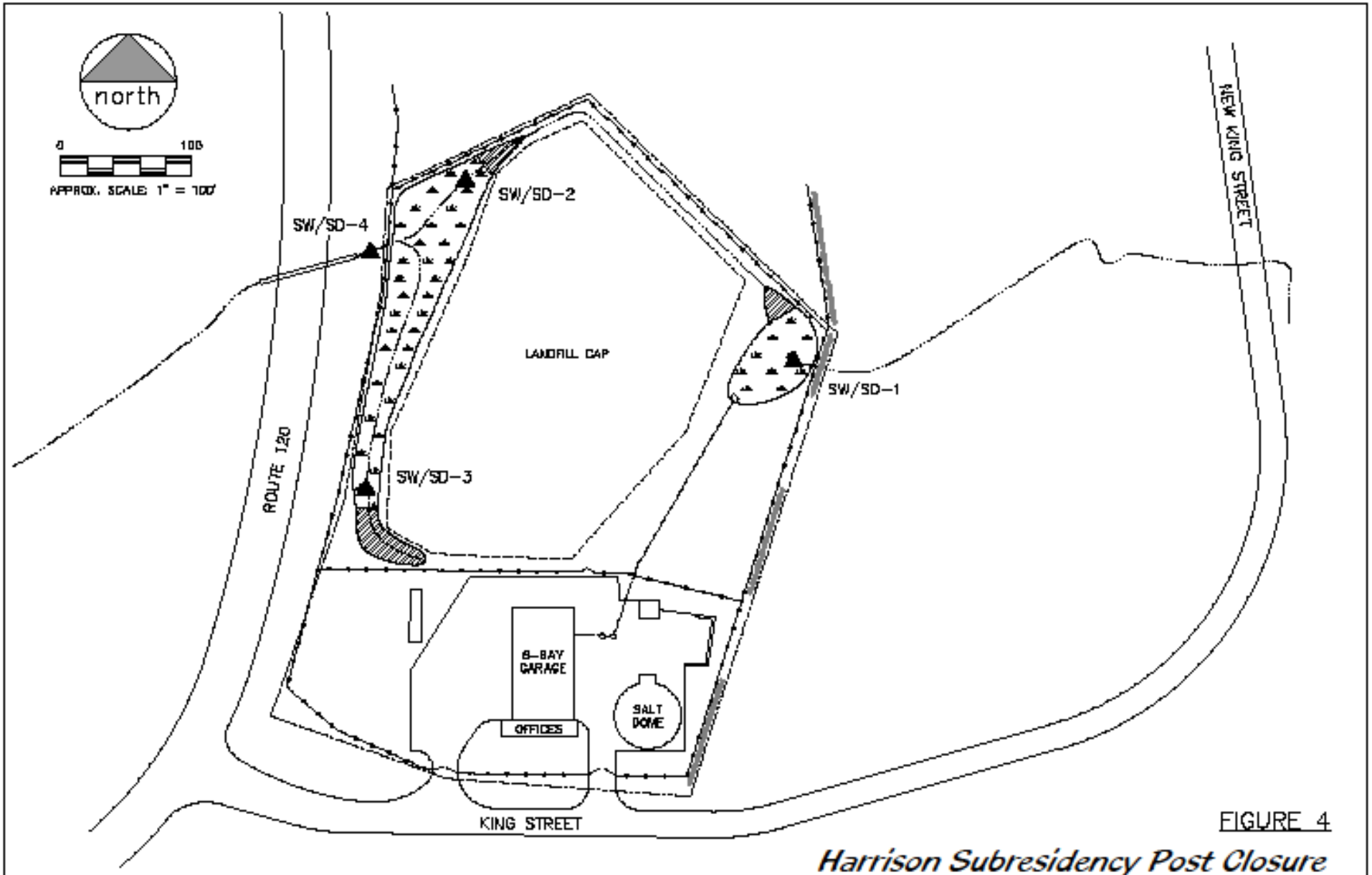

FIGURE 4

Harrison Subresidency Post Closure
Quarterly Monitoring Report
Surface Water and Sediment Sample Locations

NYSDOT PIN: 8806.51.101

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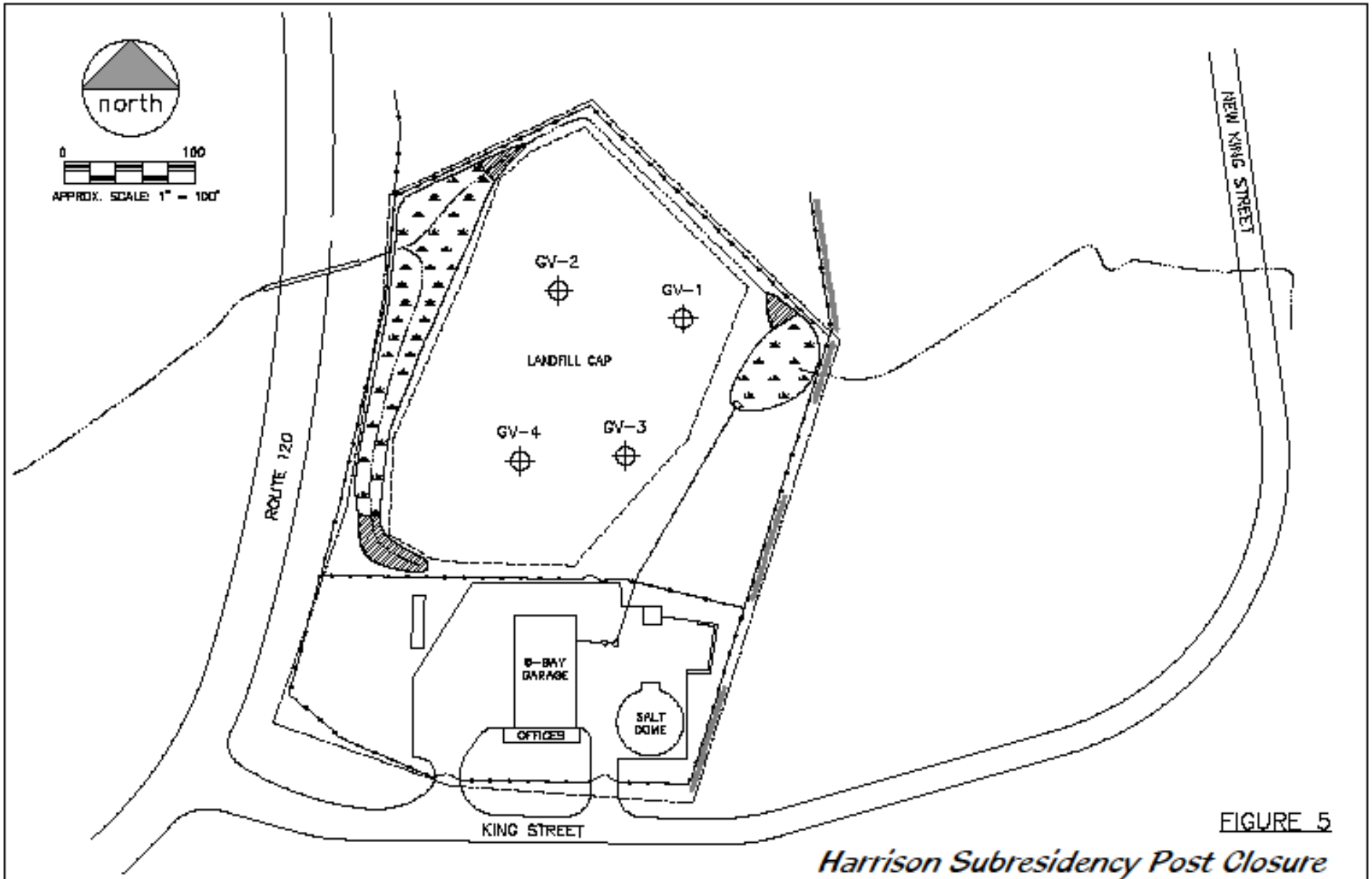

FIGURE 5

Harrison Subresidency Post Closure
Quarterly Monitoring Report
Gas Vent Locations

NYSDOT PIN: 8806.51.101

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1001.003

Appendix A

Analytical Data

PHOENIX
Environmental Laboratories, Inc.

Thursday, February 13, 2020

Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Project ID: NYSDOT HARRISON LANDFILL
SDG ID: GCF15543
Sample ID#s: CF15543 - CF15558

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY ANALYTICAL SERVICES PROTOCOL
DATA PACKAGE

Client: Cashin Associates, PC

Project: NYSDOT HARRISON LANDFILL

Laboratory Project: GCF15543

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
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February 13, 2020 **SDG I.D.: GCF15543**

Cashin Associates, PC NYSDOT HARRISON LANDFILL

Methodology Summary

Accelerated Solvent Extraction (ASE)

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed.Update III, Method 3545A.

General Chemistry

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed.Update III

ICP-MS

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update V, Method 6020B.
Environmental Protection Agency, EPA-600/4-79-020, method 200.8

Mercury

Methods for Chemical Analyses of Water and Wastes, EPA, Environmental Monitoring Systems Laboratory Cincinnati (EMSL-CL), EPA-600/4-79-020, method 245.1
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7470A.

Mercury Prep

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 7471B.

Metals

Methods for Chemical Analyses of Water and Wastes, EPA, Environmental Monitoring Systems Laboratory Cincinnati (EMSL-CL), EPA-600/4-79-020, method 200.7.

ICP :
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 6010D.
Mercury:
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7471B

Semivolatile Organic Compounds

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D.

Semi-volatiles analysis

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D (SIM - selective ion monitoring mode).

Total Cyanide

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 9010B and SW9012B

Volatile Organic Compounds:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed.Update III, Method 8260C and Environmental Protection Agency, EPA-600/4-79-020, Revised March 1983 (Methods 624) as printed in 40CFR part 136.

PHOENIX

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February 13, 2020 **SDG I.D.: GCF15543**

Cashin Associates, PC NYSDOT HARRISON LANDFILL

Laboratory Chronicle

The samples in this delivery group were received at 3.1°C.

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CF15543	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15543	Aluminum (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Antimony (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15543	Arsenic, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Barium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Beryllium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Cadmium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Calcium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15543	Chromium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Cobalt, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Copper, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Iron, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Lead (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Magnesium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Manganese, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Mercury (Dissolved)	01/16/20	01/20/20	01/21/20	RS	Y
CF15543	Nickel, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Potassium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Selenium (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15543	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15543	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15543	Silver (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Sodium (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15543	Thallium (Dissolved)	01/16/20	01/17/20	01/22/20	MGH	Y
CF15543	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15543	Vanadium, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15543	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15543	Zinc, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15544	Aluminum (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Antimony (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y

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February 13, 2020 **SDG I.D.: GCF15543**

Cashin Associates, PC NYSDOT HARRISON LANDFILL

CF15544	Arsenic, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15544	Barium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Beryllium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Cadmium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Calcium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15544	Chromium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Cobalt, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Copper, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Iron, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Lead (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Magnesium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Manganese, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15544	Mercury (Dissolved)	01/16/20	01/20/20	01/21/20	RS	Y
CF15544	Nickel, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Potassium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Selenium (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15544	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15544	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15544	Silver (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Sodium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Thallium (Dissolved)	01/16/20	01/17/20	01/22/20	MGH	Y
CF15544	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15544	Vanadium, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15544	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15544	Zinc, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15545	1,4-dioxane	01/17/20	01/24/20	01/24/20	MH	Y
CF15545	Aluminum (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Antimony (Dissolved)-LDL	01/17/20	01/17/20	01/22/20	MGH	Y
CF15545	Arsenic, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Barium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Beryllium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Cadmium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Calcium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Chloride	01/17/20	01/20/20	01/20/20	TB	Y
CF15545	Chromium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Cobalt, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

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Cashin Associates, PC NYSDOT HARRISON LANDFILL

CF15545	Copper, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Iron, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Lead (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Magnesium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Manganese, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Mercury (Dissolved)	01/17/20	01/20/20	01/21/20	RS	Y
CF15545	Nickel, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Potassium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Selenium (Dissolved)-LDL	01/17/20	01/17/20	01/22/20	MGH	Y
CF15545	Semivolatiles	01/17/20	01/20/20	01/22/20	WB	Y
CF15545	Semivolatiles	01/17/20	01/20/20	01/23/20	WB	Y
CF15545	Silver (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Sodium (Dissolved)	01/17/20	01/17/20	01/21/20	CPP	Y
CF15545	Thallium (Dissolved)	01/17/20	01/17/20	01/22/20	MGH	Y
CF15545	Total Cyanide	01/17/20	01/21/20	01/21/20	O/GD	Y
CF15545	Vanadium, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15545	Volatiles	01/17/20	01/24/20	01/24/20	MH	Y
CF15545	Zinc, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15546	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15546	Aluminum (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Antimony (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15546	Arsenic, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Barium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Beryllium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Cadmium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Calcium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15546	Chromium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Cobalt, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Copper, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Iron, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Lead (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Magnesium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Manganese, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Mercury (Dissolved)	01/16/20	01/20/20	01/21/20	RS	Y
CF15546	Nickel, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Potassium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y

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Cashin Associates, PC NYSDOT HARRISON LANDFILL

CF15546	Selenium (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15546	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15546	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15546	Silver (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Sodium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Thallium (Dissolved)	01/16/20	01/17/20	01/22/20	MGH	Y
CF15546	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15546	Vanadium, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15546	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15546	Zinc, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15547	Aluminum (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Antimony (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15547	Arsenic, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15547	Barium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Beryllium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Cadmium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Calcium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15547	Chromium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Cobalt, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Copper, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Iron, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Lead (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Magnesium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Manganese, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15547	Mercury (Dissolved)	01/16/20	01/20/20	01/21/20	RS	Y
CF15547	Nickel, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Potassium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Selenium (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15547	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15547	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15547	Silver (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Sodium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15547	Thallium (Dissolved)	01/16/20	01/17/20	01/22/20	MGH	Y
CF15547	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15547	Vanadium, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y

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CF15547	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15547	Zinc, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15548	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15548	Aluminum	01/16/20	01/20/20	01/22/20	TH	Y
CF15548	Antimony	01/16/20	01/20/20	01/22/20	CPP	Y
CF15548	Arsenic - LDL	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Barium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Beryllium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Cadmium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Calcium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15548	Chromium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Cobalt	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Copper	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Iron	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Lead	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Magnesium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Manganese	01/16/20	01/20/20	01/22/20	TH	Y
CF15548	Mercury	01/16/20	01/20/20	01/20/20	RS	Y
CF15548	Nickel	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Potassium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Selenium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15548	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15548	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15548	Silver	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Sodium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Thallium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15548	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15548	Vanadium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15548	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15548	Zinc	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15549	Aluminum	01/16/20	01/20/20	01/21/20	TH	Y
CF15549	Antimony	01/16/20	01/20/20	01/22/20	CPP	Y
CF15549	Arsenic - LDL	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Barium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Beryllium	01/16/20	01/20/20	01/21/20	CPP	Y

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CF15549	Cadmium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Calcium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15549	Chromium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Cobalt	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Copper	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Iron	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Lead	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Magnesium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Manganese	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Mercury	01/16/20	01/20/20	01/20/20	RS	Y
CF15549	Nickel	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Potassium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Selenium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15549	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15549	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15549	Silver	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Sodium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Thallium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15549	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15549	Vanadium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15549	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15549	Zinc	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15550	Aluminum	01/16/20	01/20/20	01/21/20	TH	Y
CF15550	Antimony	01/16/20	01/20/20	01/22/20	CPP	Y
CF15550	Arsenic - LDL	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Barium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Beryllium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Cadmium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Calcium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15550	Chromium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Cobalt	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Copper	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Iron	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Lead	01/16/20	01/20/20	01/21/20	CPP	Y

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CF15550	Magnesium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Manganese	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Mercury	01/16/20	01/20/20	01/20/20	RS	Y
CF15550	Nickel	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Potassium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Selenium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15550	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15550	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15550	Silver	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Sodium	01/16/20	01/20/20	01/22/20	TH	Y
CF15550	Thallium	01/16/20	01/20/20	01/22/20	CPP	Y
CF15550	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y
CF15550	Vanadium	01/16/20	01/20/20	01/21/20	CPP	Y
CF15550	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y
CF15550	Zinc	01/16/20	01/20/20	01/21/20	CPP	Y
CF15551	1,4-dioxane	01/17/20	01/24/20	01/24/20	MH	Y
CF15551	Aluminum	01/17/20	01/20/20	01/21/20	TH	Y
CF15551	Antimony	01/17/20	01/20/20	01/22/20	CPP	Y
CF15551	Arsenic - LDL	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Barium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Beryllium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Cadmium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Calcium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Chloride	01/17/20	01/20/20	01/20/20	TB	Y
CF15551	Chromium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Cobalt	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Copper	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Iron	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Lead	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Magnesium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Manganese	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Mercury	01/17/20	01/20/20	01/20/20	RS	Y
CF15551	Nickel	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Potassium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Selenium	01/17/20	01/20/20	01/22/20	CPP	Y
CF15551	Semivolatiles	01/17/20	01/20/20	01/22/20	WB	Y
CF15551	Semivolatiles	01/17/20	01/20/20	01/23/20	WB	Y

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CF15551	Silver	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Sodium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Thallium	01/17/20	01/20/20	01/22/20	CPP	Y
CF15551	Total Cyanide	01/17/20	01/21/20	01/21/20	O/GD	Y
CF15551	Vanadium	01/17/20	01/20/20	01/21/20	CPP	Y
CF15551	Volatiles	01/17/20	01/24/20	01/24/20	MH	Y
CF15551	Zinc	01/17/20	01/20/20	01/21/20	CPP	Y
CF15552	1,4-dioxane	01/16/20	01/19/20	01/19/20	JLI	Y
CF15552	Aluminum	01/16/20	01/17/20	01/19/20	EK	Y
CF15552	Antimony	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Arsenic	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Barium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Beryllium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Cadmium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Calcium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Chloride	01/16/20	01/20/20	01/20/20	BS/EG	Y
CF15552	Chromium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Cobalt	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Copper	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Iron	01/16/20	01/17/20	01/19/20	EK	Y
CF15552	Lead	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Magnesium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Manganese	01/16/20	01/17/20	01/22/20	EK	Y
CF15552	Mercury	01/16/20	01/21/20	01/21/20	RS	Y
CF15552	Nickel	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Percent Solid	01/16/20	01/17/20	01/17/20	VT	Y
CF15552	Potassium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Selenium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Semivolatiles	01/16/20	01/17/20	01/20/20	WB	Y
CF15552	Silver	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Sodium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Thallium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Total Cyanide (SW9010C Distill.)	01/16/20	01/20/20	01/20/20	O/GD	Y
CF15552	Vanadium	01/16/20	01/17/20	01/20/20	EK	Y
CF15552	Volatiles	01/16/20	01/19/20	01/19/20	JLI	Y
CF15552	Zinc	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	1,4-dioxane	01/16/20	01/19/20	01/19/20	JLI	Y

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CF15553	Aluminum	01/16/20	01/17/20	01/19/20	EK	Y
CF15553	Antimony	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Arsenic	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Barium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Beryllium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Cadmium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Calcium	01/16/20	01/17/20	01/19/20	EK	Y
CF15553	Chloride	01/16/20	01/20/20	01/20/20	BS/EG	Y
CF15553	Chromium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Cobalt	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Copper	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Iron	01/16/20	01/17/20	01/19/20	EK	Y
CF15553	Lead	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Magnesium	01/16/20	01/17/20	01/19/20	EK	Y
CF15553	Manganese	01/16/20	01/17/20	01/22/20	EK	Y
CF15553	Mercury	01/16/20	01/21/20	01/21/20	RS	Y
CF15553	Nickel	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Percent Solid	01/16/20	01/17/20	01/17/20	VT	Y
CF15553	Potassium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Selenium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Semivolatiles	01/16/20	01/17/20	01/20/20	WB	Y
CF15553	Silver	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Sodium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Thallium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Total Cyanide (SW9010C Distill.)	01/16/20	01/20/20	01/20/20	O/GD	Y
CF15553	Vanadium	01/16/20	01/17/20	01/20/20	EK	Y
CF15553	Volatiles	01/16/20	01/19/20	01/19/20	JLI	Y
CF15553	Zinc	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	1,4-dioxane	01/16/20	01/19/20	01/19/20	JLI	Y
CF15554	Aluminum	01/16/20	01/17/20	01/19/20	EK	Y
CF15554	Antimony	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Arsenic	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Barium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Beryllium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Cadmium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Calcium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Chloride	01/16/20	01/20/20	01/20/20	BS/EG	Y

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CF15554	Chromium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Cobalt	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Copper	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Iron	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Lead	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Magnesium	01/16/20	01/17/20	01/19/20	EK	Y
CF15554	Manganese	01/16/20	01/17/20	01/19/20	EK	Y
CF15554	Mercury	01/16/20	01/21/20	01/21/20	RS	Y
CF15554	Nickel	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Percent Solid	01/16/20	01/17/20	01/17/20	VT	Y
CF15554	Potassium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Selenium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Semivolatiles	01/16/20	01/17/20	01/20/20	WB	Y
CF15554	Silver	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Sodium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Thallium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Total Cyanide (SW9010C Distill.)	01/16/20	01/20/20	01/20/20	O/GD	Y
CF15554	Vanadium	01/16/20	01/17/20	01/20/20	EK	Y
CF15554	Volatiles	01/16/20	01/19/20	01/19/20	JLI	Y
CF15554	Zinc	01/16/20	01/17/20	01/20/20	EK	Y
CF15555	1,4-dioxane	01/17/20	01/19/20	01/19/20	JLI	Y
CF15555	Aluminum	01/17/20	01/17/20	01/19/20	EK	Y
CF15555	Antimony	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Arsenic	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Barium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Beryllium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Cadmium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Calcium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Chloride	01/17/20	01/20/20	01/20/20	BS/EG	Y
CF15555	Chromium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Cobalt	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Copper	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Iron	01/17/20	01/17/20	01/19/20	EK	Y
CF15555	Lead	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Magnesium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Manganese	01/17/20	01/17/20	01/19/20	EK	Y
CF15555	Mercury	01/17/20	01/21/20	01/21/20	RS	Y

Environmental Laboratories, Inc.
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NY Analytical Services Protocol Format

February 13, 2020 **SDG I.D.: GCF15543**

Cashin Associates, PC NYSDOT HARRISON LANDFILL

CF15555	Nickel	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Percent Solid	01/17/20	01/17/20	01/17/20	VT	Y
CF15555	Potassium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Selenium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Semivolatiles	01/17/20	01/17/20	01/20/20	WB	Y
CF15555	Silver	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Sodium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Thallium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Total Cyanide (SW9010C Distill.)	01/17/20	01/20/20	01/20/20	O/GD	Y
CF15555	Vanadium	01/17/20	01/17/20	01/20/20	EK	Y
CF15555	Volatiles	01/17/20	01/19/20	01/19/20	JLI	Y
CF15555	Zinc	01/17/20	01/17/20	01/20/20	EK	Y
CF15556	Aluminum (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Antimony (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15556	Arsenic, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15556	Barium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Beryllium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Cadmium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Calcium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Chloride	01/16/20	01/20/20	01/20/20	TB	Y
CF15556	Chromium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Cobalt, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Copper, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Iron, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Lead (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Magnesium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Manganese, (Dissolved)	01/16/20	01/17/20	01/21/20	CPP	Y
CF15556	Mercury (Dissolved)	01/16/20	01/20/20	01/21/20	RS	Y
CF15556	Nickel, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Potassium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Selenium (Dissolved)-LDL	01/16/20	01/17/20	01/22/20	MGH	Y
CF15556	Semivolatiles	01/16/20	01/20/20	01/22/20	WB	Y
CF15556	Semivolatiles	01/16/20	01/20/20	01/23/20	WB	Y
CF15556	Silver (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Sodium (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Thallium (Dissolved)	01/16/20	01/17/20	01/22/20	MGH	Y
CF15556	Total Cyanide	01/16/20	01/21/20	01/21/20	O/GD	Y

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NY Analytical Services Protocol Format

February 13, 2020 **SDG I.D.: GCF15543**

Cashin Associates, PC NYSDOT HARRISON LANDFILL

CF15556	Vanadium, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15556	Zinc, (Dissolved)	01/16/20	01/17/20	01/18/20	TH	Y
CF15557	Aluminum (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Antimony (Dissolved)-LDL	01/17/20	01/17/20	01/22/20	MGH	Y
CF15557	Arsenic, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Barium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Beryllium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Cadmium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Calcium (Dissolved)	01/17/20	01/17/20	01/21/20	CPP	Y
CF15557	Chloride	01/17/20	01/20/20	01/20/20	TB	Y
CF15557	Chromium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Cobalt, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Copper, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Iron, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Lead (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Magnesium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Manganese, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Mercury (Dissolved)	01/17/20	01/20/20	01/21/20	RS	Y
CF15557	Nickel, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Potassium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Selenium (Dissolved)-LDL	01/17/20	01/17/20	01/22/20	MGH	Y
CF15557	Semivolatiles	01/17/20	01/20/20	01/22/20	WB	Y
CF15557	Semivolatiles	01/17/20	01/20/20	01/23/20	WB	Y
CF15557	Silver (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Sodium (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Thallium (Dissolved)	01/17/20	01/17/20	01/22/20	MGH	Y
CF15557	Total Cyanide	01/17/20	01/21/20	01/21/20	O/GD	Y
CF15557	Vanadium, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15557	Zinc, (Dissolved)	01/17/20	01/17/20	01/18/20	TH	Y
CF15558	1,4-dioxane	01/16/20	01/24/20	01/24/20	MH	Y
CF15558	Volatiles	01/16/20	01/24/20	01/24/20	MH	Y

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NY # 11301

SDG Comments

February 13, 2020

SDG I.D.: GCF15543

8260 Volatile Organics:
1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/ECD method 504 or 8011 to achieve this criteria.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.

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Environmental Laboratories, Inc.
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NY # 11301

Sample Id Cross Reference

February 13, 2020

SDG I.D.: GCF15543

Project ID: NYSDOT HARRISON LANDFILL

Client Id	Lab Id	Matrix
PC-1 1/16/2020	CF15543	GROUND WATER
PC-2 1/16/2020	CF15544	GROUND WATER
PC-3 1/17/2020	CF15545	GROUND WATER
LMW-2 1/16/2020	CF15546	GROUND WATER
LMW-4 1/16/2020	CF15547	GROUND WATER
SW-1 1/16/2020	CF15548	SURFACE WATER
SW-2 1/16/2020	CF15549	SURFACE WATER
SW-3 1/16/2020	CF15550	SURFACE WATER
SW-4 1/17/2020	CF15551	SURFACE WATER
SD-1 1/16/2020	CF15552	SEDIMENT
SD-2 1/16/2020	CF15553	SEDIMENT
SD-3 1/16/2020	CF15554	SEDIMENT
SD-4 1/17/2020	CF15555	SEDIMENT
GW-DUP 1/16/2020	CF15556	GROUND WATER
FIELD BLANK 1/17/2020	CF15557	LIQUID
TRIP BLANK	CF15558	LIQUID

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Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/16/20	16:50
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15543

Project ID: NYSDOT HARRISON LANDFILL
Client ID: PC-1 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.043	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.005	0.005	mg/L	1	01/18/20	TH	SW6010D
Barium (Dissolved)	0.103	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	103	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	0.001	J 0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	0.003	J 0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	ND	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	3.5	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	15.6	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	0.003	J 0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Sodium (Dissolved)	81.4	1.1	1.1	mg/L	10	01/21/20	CPP	SW6010D
Nickel, (Dissolved)	0.001	J 0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	0.002	J 0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	129	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	99			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D	
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D	
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D	
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D	
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D	
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D	
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D	
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D	
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D	
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D	
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D	
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D	
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D	
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D	
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D	
QA/QC Surrogates									
% 2,4,6-Tribromophenol	53			%	1	01/23/20	WB	15 - 110 %	
% 2-Fluorobiphenyl	68			%	1	01/23/20	WB	30 - 130 %	
% 2-Fluorophenol	45			%	1	01/23/20	WB	15 - 110 %	
% Nitrobenzene-d5	55			%	1	01/23/20	WB	30 - 130 %	
% Phenol-d5	<10			%	1	01/23/20	WB	15 - 110 %	3
% Terphenyl-d14	35			%	1	01/23/20	WB	30 - 130 %	

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)	
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)	
QA/QC Surrogates									
% 2,4,6-Tribromophenol	68			%	1	01/22/20	WB	15 - 110 %	
% 2-Fluorobiphenyl	63			%	1	01/22/20	WB	30 - 130 %	
% 2-Fluorophenol	51			%	1	01/22/20	WB	15 - 110 %	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
% Nitrobenzene-d5	63			%	1	01/22/20	WB	30 - 130 %	
% Phenol-d5	<10			%	1	01/22/20	WB	15 - 110 %	3
% Terphenyl-d14	35			%	1	01/22/20	WB	30 - 130 %	
SVOA Library Search Top 15	Completed					01/23/20	WB		

3 = This parameter exceeds laboratory specified limits.

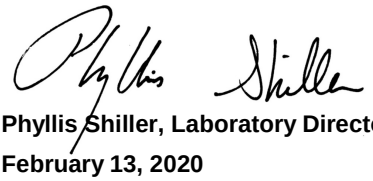
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
Poor surrogate recovery was observed for one acid and/or one base surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/16/20	15:40
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15544

Project ID: NYSDOT HARRISON LANDFILL
Client ID: PC-2 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.038	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.025	0.011	mg/L	10	01/21/20	CPP	SW6010D
Barium (Dissolved)	0.097	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	87.6	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	0.001 J	0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	0.002 J	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	40.8	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	3.8	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	19.4	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	13.1	0.053	0.011	mg/L	10	01/21/20	CPP	SW6010D
Sodium (Dissolved)	32.9	0.11	0.1	mg/L	1	01/18/20	TH	SW6010D
Nickel, (Dissolved)	0.001 J	0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	0.003	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	0.004 J	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	18.7	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	100			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	52			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	62			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	38			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	43			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	42			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	56			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	67			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	58			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	43			%	1	01/22/20	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Nitrobenzene-d5	49			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	53			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	54			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/17/20	11:56
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15545

Project ID: NYSDOT HARRISON LANDFILL
Client ID: PC-3 1/17/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.032	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Barium (Dissolved)	0.165	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	84.4	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	0.002 J	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	2.23	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	7.2	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	21.8	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	0.791	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Sodium (Dissolved)	110	1.1	1.1	mg/L	10	01/21/20	CPP	SW6010D
Nickel, (Dissolved)	0.002 J	0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	255	15.0	0.05	mg/L	5	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	99			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	92			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	99			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	45			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	65			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	33			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	30			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	36			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	68			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	52			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	59			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	45			%	1	01/22/20	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Nitrobenzene-d5	55			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	51			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	59			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/24/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/16/20	11:42
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15546

Project ID: NYSDOT HARRISON LANDFILL
Client ID: LMW-2 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.028	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Barium (Dissolved)	0.111	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	74.5	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	0.001 J	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	0.003 J	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	0.02	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	4.0	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	25.5	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	0.163	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Sodium (Dissolved)	23.7	0.11	0.1	mg/L	1	01/18/20	TH	SW6010D
Nickel, (Dissolved)	0.003 J	0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	0.002 J	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	9.2	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	100			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	92			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	100			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.8	4.8	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.8	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.8	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.8	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.95	0.95	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroisopropyl)ether	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.95	0.95	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.8	8.5	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.8	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.95	0.95	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	68			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	64			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	44			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	52			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	50			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	67			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	0.06	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	0.05	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	0.07	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	0.07	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	0.08	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	0.04	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	75			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	62			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	52			%	1	01/22/20	WB	15 - 110 %

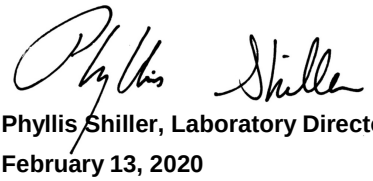
Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Nitrobenzene-d5	56			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	57			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	60			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/16/20	14:05
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15547

Project ID: NYSDOT HARRISON LANDFILL
Client ID: LMW-4 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.028	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.025	0.011	mg/L	10	01/21/20	CPP	SW6010D
Barium (Dissolved)	0.099	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	42.5	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	0.001	J 0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	0.013	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	53.6	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	3.4	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	17.2	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	12.5	0.053	0.011	mg/L	10	01/21/20	CPP	SW6010D
Sodium (Dissolved)	26.6	0.11	0.1	mg/L	1	01/18/20	TH	SW6010D
Nickel, (Dissolved)	0.002	J 0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	0.003	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	0.005	J 0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	19.8	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	100			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	90			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	104			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	100			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.8	4.8	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.8	2.3	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.8	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.8	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroisopropyl)ether	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.8	8.6	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.8	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	70			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	64			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	31			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	49			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	33			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	60			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	78			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	60			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	47			%	1	01/22/20	WB	15 - 110 %

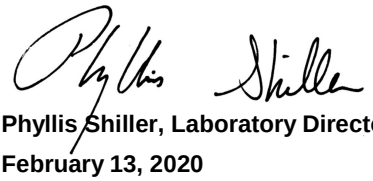
Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Nitrobenzene-d5	54			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	56			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	56			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/24/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:	MC	01/16/20	12:03
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15548

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-1 1/16/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		0.005	0.003	mg/L	1	01/21/20	CPP	SW6010D
Aluminum	1.02	*	0.020	0.0024	mg/L	1	01/22/20	TH	SW6010D
Arsenic - LDL	ND		0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Barium	0.210		0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Beryllium	ND		0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Calcium	68.5		0.010	0.003	mg/L	1	01/21/20	CPP	SW6010D
Cadmium	ND		0.004	0.0005	mg/L	1	01/21/20	CPP	SW6010D
Cobalt	0.005		0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Chromium	0.002		0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Copper	0.003	J	0.005	0.002	mg/L	1	01/21/20	CPP	SW6010D
Iron	26.7		0.01	0.01	mg/L	1	01/21/20	CPP	E200.7
Mercury	ND		0.0002	0.00015	mg/L	1	01/20/20	RS	SW7470A
Potassium	5.0		0.1	0.1	mg/L	1	01/21/20	CPP	SW6010D
Magnesium	16.5		0.010	0.01	mg/L	1	01/21/20	CPP	SW6010D
Manganese	16.1		0.050	0.010	mg/L	10	01/22/20	TH	SW6010D
Sodium	14.3		0.10	0.1	mg/L	1	01/21/20	CPP	SW6010D
Nickel	ND		0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Lead	0.006		0.002	0.001	mg/L	1	01/21/20	CPP	SW6010D
Antimony	ND		0.0030	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Selenium	ND		0.010	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Thallium	ND		0.0005	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Vanadium	ND		0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Zinc	0.045		0.010	0.002	mg/L	1	01/21/20	CPP	SW6010D
Chloride	7.5		3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND		0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Mercury Digestion	Completed						01/20/20	Q/Q	SW7470A
Semi-Volatile Extraction	Completed						01/20/20	P/AK	SW3520C
Total Metals Digestion	Completed						01/20/20	AG	

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-1 1/16/2020

Phoenix I.D.: CF15548

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed						01/20/20	AG	
1,4-dioxane									
1,4-dioxane	ND		100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles									
1,1,1-Trichloroethane	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND		0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND		0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND		0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND		2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND		2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	2.6	JS	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND		0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND		2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND		0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND		5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND		5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND		2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND		2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND		3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Tetrachloroethene	ND		1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	102			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	102			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.9	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.9	4.9	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.9	0.87	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.9	2.3	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.9	11	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.9	2.3	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.9	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.9	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.97	0.97	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.9	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.9	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.9	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-ethylhexyl)phthalate	ND	0.97	0.97	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.9	8.7	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.9	3.7	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.9	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.9	1.3	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.9	1.5	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.97	0.97	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.9	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.9	1.6	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.9	1.9	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.87	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	63			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	56			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	39			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	52			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	47			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	56			%	1	01/23/20	WB	30 - 130 %
Semivolatiles								
Acenaphthylene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.39	0.39	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.49	0.49	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	74			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	55			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	46			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	53			%	1	01/22/20	WB	30 - 130 %

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-1 1/16/2020

Phoenix I.D.: CF15548

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	57			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	55			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

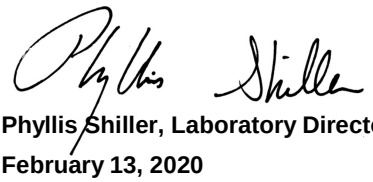
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:	MC	01/16/20	14:40
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15549

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-2 1/16/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		0.005	0.003	mg/L	1	01/21/20	CPP	SW6010D
Aluminum	0.089	*	0.020	0.0024	mg/L	1	01/21/20	TH	SW6010D
Arsenic - LDL	ND		0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Barium	0.023		0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Beryllium	ND		0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Calcium	36.6		0.010	0.003	mg/L	1	01/21/20	CPP	SW6010D
Cadmium	ND		0.004	0.0005	mg/L	1	01/21/20	CPP	SW6010D
Cobalt	ND		0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Chromium	ND		0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Copper	ND		0.005	0.002	mg/L	1	01/21/20	CPP	SW6010D
Iron	0.39		0.01	0.01	mg/L	1	01/21/20	CPP	E200.7
Mercury	ND		0.0002	0.00015	mg/L	1	01/20/20	RS	SW7470A
Potassium	3.2		0.1	0.1	mg/L	1	01/21/20	CPP	SW6010D
Magnesium	10.7		0.010	0.01	mg/L	1	01/21/20	CPP	SW6010D
Manganese	0.262		0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Sodium	13.0		0.10	0.1	mg/L	1	01/21/20	CPP	SW6010D
Nickel	ND		0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Lead	ND		0.002	0.001	mg/L	1	01/21/20	CPP	SW6010D
Antimony	ND		0.0030	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Selenium	ND		0.010	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Thallium	ND		0.0005	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Vanadium	ND		0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Zinc	0.002	J	0.010	0.002	mg/L	1	01/21/20	CPP	SW6010D
Chloride	9.0		3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND		0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Mercury Digestion	Completed						01/20/20	Q/Q	SW7470A
Semi-Volatile Extraction	Completed						01/20/20	P/AK	SW3520C
Total Metals Digestion	Completed						01/20/20	AG	

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-2 1/16/2020

Phoenix I.D.: CF15549

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					01/20/20	AG	
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	100			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	
Semivolatiles								
1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	61			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	58			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	38			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	50			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	19			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	63			%	1	01/23/20	WB	30 - 130 %
Semivolatiles								
Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	74			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	57			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	44			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	52			%	1	01/22/20	WB	30 - 130 %

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-2 1/16/2020

Phoenix I.D.: CF15549

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	24			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	60			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:	MC	01/16/20	17:00
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15550

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-3 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.003	mg/L	1	01/21/20	CPP	SW6010D
Aluminum	0.056	* 0.020	0.0024	mg/L	1	01/21/20	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Barium	0.082	0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Calcium	129	0.010	0.003	mg/L	1	01/21/20	CPP	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	01/21/20	CPP	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Chromium	ND	0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Copper	ND	0.005	0.002	mg/L	1	01/21/20	CPP	SW6010D
Iron	0.58	0.01	0.01	mg/L	1	01/21/20	CPP	E200.7
Mercury	ND	0.0002	0.00015	mg/L	1	01/20/20	RS	SW7470A
Potassium	4.2	0.1	0.1	mg/L	1	01/21/20	CPP	SW6010D
Magnesium	18.5	0.010	0.01	mg/L	1	01/21/20	CPP	SW6010D
Manganese	0.554	0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Sodium	103	1.0	1.0	mg/L	10	01/22/20	TH	SW6010D
Nickel	ND	0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Lead	ND	0.002	0.001	mg/L	1	01/21/20	CPP	SW6010D
Antimony	ND	0.0030	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Selenium	ND	0.010	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Vanadium	ND	0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Zinc	ND	0.010	0.002	mg/L	1	01/21/20	CPP	SW6010D
Chloride	156	6.0	0.02	mg/L	2	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Mercury Digestion	Completed					01/20/20	Q/Q	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C
Total Metals Digestion	Completed					01/20/20	AG	

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-3 1/16/2020

Phoenix I.D.: CF15550

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					01/20/20	AG	
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	91			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	102			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	103			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	59			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	56			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	37			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	47			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	44			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	64			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	72			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	54			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	42			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	51			%	1	01/22/20	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	53			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	58			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SURFACE WATER	Collected by:	MC	01/17/20	10:30
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15551

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-4 1/17/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.005	0.003	mg/L	1	01/21/20	CPP	SW6010D
Aluminum	0.113	* 0.020	0.0024	mg/L	1	01/21/20	TH	SW6010D
Arsenic - LDL	ND	0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Barium	0.021	0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Calcium	33.0	0.010	0.003	mg/L	1	01/21/20	CPP	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	01/21/20	CPP	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Chromium	ND	0.001	0.001	mg/L	1	01/21/20	CPP	SW6010D
Copper	ND	0.005	0.002	mg/L	1	01/21/20	CPP	SW6010D
Iron	0.26	0.01	0.01	mg/L	1	01/21/20	CPP	E200.7
Mercury	ND	0.0002	0.00015	mg/L	1	01/20/20	RS	SW7470A
Potassium	2.9	0.1	0.1	mg/L	1	01/21/20	CPP	SW6010D
Magnesium	10.2	0.010	0.01	mg/L	1	01/21/20	CPP	SW6010D
Manganese	0.099	0.005	0.001	mg/L	1	01/21/20	CPP	SW6010D
Sodium	17.9	0.10	0.1	mg/L	1	01/21/20	CPP	SW6010D
Nickel	ND	0.004	0.001	mg/L	1	01/21/20	CPP	SW6010D
Lead	ND	0.002	0.001	mg/L	1	01/21/20	CPP	SW6010D
Antimony	ND	0.0030	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Selenium	ND	0.010	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Thallium	ND	0.0005	0.0005	mg/L	5	01/22/20	CPP	SW6020B
Vanadium	ND	0.010	0.001	mg/L	1	01/21/20	CPP	SW6010D
Zinc	ND	0.010	0.002	mg/L	1	01/21/20	CPP	SW6010D
Chloride	15.0	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Mercury Digestion	Completed					01/20/20	Q/Q	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C
Total Metals Digestion	Completed					01/20/20	AG	

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-4 1/17/2020

Phoenix I.D.: CF15551

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digestion MS	Completed					01/20/20	AG	
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	MH	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	MH	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	MH	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	MH	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	MH	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	102			%	1	01/24/20	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	01/24/20	MH	70 - 130 %
% Dibromofluoromethane	102			%	1	01/24/20	MH	70 - 130 %
% Toluene-d8	102			%	1	01/24/20	MH	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Semivolatiles

1,1-Biphenyl	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.7	4.7	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.7	0.85	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.7	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.7	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.7	8.4	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.85	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	62			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	56			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	31			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	39			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	40			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	64			%	1	01/23/20	WB	30 - 130 %

Semivolatiles

Acenaphthylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.47	0.47	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	76			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	51			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	36			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	46			%	1	01/22/20	WB	30 - 130 %

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SW-4 1/17/2020

Phoenix I.D.: CF15551

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Phenol-d5	52			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	61			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SEDIMENT	Collected by:	MC	01/16/20	12:31
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15552

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-1 1/16/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Aluminum	14400		120	23	mg/Kg	10	01/19/20	EK	SW6010D
Arsenic	2.4		2.3	2.3	mg/Kg	1	01/20/20	EK	SW6010D
Barium	256		2.3	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Beryllium	ND		0.93	0.46	mg/Kg	1	01/20/20	EK	SW6010D
Calcium	9340	*	12	11	mg/Kg	1	01/20/20	EK	SW6010D
Cadmium	2.3		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Cobalt	18.2		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Chromium	31.7		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Copper	39.1	*	2.3	1.2	mg/kg	1	01/20/20	EK	SW6010D
Iron	36900		120	120	mg/Kg	10	01/19/20	EK	SW6010D
Mercury	0.09	J, N,	0.09	0.06	mg/Kg	2	01/21/20	RS	SW7471B
Potassium	3540	N	23	9.0	mg/Kg	1	01/20/20	EK	SW6010D
Magnesium	5550		12	12	mg/Kg	1	01/20/20	EK	SW6010D
Manganese	15000	N	120	120	mg/Kg	100	01/22/20	EK	SW6010D
Sodium	227	*	23	10	mg/Kg	1	01/20/20	EK	SW6010D
Nickel	25.6		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Lead	40.2		2.3	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Antimony	ND		12	12	mg/Kg	1	01/20/20	EK	SW6010D
Selenium	ND		4.6	3.9	mg/Kg	1	01/20/20	EK	SW6010D
Thallium	ND		4.6	4.6	mg/Kg	1	01/20/20	EK	SW6010D
Vanadium	50.2		1.2	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Zinc	137		2.3	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Percent Solid	28				%		01/17/20	VT	SW846-%Solid
Chloride	ND		107	107	mg/kg	10	01/20/20	BS/EG	SW9056A
Total Cyanide (SW9010C Distill.)	ND		1.79	0.893	mg/Kg	1	01/20/20	O/GD	SW9012B
Soil Extraction for SVOA	Completed						01/17/20	R/K/LA	SW3545A
Mercury Digestion	Completed						01/21/20	LS/LS	SW7471B

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-1 1/16/2020

Phoenix I.D.: CF15552

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed						01/17/20	JJ/AG/BF	SW3050B
1,4-dioxane									
1,4-dioxane	ND		480	260	ug/kg	1	01/19/20	JLI	SW8260C
Volatiles									
1,1,1-Trichloroethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2-Trichloroethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromoethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichlorobenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloroethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloropropane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,3-Dichlorobenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
1,4-Dichlorobenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
2-Hexanone	ND		160	32	ug/Kg	1	01/19/20	JLI	SW8260C
4-Methyl-2-pentanone	ND		160	32	ug/Kg	1	01/19/20	JLI	SW8260C
Acetone	1300	S	160	32	ug/Kg	1	01/19/20	JLI	SW8260C
Benzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Bromochloromethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Bromodichloromethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Bromoform	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Bromomethane	ND		32	13	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon Disulfide	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon tetrachloride	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Chlorobenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroform	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Chloromethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,2-Dichloroethene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,3-Dichloropropene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Cyclohexane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Dibromochloromethane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Dichlorodifluoromethane	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Ethylbenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Isopropylbenzene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
m&p-Xylene	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl ethyl ketone	450		190	32	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND		64	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Methylacetate	ND		32	32	ug/Kg	1	01/19/20	JLI	SW8260C
Methylcyclohexane	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Methylene chloride	ND		32	32	ug/Kg	1	01/19/20	JLI	SW8260C
o-Xylene	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Styrene	ND		32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Tetrachloroethene	ND		32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Total Xylenes	ND	32	32	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,2-Dichloroethene	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,3-Dichloropropene	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Trichloroethene	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorofluoromethane	ND	32	6.4	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorotrifluoroethane	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
Vinyl chloride	ND	32	3.2	ug/Kg	1	01/19/20	JLI	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	94			%	1	01/19/20	JLI	70 - 130 %
% Bromofluorobenzene	83			%	1	01/19/20	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	01/19/20	JLI	70 - 130 %
% Toluene-d8	95			%	1	01/19/20	JLI	70 - 130 %
Volatile Library Search Top 10	Completed					01/20/20	JLI	

Semivolatiles

1,1-Biphenyl	ND	810	350	ug/Kg	1	01/20/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	810	410	ug/Kg	1	01/20/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	810	540	ug/Kg	1	01/20/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	810	630	ug/Kg	1	01/20/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	460	370	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dichlorophenol	ND	460	410	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dimethylphenol	ND	810	290	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrophenol	ND	810	810	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrotoluene	ND	460	450	ug/Kg	1	01/20/20	WB	SW8270D
2,6-Dinitrotoluene	ND	460	360	ug/Kg	1	01/20/20	WB	SW8270D
2-Chloronaphthalene	ND	810	330	ug/Kg	1	01/20/20	WB	SW8270D
2-Chlorophenol	ND	810	330	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylnaphthalene	ND	810	340	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	810	540	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitroaniline	ND	810	810	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitrophenol	ND	810	730	ug/Kg	1	01/20/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	810	450	ug/Kg	1	01/20/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	460	460	ug/Kg	1	01/20/20	WB	SW8270D
3-Nitroaniline	ND	2300	810	ug/Kg	1	01/20/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	810	810	ug/Kg	1	01/20/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	810	340	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	810	410	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloroaniline	ND	2300	540	ug/Kg	1	01/20/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	810	390	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitroaniline	ND	5800	390	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitrophenol	ND	810	520	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthene	ND	810	350	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthylene	ND	460	320	ug/Kg	1	01/20/20	WB	SW8270D
Acetophenone	ND	810	360	ug/Kg	1	01/20/20	WB	SW8270D
Anthracene	ND	810	380	ug/Kg	1	01/20/20	WB	SW8270D
Atrazine	ND	810	300	ug/Kg	1	01/20/20	WB	SW8270D
Benz(a)anthracene	ND	810	390	ug/Kg	1	01/20/20	WB	SW8270D
Benzaldehyde	ND	810	340	ug/Kg	1	01/20/20	WB	SW8270D

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-1 1/16/2020

Phoenix I.D.: CF15552

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(a)pyrene	ND	460	380	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(b)fluoranthene	ND	810	390	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(ghi)perylene	ND	810	370	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(k)fluoranthene	ND	810	380	ug/Kg	1	01/20/20	WB	SW8270D
Benzyl butyl phthalate	ND	810	300	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	810	320	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethyl)ether	ND	460	310	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	810	320	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	810	330	ug/Kg	1	01/20/20	WB	SW8270D
Caprolactam	ND	810	810	ug/Kg	1	01/20/20	WB	SW8270D
Carbazole	ND	810	580	ug/Kg	1	01/20/20	WB	SW8270D
Chrysene	ND	810	390	ug/Kg	1	01/20/20	WB	SW8270D
Dibenz(a,h)anthracene	ND	460	370	ug/Kg	1	01/20/20	WB	SW8270D
Dibenzofuran	ND	810	340	ug/Kg	1	01/20/20	WB	SW8270D
Diethyl phthalate	ND	810	360	ug/Kg	1	01/20/20	WB	SW8270D
Dimethylphthalate	ND	810	360	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-butylphthalate	ND	810	310	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-octylphthalate	ND	810	300	ug/Kg	1	01/20/20	WB	SW8270D
Fluoranthene	ND	810	370	ug/Kg	1	01/20/20	WB	SW8270D
Fluorene	ND	810	380	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobenzene	ND	460	340	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobutadiene	ND	810	420	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	810	350	ug/Kg	1	01/20/20	WB	SW8270D
Hexachloroethane	ND	460	350	ug/Kg	1	01/20/20	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	810	380	ug/Kg	1	01/20/20	WB	SW8270D
Isophorone	ND	460	320	ug/Kg	1	01/20/20	WB	SW8270D
Naphthalene	ND	810	330	ug/Kg	1	01/20/20	WB	SW8270D
Nitrobenzene	ND	460	400	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodimethylamine	ND	810	330	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	460	370	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	460	440	ug/Kg	1	01/20/20	WB	SW8270D
Pentachlorophenol	ND	810	440	ug/Kg	1	01/20/20	WB	SW8270D
Phenanthrene	ND	460	330	ug/Kg	1	01/20/20	WB	SW8270D
Phenol	ND	810	370	ug/Kg	1	01/20/20	WB	SW8270D
Pyrene	ND	810	400	ug/Kg	1	01/20/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	54			%	1	01/20/20	WB	30 - 130 %
% 2-Fluorobiphenyl	40			%	1	01/20/20	WB	30 - 130 %
% 2-Fluorophenol	45			%	1	01/20/20	WB	30 - 130 %
% Nitrobenzene-d5	33			%	1	01/20/20	WB	30 - 130 %
% Phenol-d5	51			%	1	01/20/20	WB	30 - 130 %
% Terphenyl-d14	59			%	1	01/20/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/20/20	MR	

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-1 1/16/2020

Phoenix I.D.: CF15552

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SEDIMENT	Collected by:	MC	01/16/20	14:50
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15553

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-2 1/16/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Aluminum	7260		42	8.4	mg/Kg	10	01/19/20	EK	SW6010D
Arsenic	1.18		0.84	0.84	mg/Kg	1	01/20/20	EK	SW6010D
Barium	89.6		0.8	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Beryllium	ND		0.34	0.17	mg/Kg	1	01/20/20	EK	SW6010D
Calcium	18200	*	42	39	mg/Kg	10	01/19/20	EK	SW6010D
Cadmium	0.86		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Cobalt	7.26		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Chromium	13.3		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Copper	22.1	*	0.8	0.42	mg/kg	1	01/20/20	EK	SW6010D
Iron	20800		42	42	mg/Kg	10	01/19/20	EK	SW6010D
Mercury	ND	N, *	0.03	0.02	mg/Kg	2	01/21/20	RS	SW7471B
Potassium	2730	N	8	3.3	mg/Kg	1	01/20/20	EK	SW6010D
Magnesium	13800		42	42	mg/Kg	10	01/19/20	EK	SW6010D
Manganese	2550	N	42	42	mg/Kg	100	01/22/20	EK	SW6010D
Sodium	140	*	8	3.6	mg/Kg	1	01/20/20	EK	SW6010D
Nickel	11.9		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Lead	13.8		0.8	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Antimony	ND		4.2	4.2	mg/Kg	1	01/20/20	EK	SW6010D
Selenium	ND		1.7	1.4	mg/Kg	1	01/20/20	EK	SW6010D
Thallium	ND		1.7	1.7	mg/Kg	1	01/20/20	EK	SW6010D
Vanadium	29.1		0.42	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Zinc	58.8		0.8	0.42	mg/Kg	1	01/20/20	EK	SW6010D
Percent Solid	78				%		01/17/20	VT	SW846-%Solid
Chloride	ND		38	38	mg/kg	10	01/20/20	BS/EG	SW9056A
Total Cyanide (SW9010C Distill.)	ND		0.64	0.321	mg/Kg	1	01/20/20	O/GD	SW9012B
Soil Extraction for SVOA	Completed						01/17/20	R/K/LA	SW3545A
Mercury Digestion	Completed						01/21/20	LS/LS	SW7471B

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-2 1/16/2020

Phoenix I.D.: CF15553

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					01/17/20	JJ/AG/BF	SW3050B
1,4-dioxane								
1,4-dioxane	ND	79	42	ug/kg	1	01/19/20	JLI	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromoethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloroethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloropropane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
2-Hexanone	ND	26	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
Acetone	ND	26	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
Benzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Bromochloromethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Bromodichloromethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Bromoform	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Bromomethane	ND	5.3	2.1	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon Disulfide	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon tetrachloride	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroform	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Chloromethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Cyclohexane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Dibromochloromethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl ethyl ketone	ND	32	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Methylacetate	ND	5.3	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
Methylcyclohexane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Methylene chloride	ND	5.3	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Tetrachloroethene	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Total Xylenes	ND	5.3	5.3	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
Vinyl chloride	ND	5.3	0.53	ug/Kg	1	01/19/20	JLI	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	97			%	1	01/19/20	JLI	70 - 130 %
% Bromofluorobenzene	92			%	1	01/19/20	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	01/19/20	JLI	70 - 130 %
% Toluene-d8	98			%	1	01/19/20	JLI	70 - 130 %
Volatile Library Search Top 10	Completed					01/20/20	JLI	
Semivolatiles								
1,1-Biphenyl	ND	290	130	ug/Kg	1	01/20/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	290	150	ug/Kg	1	01/20/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	290	190	ug/Kg	1	01/20/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	290	230	ug/Kg	1	01/20/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	130	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dichlorophenol	ND	170	150	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrotoluene	ND	170	160	ug/Kg	1	01/20/20	WB	SW8270D
2,6-Dinitrotoluene	ND	170	130	ug/Kg	1	01/20/20	WB	SW8270D
2-Chloronaphthalene	ND	290	120	ug/Kg	1	01/20/20	WB	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylnaphthalene	ND	290	120	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	290	200	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitroaniline	ND	290	290	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	01/20/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	01/20/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	170	ug/Kg	1	01/20/20	WB	SW8270D
3-Nitroaniline	ND	830	290	ug/Kg	1	01/20/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	290	290	ug/Kg	1	01/20/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	290	150	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloroaniline	ND	830	190	ug/Kg	1	01/20/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitroaniline	ND	2100	140	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitrophenol	ND	290	190	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthene	ND	290	130	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthylene	ND	170	120	ug/Kg	1	01/20/20	WB	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	01/20/20	WB	SW8270D
Anthracene	ND	290	140	ug/Kg	1	01/20/20	WB	SW8270D
Atrazine	ND	290	110	ug/Kg	1	01/20/20	WB	SW8270D
Benz(a)anthracene	ND	290	140	ug/Kg	1	01/20/20	WB	SW8270D
Benzaldehyde	ND	290	120	ug/Kg	1	01/20/20	WB	SW8270D

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-2 1/16/2020

Phoenix I.D.: CF15553

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(a)pyrene	ND		170	140	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(b)fluoranthene	ND		290	140	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(ghi)perylene	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(k)fluoranthene	ND		290	140	ug/Kg	1	01/20/20	WB	SW8270D
Benzyl butyl phthalate	ND		290	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND		290	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethyl)ether	ND		170	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND		290	120	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND		290	120	ug/Kg	1	01/20/20	WB	SW8270D
Caprolactam	ND		290	290	ug/Kg	1	01/20/20	WB	SW8270D
Carbazole	ND		290	210	ug/Kg	1	01/20/20	WB	SW8270D
Chrysene	ND		290	140	ug/Kg	1	01/20/20	WB	SW8270D
Dibenz(a,h)anthracene	ND		170	130	ug/Kg	1	01/20/20	WB	SW8270D
Dibenzofuran	ND		290	120	ug/Kg	1	01/20/20	WB	SW8270D
Diethyl phthalate	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Dimethylphthalate	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-butylphthalate	ND		290	110	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-octylphthalate	ND		290	110	ug/Kg	1	01/20/20	WB	SW8270D
Fluoranthene	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Fluorene	ND		290	140	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobenzene	ND		170	120	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobutadiene	ND		290	150	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorocyclopentadiene	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Hexachloroethane	ND		170	120	ug/Kg	1	01/20/20	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND		290	140	ug/Kg	1	01/20/20	WB	SW8270D
Isophorone	ND		170	120	ug/Kg	1	01/20/20	WB	SW8270D
Naphthalene	ND		290	120	ug/Kg	1	01/20/20	WB	SW8270D
Nitrobenzene	ND		170	150	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodimethylamine	ND		290	120	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND		170	130	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodiphenylamine	ND		170	160	ug/Kg	1	01/20/20	WB	SW8270D
Pentachlorophenol	ND		290	160	ug/Kg	1	01/20/20	WB	SW8270D
Phenanthrene	180		170	120	ug/Kg	1	01/20/20	WB	SW8270D
Phenol	ND		290	130	ug/Kg	1	01/20/20	WB	SW8270D
Pyrene	170	J	290	140	ug/Kg	1	01/20/20	WB	SW8270D
QA/QC Surrogates									
% 2,4,6-Tribromophenol	58				%	1	01/20/20	WB	30 - 130 %
% 2-Fluorobiphenyl	69				%	1	01/20/20	WB	30 - 130 %
% 2-Fluorophenol	34				%	1	01/20/20	WB	30 - 130 %
% Nitrobenzene-d5	56				%	1	01/20/20	WB	30 - 130 %
% Phenol-d5	49				%	1	01/20/20	WB	30 - 130 %
% Terphenyl-d14	61				%	1	01/20/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed						01/20/20	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

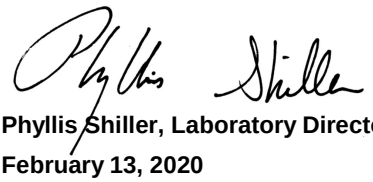
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SEDIMENT	Collected by:	MC	01/16/20	17:15
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15554

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-3 1/16/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Aluminum	15900		90	18	mg/Kg	10	01/19/20	EK	SW6010D
Arsenic	2.3		1.8	1.8	mg/Kg	1	01/20/20	EK	SW6010D
Barium	90.7		1.8	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Beryllium	0.43	J	0.72	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Calcium	25500	*	9.0	8.3	mg/Kg	1	01/20/20	EK	SW6010D
Cadmium	2.10		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Cobalt	12.2		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Chromium	23.4		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Copper	36.3	*	1.8	0.90	mg/kg	1	01/20/20	EK	SW6010D
Iron	20300		9.0	9.0	mg/Kg	1	01/20/20	EK	SW6010D
Mercury	0.06	J, N,	0.06	0.04	mg/Kg	2	01/21/20	RS	SW7471B
Potassium	1800	N	18	7.0	mg/Kg	1	01/20/20	EK	SW6010D
Magnesium	18800		90	90	mg/Kg	10	01/19/20	EK	SW6010D
Manganese	797	N	9.0	9.0	mg/Kg	10	01/19/20	EK	SW6010D
Sodium	528	*	18	7.7	mg/Kg	1	01/20/20	EK	SW6010D
Nickel	22.2		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Lead	120		1.8	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Antimony	ND		9.0	9.0	mg/Kg	1	01/20/20	EK	SW6010D
Selenium	ND		3.6	3.1	mg/Kg	1	01/20/20	EK	SW6010D
Thallium	ND		3.6	3.6	mg/Kg	1	01/20/20	EK	SW6010D
Vanadium	36.0		0.90	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Zinc	131		1.8	0.90	mg/Kg	1	01/20/20	EK	SW6010D
Percent Solid	37				%		01/17/20	VT	SW846-%Solid
Chloride	202		81	81	mg/kg	10	01/20/20	BS/EG	SW9056A
Total Cyanide (SW9010C Distill.)	ND		1.35	0.676	mg/Kg	1	01/20/20	O/GD	SW9012B
Soil Extraction for SVOA	Completed						01/17/20	R/K/LA	SW3545A
Mercury Digestion	Completed						01/21/20	LS/LS	SW7471B

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-3 1/16/2020

Phoenix I.D.: CF15554

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					01/17/20	JJ/AG/BF	SW3050B
1,4-dioxane								
1,4-dioxane	ND	200	110	ug/kg	1	01/19/20	JLI	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	1300	260	ug/Kg	50	01/19/20	JLI	SW8260C
1,1,2-Trichloroethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	1300	260	ug/Kg	50	01/19/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	1300	260	ug/Kg	50	01/19/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	1300	260	ug/Kg	50	01/19/20	JLI	SW8260C
1,2-Dibromoethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichlorobenzene	ND	1300	130	ug/Kg	50	01/19/20	JLI	SW8260C
1,2-Dichloroethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloropropane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
1,3-Dichlorobenzene	ND	1300	130	ug/Kg	50	01/19/20	JLI	SW8260C
1,4-Dichlorobenzene	ND	1300	130	ug/Kg	50	01/19/20	JLI	SW8260C
2-Hexanone	ND	68	14	ug/Kg	1	01/19/20	JLI	SW8260C
4-Methyl-2-pentanone	ND	68	14	ug/Kg	1	01/19/20	JLI	SW8260C
Acetone	ND	68	14	ug/Kg	1	01/19/20	JLI	SW8260C
Benzene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Bromochloromethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Bromodichloromethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Bromoform	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Bromomethane	ND	14	5.5	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon Disulfide	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon tetrachloride	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Chlorobenzene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroform	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Chloromethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,2-Dichloroethene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,3-Dichloropropene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Cyclohexane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Dibromochloromethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Dichlorodifluoromethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Ethylbenzene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Isopropylbenzene	ND	1300	130	ug/Kg	50	01/19/20	JLI	SW8260C
m&p-Xylene	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl ethyl ketone	ND	82	14	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	27	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Methylacetate	ND	14	14	ug/Kg	1	01/19/20	JLI	SW8260C
Methylcyclohexane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Methylene chloride	ND	14	14	ug/Kg	1	01/19/20	JLI	SW8260C
o-Xylene	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Styrene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Tetrachloroethene	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Total Xylenes	ND	14	14	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,2-Dichloroethene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,3-Dichloropropene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Trichloroethene	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorofluoromethane	ND	14	2.7	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorotrifluoroethane	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
Vinyl chloride	ND	14	1.4	ug/Kg	1	01/19/20	JLI	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	92			%	1	01/19/20	JLI	70 - 130 %
% Bromofluorobenzene	83			%	1	01/19/20	JLI	70 - 130 %
% Dibromofluoromethane	98			%	1	01/19/20	JLI	70 - 130 %
% Toluene-d8	93			%	1	01/19/20	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	99			%	50	01/19/20	JLI	70 - 130 %
% Bromofluorobenzene (50x)	94			%	50	01/19/20	JLI	70 - 130 %
% Dibromofluoromethane (50x)	95			%	50	01/19/20	JLI	70 - 130 %
% Toluene-d8 (50x)	97			%	50	01/19/20	JLI	70 - 130 %
Volatile Library Search Top 10	Completed					01/20/20	JLI	
Semivolatiles								
1,1-Biphenyl	ND	620	270	ug/Kg	1	01/20/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	620	310	ug/Kg	1	01/20/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	620	410	ug/Kg	1	01/20/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	620	480	ug/Kg	1	01/20/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	350	280	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dichlorophenol	ND	350	310	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dimethylphenol	ND	620	220	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrophenol	ND	620	620	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrotoluene	ND	350	350	ug/Kg	1	01/20/20	WB	SW8270D
2,6-Dinitrotoluene	ND	350	280	ug/Kg	1	01/20/20	WB	SW8270D
2-Chloronaphthalene	ND	620	250	ug/Kg	1	01/20/20	WB	SW8270D
2-Chlorophenol	ND	620	250	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylnaphthalene	ND	620	260	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	620	410	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitroaniline	ND	620	620	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitrophenol	ND	620	560	ug/Kg	1	01/20/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	620	350	ug/Kg	1	01/20/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	350	350	ug/Kg	1	01/20/20	WB	SW8270D
3-Nitroaniline	ND	1800	620	ug/Kg	1	01/20/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	620	620	ug/Kg	1	01/20/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	620	260	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	620	310	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloroaniline	ND	1800	410	ug/Kg	1	01/20/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	620	300	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitroaniline	ND	4400	290	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitrophenol	ND	620	400	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthene	ND	620	270	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthylene	ND	350	250	ug/Kg	1	01/20/20	WB	SW8270D
Acetophenone	ND	620	280	ug/Kg	1	01/20/20	WB	SW8270D

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-3 1/16/2020

Phoenix I.D.: CF15554

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Anthracene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Atrazine	ND		620	230	ug/Kg	1	01/20/20	WB	SW8270D
Benz(a)anthracene	ND		620	300	ug/Kg	1	01/20/20	WB	SW8270D
Benzaldehyde	350	J	620	260	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(a)pyrene	ND		350	290	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(b)fluoranthene	ND		620	300	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(ghi)perylene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(k)fluoranthene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Benzyl butyl phthalate	ND		620	230	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND		620	240	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethyl)ether	ND		350	240	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND		620	250	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND		620	250	ug/Kg	1	01/20/20	WB	SW8270D
Caprolactam	ND		620	620	ug/Kg	1	01/20/20	WB	SW8270D
Carbazole	ND		620	440	ug/Kg	1	01/20/20	WB	SW8270D
Chrysene	ND		620	300	ug/Kg	1	01/20/20	WB	SW8270D
Dibenz(a,h)anthracene	ND		350	290	ug/Kg	1	01/20/20	WB	SW8270D
Dibenzofuran	ND		620	260	ug/Kg	1	01/20/20	WB	SW8270D
Diethyl phthalate	ND		620	280	ug/Kg	1	01/20/20	WB	SW8270D
Dimethylphthalate	ND		620	270	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-butylphthalate	ND		620	230	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-octylphthalate	ND		620	230	ug/Kg	1	01/20/20	WB	SW8270D
Fluoranthene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Fluorene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobenzene	ND		350	260	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobutadiene	ND		620	320	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorocyclopentadiene	ND		620	270	ug/Kg	1	01/20/20	WB	SW8270D
Hexachloroethane	ND		350	260	ug/Kg	1	01/20/20	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND		620	290	ug/Kg	1	01/20/20	WB	SW8270D
Isophorone	ND		350	250	ug/Kg	1	01/20/20	WB	SW8270D
Naphthalene	ND		620	250	ug/Kg	1	01/20/20	WB	SW8270D
Nitrobenzene	ND		350	310	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodimethylamine	ND		620	250	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND		350	290	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodiphenylamine	ND		350	340	ug/Kg	1	01/20/20	WB	SW8270D
Pentachlorophenol	ND		620	330	ug/Kg	1	01/20/20	WB	SW8270D
Phenanthrene	ND		350	250	ug/Kg	1	01/20/20	WB	SW8270D
Phenol	ND		620	280	ug/Kg	1	01/20/20	WB	SW8270D
Pyrene	ND		620	300	ug/Kg	1	01/20/20	WB	SW8270D
QA/QC Surrogates									
% 2,4,6-Tribromophenol	58				%	1	01/20/20	WB	30 - 130 %
% 2-Fluorobiphenyl	39				%	1	01/20/20	WB	30 - 130 %
% 2-Fluorophenol	39				%	1	01/20/20	WB	30 - 130 %
% Nitrobenzene-d5	41				%	1	01/20/20	WB	30 - 130 %
% Phenol-d5	42				%	1	01/20/20	WB	30 - 130 %
% Terphenyl-d14	53				%	1	01/20/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed						01/20/20	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

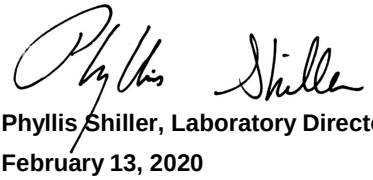
Comments:

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Volatile Comment:
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	SEDIMENT	Collected by:	MC	01/17/20	10:40
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15555

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-4 1/17/2020

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Aluminum	8800		36	7.3	mg/Kg	10	01/19/20	EK	SW6010D
Arsenic	1.32		0.73	0.73	mg/Kg	1	01/20/20	EK	SW6010D
Barium	57.9		0.7	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Beryllium	0.17	J	0.29	0.15	mg/Kg	1	01/20/20	EK	SW6010D
Calcium	3210	*	3.6	3.3	mg/Kg	1	01/20/20	EK	SW6010D
Cadmium	0.99		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Cobalt	11.9		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Chromium	12.8		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Copper	15.1	*	0.7	0.36	mg/kg	1	01/20/20	EK	SW6010D
Iron	24100		36	36	mg/Kg	10	01/19/20	EK	SW6010D
Mercury	ND	N, *	0.03	0.02	mg/Kg	2	01/21/20	RS	SW7471B
Potassium	730	N	7	2.8	mg/Kg	1	01/20/20	EK	SW6010D
Magnesium	5340		3.6	3.6	mg/Kg	1	01/20/20	EK	SW6010D
Manganese	1110	N	3.6	3.6	mg/Kg	10	01/19/20	EK	SW6010D
Sodium	66	*	7	3.1	mg/Kg	1	01/20/20	EK	SW6010D
Nickel	25.0		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Lead	32.0		0.7	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Antimony	ND		3.6	3.6	mg/Kg	1	01/20/20	EK	SW6010D
Selenium	ND		1.5	1.2	mg/Kg	1	01/20/20	EK	SW6010D
Thallium	ND		1.5	1.5	mg/Kg	1	01/20/20	EK	SW6010D
Vanadium	13.2		0.36	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Zinc	89.5		0.7	0.36	mg/Kg	1	01/20/20	EK	SW6010D
Percent Solid	81				%		01/17/20	VT	SW846-%Solid
Chloride	ND		37	37	mg/kg	10	01/20/20	BS/EG	SW9056A
Total Cyanide (SW9010C Distill.)	ND		0.56	0.278	mg/Kg	1	01/20/20	O/GD	SW9012B
Soil Extraction for SVOA	Completed						01/17/20	R/K/LA	SW3545A
Mercury Digestion	Completed						01/21/20	LS/LS	SW7471B

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: SD-4 1/17/2020

Phoenix I.D.: CF15555

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Metals Digest	Completed					01/17/20	JJ/AG/BF	SW3050B
1,4-dioxane								
1,4-dioxane	ND	74	40	ug/kg	1	01/19/20	JLI	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
2-Hexanone	ND	25	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
Acetone	ND	25	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Bromoform	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Chloromethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Cyclohexane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
m&p-Xylene	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl ethyl ketone	ND	30	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Methylacetate	ND	4.9	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
Methylcyclohexane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
o-Xylene	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Toluene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Total Xylenes	ND	4.9	4.9	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Trichloroethene	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.99	ug/Kg	1	01/19/20	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	01/19/20	JLI	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	96			%	1	01/19/20	JLI	70 - 130 %
% Bromofluorobenzene	93			%	1	01/19/20	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	01/19/20	JLI	70 - 130 %
% Toluene-d8	97			%	1	01/19/20	JLI	70 - 130 %
Volatile Library Search Top 10	Completed					01/20/20	JLI	

Semivolatiles

1,1-Biphenyl	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	01/20/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	280	190	ug/Kg	1	01/20/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	01/20/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	160	130	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dichlorophenol	ND	160	140	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dimethylphenol	ND	280	99	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	01/20/20	WB	SW8270D
2,4-Dinitrotoluene	ND	160	160	ug/Kg	1	01/20/20	WB	SW8270D
2,6-Dinitrotoluene	ND	160	130	ug/Kg	1	01/20/20	WB	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitroaniline	ND	280	280	ug/Kg	1	01/20/20	WB	SW8270D
2-Nitrophenol	ND	280	250	ug/Kg	1	01/20/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	01/20/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	160	160	ug/Kg	1	01/20/20	WB	SW8270D
3-Nitroaniline	ND	800	280	ug/Kg	1	01/20/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	280	280	ug/Kg	1	01/20/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	01/20/20	WB	SW8270D
4-Chloroaniline	ND	800	190	ug/Kg	1	01/20/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitroaniline	ND	2000	130	ug/Kg	1	01/20/20	WB	SW8270D
4-Nitrophenol	ND	280	180	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Acenaphthylene	ND	160	110	ug/Kg	1	01/20/20	WB	SW8270D
Acetophenone	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Anthracene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Atrazine	ND	280	100	ug/Kg	1	01/20/20	WB	SW8270D
Benz(a)anthracene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Benzaldehyde	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Benzo(a)pyrene	ND	160	130	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(b)fluoranthene	ND	280	140	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(ghi)perylene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Benzo(k)fluoranthene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroethyl)ether	ND	160	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Caprolactam	ND	280	280	ug/Kg	1	01/20/20	WB	SW8270D
Carbazole	ND	280	200	ug/Kg	1	01/20/20	WB	SW8270D
Chrysene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Dibenz(a,h)anthracene	ND	160	130	ug/Kg	1	01/20/20	WB	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-butylphthalate	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	01/20/20	WB	SW8270D
Fluoranthene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobenzene	ND	160	120	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorobutadiene	ND	280	150	ug/Kg	1	01/20/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Hexachloroethane	ND	160	120	ug/Kg	1	01/20/20	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Isophorone	ND	160	110	ug/Kg	1	01/20/20	WB	SW8270D
Naphthalene	ND	280	120	ug/Kg	1	01/20/20	WB	SW8270D
Nitrobenzene	ND	160	140	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	160	130	ug/Kg	1	01/20/20	WB	SW8270D
N-Nitrosodiphenylamine	ND	160	150	ug/Kg	1	01/20/20	WB	SW8270D
Pentachlorophenol	ND	280	150	ug/Kg	1	01/20/20	WB	SW8270D
Phenanthrene	ND	160	110	ug/Kg	1	01/20/20	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	01/20/20	WB	SW8270D
Pyrene	ND	280	140	ug/Kg	1	01/20/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	59			%	1	01/20/20	WB	30 - 130 %
% 2-Fluorobiphenyl	51			%	1	01/20/20	WB	30 - 130 %
% 2-Fluorophenol	35			%	1	01/20/20	WB	30 - 130 %
% Nitrobenzene-d5	42			%	1	01/20/20	WB	30 - 130 %
% Phenol-d5	43			%	1	01/20/20	WB	30 - 130 %
% Terphenyl-d14	60			%	1	01/20/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/20/20	MR	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

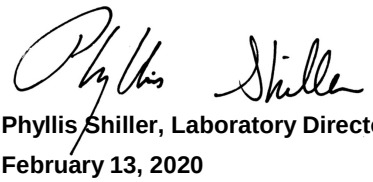
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	GROUND WATER	Collected by:	MC	01/16/20	
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15556

Project ID: NYSDOT HARRISON LANDFILL
Client ID: GW-DUP 1/16/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.021	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.025	0.011	mg/L	10	01/21/20	CPP	SW6010D
Barium (Dissolved)	0.086	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	42.4	0.01	0.003	mg/L	1	01/18/20	TH	SW6010D
Cadmium (Dissolved)	0.001	J 0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	0.013	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	40.7	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	3.4	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	17.2	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	13.2	0.053	0.011	mg/L	10	01/21/20	CPP	SW6010D
Sodium (Dissolved)	26.8	0.11	0.1	mg/L	1	01/18/20	TH	SW6010D
Nickel, (Dissolved)	0.001	J 0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	0.002	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	0.005	J 0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	20.5	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed					01/17/20	AG	SW3005A
Semivolatiles								
1,1-Biphenyl	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND	4.8	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND	4.8	4.8	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	4.8	0.86	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.8	2.3	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND	4.8	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND	4.8	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND	4.8	8.6	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND	4.8	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND	4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND	0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND	4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND	4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.8	1.6	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	71			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	54			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	33			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	40			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	41			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	73			%	1	01/23/20	WB	30 - 130 %
Semivolatiles								
Acenaphthylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	75			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	55			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	36			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	41			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	48			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	57			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

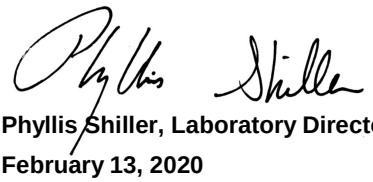
Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 13, 2020

Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	LIQUID	Collected by:	MC	01/17/20	12:55
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15557

Project ID: NYSDOT HARRISON LANDFILL
Client ID: FIELD BLANK 1/17/2020

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver (Dissolved)	ND	0.005	0.002	mg/L	1	01/18/20	TH	SW6010D
Aluminum (Dissolved)	0.019	0.011	0.0026	mg/L	1	01/18/20	TH	SW6010D
Arsenic, (Dissolved)	ND	0.003	0.001	mg/L	1	01/18/20	TH	SW6010D
Barium (Dissolved)	ND	0.011	0.001	mg/L	1	01/18/20	TH	SW6010D
Beryllium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Calcium (Dissolved)	0.02	0.01	0.003	mg/L	1	01/21/20	CPP	SW6010D
Cadmium (Dissolved)	ND	0.004	0.0005	mg/L	1	01/18/20	TH	SW6010D
Cobalt, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Chromium (Dissolved)	ND	0.001	0.001	mg/L	1	01/18/20	TH	SW6010D
Copper, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Iron, (Dissolved)	0.10	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Mercury (Dissolved)	ND	0.0002	0.00015	mg/L	1	01/21/20	RS	SW7470A
Potassium (Dissolved)	ND	0.1	0.1	mg/L	1	01/18/20	TH	SW6010D
Magnesium (Dissolved)	0.06	0.01	0.01	mg/L	1	01/18/20	TH	SW6010D
Manganese, (Dissolved)	ND	0.005	0.001	mg/L	1	01/18/20	TH	SW6010D
Sodium (Dissolved)	0.13	0.11	0.1	mg/L	1	01/18/20	TH	SW6010D
Nickel, (Dissolved)	ND	0.004	0.001	mg/L	1	01/18/20	TH	SW6010D
Lead (Dissolved)	ND	0.002	0.001	mg/L	1	01/18/20	TH	SW6010D
Antimony (Dissolved)-LDL	ND	0.001	0.001	mg/L	1	01/22/20	MGH	SW6020B
Selenium (Dissolved)-LDL	ND	0.003	0.002	mg/L	1	01/22/20	MGH	SW6020B
Thallium (Dissolved)	ND	0.0003	0.0001	mg/L	1	01/22/20	MGH	SW6020B
Vanadium, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Zinc, (Dissolved)	ND	0.011	0.002	mg/L	1	01/18/20	TH	SW6010D
Chloride	1.9 J	3.0	0.01	mg/L	1	01/20/20	TB	SM4500CLE-11
Total Cyanide	ND	0.010	0.005	mg/L	1	01/21/20	O/GD	SW9010C/SW9012B
Filtration	Completed					01/17/20	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					01/20/20	W/LS	SW7470A
Semi-Volatile Extraction	Completed					01/20/20	P/AK	SW3520C

Ver 2

Project ID: NYSDOT HARRISON LANDFILL
Client ID: FIELD BLANK 1/17/2020

Phoenix I.D.: CF15557

Parameter	Result		RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dissolved Metals Preparation	Completed						01/17/20	AG	SW3005A
Dissolved Metals Preparation	Completed						01/17/20	AG	SW3005A
Semivolatiles									
1,1-Biphenyl	ND		3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
1,2,4,5-Tetrachlorobenzene	ND		3.4	3.4	ug/L	1	01/23/20	WB	SW8270D
2,3,4,6-tetrachlorophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,5-Trichlorophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4,6-Trichlorophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dichlorophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dimethylphenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2,4-Dinitrotoluene	ND		4.8	1.9	ug/L	1	01/23/20	WB	SW8270D
2,6-Dinitrotoluene	ND		4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
2-Chloronaphthalene	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Chlorophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Methylnaphthalene	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
2-Methylphenol (o-cresol)	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
2-Nitroaniline	ND		4.8	4.8	ug/L	1	01/23/20	WB	SW8270D
2-Nitrophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND		4.8	0.86	ug/L	1	01/23/20	WB	SW8270D
3,3'-Dichlorobenzidine	ND		4.8	2.3	ug/L	1	01/23/20	WB	SW8270D
3-Nitroaniline	ND		4.8	10	ug/L	1	01/23/20	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND		1.0	1.0	ug/L	1	01/23/20	WB	SW8270D
4-Bromophenyl phenyl ether	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
4-Chloro-3-methylphenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
4-Chloroaniline	ND		4.8	2.2	ug/L	1	01/23/20	WB	SW8270D
4-Chlorophenyl phenyl ether	ND		4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitroaniline	ND		4.8	1.6	ug/L	1	01/23/20	WB	SW8270D
4-Nitrophenol	ND		1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
Acenaphthene	ND		4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Acetophenone	ND		4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Atrazine	ND		0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Benzaldehyde	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Benzyl butyl phthalate	ND		4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroethoxy)methane	ND		4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND		4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Bis(2-ethylhexyl)phthalate	2.9		0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Caprolactam	ND		4.8	8.6	ug/L	1	01/23/20	WB	SW8270D
Carbazole	ND		4.8	3.6	ug/L	1	01/23/20	WB	SW8270D
Dibenzofuran	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
Diethyl phthalate	3.5	J	4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Dimethylphthalate	ND		4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Di-n-butylphthalate	ND		4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Di-n-octylphthalate	ND		4.8	1.2	ug/L	1	01/23/20	WB	SW8270D
Hexachlorocyclopentadiene	ND		4.8	1.5	ug/L	1	01/23/20	WB	SW8270D
Hexachloroethane	ND		0.96	0.96	ug/L	1	01/23/20	WB	SW8270D
Isophorone	ND		4.8	1.3	ug/L	1	01/23/20	WB	SW8270D
Naphthalene	ND		4.8	1.4	ug/L	1	01/23/20	WB	SW8270D
N-Nitrosodi-n-propylamine	ND		4.8	1.6	ug/L	1	01/23/20	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
N-Nitrosodiphenylamine	ND	4.8	1.8	ug/L	1	01/23/20	WB	SW8270D
Phenol	ND	1.0	0.86	ug/L	1	01/23/20	WB	SW8270D
QA/QC Surrogates								
% 2,4,6-Tribromophenol	55			%	1	01/23/20	WB	15 - 110 %
% 2-Fluorobiphenyl	54			%	1	01/23/20	WB	30 - 130 %
% 2-Fluorophenol	35			%	1	01/23/20	WB	15 - 110 %
% Nitrobenzene-d5	50			%	1	01/23/20	WB	30 - 130 %
% Phenol-d5	43			%	1	01/23/20	WB	15 - 110 %
% Terphenyl-d14	56			%	1	01/23/20	WB	30 - 130 %
Semivolatiles								
Acenaphthylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Bis(2-chloroethyl)ether	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluoranthene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Fluorene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Hexachlorocyclopentadiene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	01/22/20	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	01/22/20	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.19	0.19	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Phenanthrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
Pyrene	ND	0.48	0.48	ug/L	1	01/22/20	WB	SW8270D (SIM)
QA/QC Surrogates								
% 2,4,6-Tribromophenol	67			%	1	01/22/20	WB	15 - 110 %
% 2-Fluorobiphenyl	52			%	1	01/22/20	WB	30 - 130 %
% 2-Fluorophenol	42			%	1	01/22/20	WB	15 - 110 %
% Nitrobenzene-d5	50			%	1	01/22/20	WB	30 - 130 %
% Phenol-d5	49			%	1	01/22/20	WB	15 - 110 %
% Terphenyl-d14	57			%	1	01/22/20	WB	30 - 130 %
SVOA Library Search Top 15	Completed					01/23/20	WB	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Total Cyanide:
Chlorine was present; Sample was de-chlorinated prior to digestion/analysis. (EPA requires dechlorination at time of sampling.) A sample bias can not be ruled out.

Semi-Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
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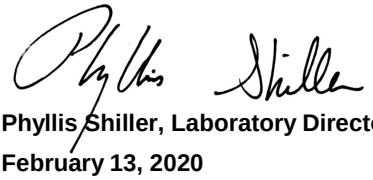

Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 13, 2020

FOR: Attn: Marc Califano
Cashin Associates, PC
1200 Veterans Memorial Highway
Hauppauge, NY 11788

Sample Information		Custody Information		Date	Time
Matrix:	LIQUID	Collected by:	MC	01/16/20	
Location Code:	CASHIN-NY	Received by:	CP	01/17/20	16:16
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:	D037853.01				

Laboratory Data

SDG ID: GCF15543
Phoenix ID: CF15558

Project ID: NYSDOT HARRISON LANDFILL
Client ID: TRIP BLANK

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,4-dioxane								
1,4-dioxane	ND	100	50	ug/l	1	01/24/20	PS	SW8260C
Volatiles								
1,1,1-Trichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,1-Dichloroethane	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2-Dibromo-3-chloropropane	ND	0.50	0.50	ug/L	1	01/24/20	PS	SW8260C
1,2-Dibromoethane	ND	0.25	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2-Dichloroethane	ND	0.60	0.25	ug/L	1	01/24/20	PS	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,3-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
1,4-Dichlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	01/24/20	PS	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	01/24/20	PS	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	01/24/20	PS	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	01/24/20	PS	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Bromoform	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Bromomethane	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C

Project ID: NYSDOT HARRISON LANDFILL
Client ID: TRIP BLANK

Phoenix I.D.: CF15558

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Chlorobenzene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Chloroethane	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Chloroform	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Chloromethane	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	PS	SW8260C
Cyclohexane	ND	5.0	0.50	ug/L	1	01/24/20	PS	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Methyl ethyl ketone	ND	5.0	2.5	ug/L	1	01/24/20	PS	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Methylacetate	ND	2.5	2.5	ug/L	1	01/24/20	PS	SW8260C
Methylcyclohexane	ND	2.0	0.50	ug/L	1	01/24/20	PS	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	01/24/20	PS	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Toluene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Total Xylenes	ND	1.0	1.0	ug/L	1	01/24/20	PS	SW8260C
trans-1,2-Dichloroethene	ND	2.0	0.25	ug/L	1	01/24/20	PS	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	01/24/20	PS	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	01/24/20	PS	SW8260C
QA/QC Surrogates								
% 1,2-dichlorobenzene-d4	101			%	1	01/24/20	PS	70 - 130 %
% Bromofluorobenzene	93			%	1	01/24/20	PS	70 - 130 %
% Dibromofluoromethane	97			%	1	01/24/20	PS	70 - 130 %
% Toluene-d8	101			%	1	01/24/20	PS	70 - 130 %
Volatile Library Search Top 10	Completed					01/27/20	MH	

Project ID: NYSDOT HARRISON LANDFILL
Client ID: TRIP BLANK

Phoenix I.D.: CF15558

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

Volatile Comment:
To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
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Phyllis Shiller, Laboratory Director
February 13, 2020
Reviewed and Released by: Maryam Taylor, Project Manager

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PC-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15543

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_11.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PC-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15544

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_12.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

PC-3 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15545

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_13.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

LMW-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15546

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_14.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: LMW-4 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15547

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_15.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15548

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_16.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15549

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_17.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-3 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15550

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_18.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-4 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15551

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_19.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: CF15552 BLK

Lab Name: Phoenix Environmental Labs Client:

Lab Code: Phoenix Case No.: SAS No.: SDG No.:

Matrix:(soil/water) Soil Lab Sample ID: CF15552 BLK

Sample wt/vol: 5 (g/mL) g Lab File ID: 0120_12.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. n.a. Date Analyzed: 01/20/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

SD-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15552

Sample wt/vol: 2.8 (g/mL) g Lab File ID: 0119_34.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 72 Date Analyzed: 01/19/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15553

Sample wt/vol: 6.13 (g/mL) g Lab File ID: 0119_35.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 22 Date Analyzed: 01/19/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: CF15554 BLK

Lab Name: Phoenix Environmental Labs Client:

Lab Code: Phoenix Case No.: SAS No.: SDG No.:

Matrix:(soil/water) Soil Lab Sample ID: CF15554 BLK

Sample wt/vol: 5 (g/mL) g Lab File ID: 0119_23.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. n.a. Date Analyzed: 01/19/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

CLIENT ID

SD-3 1/16/2020

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15554

Sample wt/vol: 4.94 (g/mL) g Lab File ID: 0119_37.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 63 Date Analyzed: 01/19/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-4 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15555

Sample wt/vol: 6.28 (g/mL) g Lab File ID: 0119_38.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 19 Date Analyzed: 01/19/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 5000 (uL) Soil Aliquot Vol (uL): 5000

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: CF15558 BLK

Lab Name: Phoenix Environmental Labs Client:

Lab Code: Phoenix Case No.: SAS No.: SDG No.:

Matrix:(soil/water) Water Lab Sample ID: CF15558 BLK

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_07.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. n.a. Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID

TRIP BLANK

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) LIQUID Lab Sample ID: CF15558

Sample wt/vol: 25 (g/mL) mL Lab File ID: 0124_08.D

Level: (low/med) Date Received: 01/17/20

% Moisture: not dec. 100 Date Analyzed: 01/24/20

GC Column: RTX-VMS ID: 0.18mm Dilution Factor: 1

Purge Volume: 25000 (uL) Soil Aliquot Vol (uL): n.a.

CONCENTRATION UNITS:
Number TICs found: 0 (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: CF15543 BLK

Lab Name: Phoenix Environmental Labs Client:

Lab Code: Phoenix Case No.: SAS No.: SDG No.:

Matrix:(soil/water) Water Lab Sample ID: CF15543 BLK

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0122_19.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. n.a. decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	12.052	4.5	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PC-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15543

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0122_22.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	5.007	21	J
	unknown hydrocarbon	5.272	29	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: PC-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15544

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0122_23.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	12.046	7.5	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

CLIENT ID

PC-3 1/17/2020

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15545

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0123_16.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: LMW-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15546

Sample wt/vol: 1050 (g/mL) mL Lab File ID: 0122_25.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	3.521	4.7	J
	unknown hydrocarbon	12.046	7.2	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: LMW-4 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15547

Sample wt/vol: 1045 (g/mL) mL Lab File ID: 0123_17.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15548

Sample wt/vol: 1035 (g/mL) mL Lab File ID: 0122_27.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	12.046	4.7	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-2 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15549

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0122_28.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	5.007	7.6	J
	unknown hydrocarbon	5.272	15	J
	unknown hydrocarbon	12.046	4.4	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-3 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15550

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0122_29.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	12.052	4.3	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SW-4 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SURFACE WATER Lab Sample ID: CF15551

Sample wt/vol: 1065 (g/mL) mL Lab File ID: 0122_30.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	5.272	6.1	J
	unknown hydrocarbon	12.046	4	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-1 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15552

Sample wt/vol: 15.48 (g/mL) g Lab File ID: 0119_47.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 72 decanted:(Y/N) NA Date Extracted: 01/20/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/20/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.075	3600	JNA
000629-92-5	Nonadecane	11.417	1600	JN
000638-66-4	Octadecanal	12.621	1100	JN
	unknown hydrocarbon	14.619	1600	J
	unknown hydrocarbon	19.102	1100	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-2 1/16/2020

Lab Name: Phoenix Environmental Labs | Client: CASHIN-NY

Lab Code: Phoenix | Case No.: | SAS No.: | SDG No.: GCF15543

Matrix:(soil/water): SEDIMENT | Lab Sample ID: CF15553

Sample wt/vol: 15.43 (g/mL) g | Lab File ID: 0119_48.D

Level: (low/med): Low | Date Received: 01/17/20

% Moisture: not dec. 22 | decanted:(Y/N) NA | Date Extracted: 01/20/20

GPC Cleanup (Y/N): N | pH: NA | Date Analyzed: 1/20/2020

Conc. Extract Volume: 1000 (uL) | Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 | CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.075	5600	JNA

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-3 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15554

Sample wt/vol: 15.32 (g/mL) g Lab File ID: 0119_49.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 63 decanted:(Y/N) NA Date Extracted: 01/20/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/20/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.075	2200	JNA
	unknown hydrocarbon	10.512	910	J
000593-45-3	Octadecane	11.417	780	JN
000638-66-4	Octadecanal	14.625	750	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: SD-4 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) SEDIMENT Lab Sample ID: CF15555

Sample wt/vol: 15.39 (g/mL) g Lab File ID: 0119_50.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 19 decanted:(Y/N) NA Date Extracted: 01/20/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/20/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/KG) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	2.081	4100	JNA
000112-95-8	Eicosane	10.136	580	JN
013475-76-8	Docosane, 11-butyl-	11.417	700	JN
067860-04-2	Oxirane, heptadecyl-	12.621	380	JN
000638-66-4	Octadecanal	14.619	340	JN

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: GW-DUP 1/16/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) GROUND WATER Lab Sample ID: CF15556

Sample wt/vol: 1040 (g/mL) mL Lab File ID: 0122_31.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT ID: FIELD BLANK 1/17/2020

Lab Name: Phoenix Environmental Labs Client: CASHIN-NY

Lab Code: Phoenix Case No.: SAS No.: SDG No.: GCF15543

Matrix:(soil/water) LIQUID Lab Sample ID: CF15557

Sample wt/vol: 1040 (g/mL) mL Lab File ID: 0122_32.D

Level: (low/med) Low Date Received: 01/17/20

% Moisture: not dec. 100 decanted:(Y/N) NA Date Extracted: 01/23/20

GPC Cleanup (Y/N): N pH: NA Date Analyzed: 1/23/2020

Conc. Extract Volume: 1000 (uL) Dilution Factor 1

Injection Volume: 1 (uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown hydrocarbon	5.272	4.1	J

FORM I SEMIVOA-TIC

A - Indicates that the tentatively identified compound is a suspected aldol condensation product. Aldol condensation products are produced during the extraction process.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

February 13, 2020

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 515024 (mg/kg), QC Sample No: CF14308 2X (CF15552, CF15553, CF15554, CF15555)														
Mercury - Soil	BRL	0.02	0.22	0.57	88.6	117	97.8	17.9	61.7	98.1	45.6	75 - 125	30	m,r
QA/QC Batch 514956 (mg/L), QC Sample No: CF14345 (CF15548, CF15549, CF15550, CF15551)														
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	108			104			75 - 125	20	
QA/QC Batch 514951 (mg/L), QC Sample No: CF15557 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15556, CF15557)														
Mercury (Dissolved)	BRL	0.0002	<0.0002	<0.0003	NC	105			112			75 - 125	20	
QA/QC Batch 514875 (mg/L), QC Sample No: CF15546 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15556, CF15557)														
ICP Metals - Dissolved														
Aluminum	BRL	0.011	0.028	0.029	NC	89.2	87.9	1.5	90.2			80 - 120	20	
Arsenic	BRL	0.004	<0.005	<0.004	NC	92.4	91.3	1.2	93.7			80 - 120	20	
Barium	BRL	0.002	0.111	0.112	0.90	92.3	91.1	1.3	90.9			80 - 120	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	95.6	94.6	1.1	95.6			80 - 120	20	
Cadmium	BRL	0.001	<0.004	<0.001	NC	93.0	91.8	1.3	90.5			80 - 120	20	
Calcium	BRL	0.02	74.5	74.8	0.40	91.7	90.2	1.6	NC			80 - 120	20	
Chromium	BRL	0.001	<0.001	<0.001	NC	92.3	90.8	1.6	91.1			80 - 120	20	
Cobalt	BRL	0.001	0.001 J	0.001	NC	95.7	94.1	1.7	93.6			80 - 120	20	
Copper	BRL	0.005	0.003 J	0.003	NC	91.5	90.2	1.4	92.9			80 - 120	20	
Iron	BRL	0.011	0.02	0.018	NC	94.8	93.2	1.7	93.5			80 - 120	20	
Lead	BRL	0.002	<0.002	<0.002	NC	90.4	89.0	1.6	88.6			80 - 120	20	
Magnesium	BRL	0.01	25.5	25.7	0.80	98.3	97.0	1.3	NC			80 - 120	20	
Manganese	BRL	0.001	0.163	0.165	1.20	93.2	92.0	1.3	92.3			80 - 120	20	
Nickel	BRL	0.001	0.003 J	0.003	NC	91.5	90.0	1.7	89.0			80 - 120	20	
Potassium	BRL	0.1	4.0	3.9	2.50	93.2	93.6	0.4	94.0			80 - 120	20	
Silver	BRL	0.001	<0.005	<0.001	NC	86.5	85.6	1.0	86.9			70 - 130	30	
Sodium	BRL	0.11	23.7	23.9	0.80	103	99.6	3.4	NC			80 - 120	20	
Vanadium	BRL	0.002	0.002 J	<0.002	NC	90.5	89.5	1.1	90.3			80 - 120	20	
Zinc	BRL	0.002	<0.011	<0.002	NC	91.9	90.7	1.3	91.4			80 - 120	20	
QA/QC Batch 515064 (mg/L), QC Sample No: CF15548 (CF15548, CF15549, CF15550, CF15551)														
ICP Metals - Aqueous														
Aluminum	BRL	0.020	1.02 *	0.816	22.2	95.7	95.8	0.1	96.9			80 - 120	20	r
Arsenic	BRL	0.004	<0.004	<0.004	NC	101	102	1.0	103			80 - 120	20	
Barium	BRL	0.002	0.210	0.196	6.90	99.8	100	0.2	101			80 - 120	20	
Beryllium	BRL	0.001	<0.001	<0.001	NC	105	104	1.0	106			80 - 120	20	
Cadmium	BRL	0.001	<0.004	<0.001	NC	102	102	0.0	103			80 - 120	20	
Calcium	BRL	0.010	68.5	64.9	5.40	99.6	100	0.4	105			80 - 120	20	
Chromium	BRL	0.001	0.002	0.002	NC	101	100	1.0	102			80 - 120	20	
Cobalt	BRL	0.002	0.005	0.005	NC	99.8	99.4	0.4	101			80 - 120	20	
Copper	BRL	0.005	0.003 J	0.004	NC	99.5	100	0.5	101			80 - 120	20	
Iron	BRL	0.010	26.7	25.1	6.20	103	102	1.0	106			80 - 120	20	
Lead	BRL	0.002	0.006	0.005	NC	99.4	99.7	0.3	101			80 - 120	20	
Magnesium	BRL	0.010	16.5	15.6	5.60	100	100	0.0	102			80 - 120	20	
Manganese	BRL	0.001	16.1	15.2	5.80	101	101	0.0	104			80 - 120	20	

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Nickel	BRL	0.001	<0.004	0.003	NC	100	99.6	0.4	101			80 - 120	20	
Potassium	BRL	0.1	5.0	4.6	8.30	98.8	96.3	2.6	99.1			80 - 120	20	
Silver	BRL	0.001	<0.005	<0.005	NC	98.0	97.2	0.8	99.6			70 - 130	30	
Sodium	BRL	0.10	14.3	13.5	5.80	100	97.5	2.5	101			80 - 120	20	
Vanadium	BRL	0.002	<0.010	<0.002	NC	99.6	100	0.4	101			80 - 120	20	
Zinc	BRL	0.004	0.045	0.018	NC	100	99.6	0.4	102			80 - 120	20	
QA/QC Batch 514827 (mg/kg), QC Sample No: CF15604 (CF15552, CF15553, CF15554, CF15555)														
ICP Metals - Soil														
Aluminum	BRL	5.0	5910	5290	11.1	101	99.0	2.0	NC			80 - 120	30	
Antimony	BRL	3.3	<3.4	<3.3	NC	95.8	97.1	1.3	98.7			70 - 130	30	
Arsenic	BRL	0.67	3.39	2.87	NC	107	104	2.8	102			80 - 120	30	
Barium	BRL	0.33	83.5	76.0	9.40	101	102	1.0	109			80 - 120	30	
Beryllium	BRL	0.27	0.25 J	0.23	NC	98.6	106	7.2	103			80 - 120	30	
Cadmium	BRL	0.33	0.46	0.44	NC	100	107	6.8	99.2			80 - 120	30	
Calcium	BRL	5.0	2110 *	2910	31.9	94.8	97.7	3.0	NC			80 - 120	30	r
Chromium	BRL	0.33	9.65	10.3	6.50	102	99.8	2.2	102			80 - 120	30	
Cobalt	BRL	0.33	4.33	3.91	10.2	98.6	103	4.4	102			80 - 120	30	
Copper	BRL	0.67	8.1 *	5.87	31.9	102	103	1.0	102			80 - 120	30	r
Iron	BRL	5.0	12200	10700	13.1	97.4	90.2	7.7	NC			80 - 120	30	
Lead	BRL	0.33	3.9	3.90	0	98.9	97.0	1.9	98.0			80 - 120	30	
Magnesium	BRL	5.0	1720	1500	13.7	100	100	0.0	NC			80 - 120	30	
Manganese	BRL	0.33	153 N	145	5.40	98.8	99.9	1.1	130			80 - 120	30	m
Nickel	BRL	0.33	7.64	6.39	17.8	101	104	2.9	99.6			80 - 120	30	
Potassium	BRL	5.0	630 N	519	19.3	99.7	98.7	1.0	>130			80 - 120	30	m
Selenium	BRL	1.3	<1.4	<1.3	NC	99.0	97.2	1.8	99.1			80 - 120	30	
Silver	BRL	0.33	<0.34	<0.33	NC	98.6	94.6	4.1	100			70 - 130	30	
Sodium	BRL	5.0	134 *	81.8	48.4	91.9	92.0	0.1	81.8			80 - 120	30	r
Thallium	BRL	3.0	<1.4	<2.9	NC	102	105	2.9	103			80 - 120	30	
Vanadium	BRL	0.33	16.8	15.4	8.70	107	103	3.8	102			80 - 120	30	
Zinc	BRL	0.67	21.2	19.1	10.4	101	101	0.0	102			80 - 120	30	
QA/QC Batch 514894 (mg/L), QC Sample No: CF15545 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15556, CF15557)														
ICP Metals MS - Dissolved														
Antimony	BRL	0.0003	<0.001	<0.0003	NC	90.4	91.5	1.2	94.1			80 - 120	20	
Selenium	BRL	0.002	<0.003	0.000	NC	88.8	88.2	0.7	91.0			80 - 120	20	
Thallium	BRL	0.0003	<0.0003	<0.0003	NC	94.3	92.4	2.0	91.5			80 - 120	20	
QA/QC Batch 515063 (mg/L), QC Sample No: CF15550 5X (CF15548, CF15549, CF15550, CF15551)														
ICP MS Metals - Aqueous														
Antimony	BRL	0.0030	<0.0030	<0.0030	NC	109	106	2.8	106			80 - 120	20	
Selenium	BRL	0.010	<0.010	<0.010	NC	111	109	1.8	110			80 - 120	20	
Thallium	BRL	0.0005	<0.0005	<0.0005	NC	108	104	3.8	105			80 - 120	20	

m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.

Environmental Laboratories, Inc.
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NY # 11301

QA/QC Report

February 13, 2020

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 514935 (mg/Kg), QC Sample No: CF15509 50X (CF15552, CF15553, CF15554, CF15555)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.59	<0.59	NC	102			92.0			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 515085 (mg/L), QC Sample No: CF15557 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15548, CF15549, CF15550, CF15551, CF15556, CF15557)													
Total Cyanide	BRL	0.010	<0.010	<0.010	NC	92.9			95.0			90 - 110	20
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 515156 (mg/L), QC Sample No: CF15634 (CF15552, CF15553, CF15554, CF15555)													
Chloride	BRL	3.0	132	134	1.50	109			99.6			90 - 110	20
QA/QC Batch 514661 (mg/L), QC Sample No: CF14024 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15548)													
Chloride	BRL	3.0	20.4	19.9	2.50	96.8			104			90 - 110	20
QA/QC Batch 515119 (mg/L), QC Sample No: CF15557 (CF15549, CF15550, CF15551, CF15556, CF15557)													
Chloride	1.7 J	3.0	1.9 J	1.9 J	NC	97.2			99.1			90 - 110	20

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NY # 11301

QA/QC Report

February 13, 2020

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 515068 (ug/L), QC Sample No: CF15543 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15548, CF15549, CF15550, CF15551, CF15556, CF15557)											
Semivolatiles - Ground Water, Surface Water, Liquid											
1,1-Biphenyl	ND	3.5	73						30 - 130	20	
1,2,4,5-Tetrachlorobenzene	ND	3.5	67						30 - 130	20	
2,3,4,6-tetrachlorophenol	ND	3.5	83						30 - 130	20	
2,4,5-Trichlorophenol	ND	1.0	82						30 - 130	20	
2,4,6-Trichlorophenol	ND	1.0	82						30 - 130	20	
2,4-Dichlorophenol	ND	1.0	74						30 - 130	20	
2,4-Dimethylphenol	ND	1.0	77						30 - 130	20	
2,4-Dinitrophenol	ND	1.0	65						30 - 130	20	
2,4-Dinitrotoluene	ND	3.5	86						30 - 130	20	
2,6-Dinitrotoluene	ND	3.5	82						30 - 130	20	
2-Chloronaphthalene	ND	3.5	76						30 - 130	20	
2-Chlorophenol	ND	1.0	61						30 - 130	20	
2-Methylnaphthalene	ND	3.5	70						30 - 130	20	
2-Methylphenol (o-cresol)	ND	1.0	72						30 - 130	20	
2-Nitroaniline	ND	3.5	105						30 - 130	20	
2-Nitrophenol	ND	1.0	68						30 - 130	20	
3&4-Methylphenol (m&p-cresol)	ND	1.0	72						30 - 130	20	
3,3'-Dichlorobenzidine	ND	5.0	25						30 - 130	20	I
3-Nitroaniline	ND	5.0	89						30 - 130	20	
4,6-Dinitro-2-methylphenol	ND	1.0	82						30 - 130	20	
4-Bromophenyl phenyl ether	ND	3.5	85						30 - 130	20	
4-Chloro-3-methylphenol	ND	1.0	83						30 - 130	20	
4-Chloroaniline	ND	3.5	40						30 - 130	20	
4-Chlorophenyl phenyl ether	ND	1.0	80						30 - 130	20	
4-Nitroaniline	ND	5.0	87						30 - 130	20	
4-Nitrophenol	ND	1.0	80						30 - 130	20	
Acenaphthene	ND	1.5	80						30 - 130	20	
Acetophenone	ND	3.5	69						30 - 130	20	
Atrazine	ND	3.5	35						30 - 130	20	
Benzaldehyde	ND	3.5	109						30 - 130	20	
Benzyl butyl phthalate	ND	1.5	96						30 - 130	20	
Bis(2-chloroethoxy)methane	ND	3.5	71						30 - 130	20	
Bis(2-chloroisopropyl)ether	ND	1.0	58						30 - 130	20	
Bis(2-ethylhexyl)phthalate	ND	1.5	99						30 - 130	20	
Caprolactam	ND	3.5	78						30 - 130	20	
Carbazole	ND	5.0	90						30 - 130	20	
Dibenzofuran	ND	3.5	80						30 - 130	20	
Diethyl phthalate	ND	1.5	92						30 - 130	20	
Dimethylphthalate	ND	1.5	88						30 - 130	20	
Di-n-butylphthalate	ND	1.5	96						30 - 130	20	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Di-n-octylphthalate	ND	1.5	86						30 - 130	20	
Hexachlorocyclopentadiene	ND	3.5	36						30 - 130	20	
Hexachloroethane	ND	3.5	58						30 - 130	20	
Isophorone	ND	3.5	72						30 - 130	20	
Naphthalene	ND	1.5	66						30 - 130	20	
N-Nitrosodi-n-propylamine	ND	3.5	77						30 - 130	20	
N-Nitrosodiphenylamine	ND	3.5	84						30 - 130	20	
Phenol	ND	1.0	55						30 - 130	20	
% 2,4,6-Tribromophenol	41	%	88						15 - 110	20	
% 2-Fluorobiphenyl	64	%	70						30 - 130	20	
% 2-Fluorophenol	49	%	44						15 - 110	20	
% Nitrobenzene-d5	46	%	62						30 - 130	20	
% Phenol-d5	34	%	49						15 - 110	20	
% Terphenyl-d14	62	%	77						30 - 130	20	

Comment:

This batch consists of a Blank and LCS (LCSD was lost during extraction)

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 514845 (ug/kg), QC Sample No: CF15605 (CF15552, CF15553, CF15554, CF15555)

Semivolatiles - Sediment

1,1-Biphenyl	ND	230	66	69	4.4	71	60	16.8	30 - 130	30	
1,2,4,5-Tetrachlorobenzene	ND	230	67	68	1.5	76	66	14.1	30 - 130	30	
2,3,4,6-tetrachlorophenol	ND	230	74	79	6.5	86	71	19.1	30 - 130	30	
2,4,5-Trichlorophenol	ND	230	77	81	5.1	81	69	16.0	30 - 130	30	
2,4,6-Trichlorophenol	ND	130	78	84	7.4	83	70	17.0	30 - 130	30	
2,4-Dichlorophenol	ND	130	73	78	6.6	82	72	13.0	30 - 130	30	
2,4-Dimethylphenol	ND	230	72	76	5.4	76	69	9.7	30 - 130	30	
2,4-Dinitrophenol	ND	230	37	41	10.3	20	12	50.0	30 - 130	30	m,r
2,4-Dinitrotoluene	ND	130	75	76	1.3	84	74	12.7	30 - 130	30	
2,6-Dinitrotoluene	ND	130	70	74	5.6	76	68	11.1	30 - 130	30	
2-Chloronaphthalene	ND	230	69	70	1.4	72	64	11.8	30 - 130	30	
2-Chlorophenol	ND	230	61	65	6.3	71	63	11.9	30 - 130	30	
2-Methylnaphthalene	ND	230	64	63	1.6	71	62	13.5	30 - 130	30	
2-Methylphenol (o-cresol)	ND	230	65	76	15.6	76	67	12.6	30 - 130	30	
2-Nitroaniline	ND	330	92	87	5.6	105	94	11.1	30 - 130	30	
2-Nitrophenol	ND	230	58	58	0.0	65	57	13.1	30 - 130	30	
3&4-Methylphenol (m&p-cresol)	ND	230	65	77	16.9	75	66	12.8	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	62	55	12.0	90	76	16.9	30 - 130	30	
3-Nitroaniline	ND	330	69	69	0.0	93	81	13.8	30 - 130	30	
4,6-Dinitro-2-methylphenol	ND	230	56	59	5.2	37	24	42.6	30 - 130	30	m,r
4-Bromophenyl phenyl ether	ND	230	73	84	14.0	79	72	9.3	30 - 130	30	
4-Chloro-3-methylphenol	ND	230	76	81	6.4	85	77	9.9	30 - 130	30	
4-Chloroaniline	ND	230	41	41	0.0	69	63	9.1	30 - 130	30	
4-Chlorophenyl phenyl ether	ND	230	70	75	6.9	78	68	13.7	30 - 130	30	
4-Nitroaniline	ND	230	68	72	5.7	74	65	12.9	30 - 130	30	
4-Nitrophenol	ND	230	56	56	0.0	58	49	16.8	30 - 130	30	
Acenaphthene	ND	230	70	72	2.8	75	65	14.3	30 - 130	30	
Acenaphthylene	ND	130	69	70	1.4	74	65	12.9	30 - 130	30	
Acetophenone	ND	230	54	58	7.1	65	58	11.4	30 - 130	30	
Anthracene	ND	230	73	79	7.9	80	72	10.5	30 - 130	30	
Atrazine	ND	130	48	53	9.9	53	47	12.0	30 - 130	30	
Benz(a)anthracene	ND	230	76	83	8.8	84	75	11.3	30 - 130	30	

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
Benzaldehyde	ND	230	45	60	28.6	31	26	17.5	30 - 130	30	m
Benzo(a)pyrene	ND	130	77	84	8.7	85	77	9.9	30 - 130	30	
Benzo(b)fluoranthene	ND	160	73	84	14.0	80	71	11.9	30 - 130	30	
Benzo(ghi)perylene	ND	230	62	62	0.0	74	68	8.5	30 - 130	30	
Benzo(k)fluoranthene	ND	230	71	79	10.7	76	70	8.2	30 - 130	30	
Benzyl butyl phthalate	ND	230	78	85	8.6	85	75	12.5	30 - 130	30	
Bis(2-chloroethoxy)methane	ND	230	62	62	0.0	68	60	12.5	30 - 130	30	
Bis(2-chloroethyl)ether	ND	130	44	42	4.7	54	47	13.9	30 - 130	30	
Bis(2-chloroisopropyl)ether	ND	230	39	39	0.0	48	42	13.3	30 - 130	30	
Bis(2-ethylhexyl)phthalate	ND	230	75	79	5.2	81	73	10.4	30 - 130	30	
Caprolactam	ND	230	66	67	1.5	81	74	9.0	30 - 130	30	
Carbazole	ND	230	76	81	6.4	82	75	8.9	30 - 130	30	
Chrysene	ND	230	75	81	7.7	82	73	11.6	30 - 130	30	
Dibenz(a,h)anthracene	ND	130	71	73	2.8	79	73	7.9	30 - 130	30	
Dibenzofuran	ND	230	70	71	1.4	76	66	14.1	30 - 130	30	
Diethyl phthalate	ND	230	72	71	1.4	76	68	11.1	30 - 130	30	
Dimethylphthalate	ND	230	73	75	2.7	79	69	13.5	30 - 130	30	
Di-n-butylphthalate	ND	670	77	79	2.6	84	76	10.0	30 - 130	30	
Di-n-octylphthalate	ND	230	77	80	3.8	87	77	12.2	30 - 130	30	
Fluoranthene	ND	230	74	76	2.7	81	74	9.0	30 - 130	30	
Fluorene	ND	230	71	73	2.8	78	68	13.7	30 - 130	30	
Hexachlorobenzene	ND	130	66	73	10.1	72	65	10.2	30 - 130	30	
Hexachlorobutadiene	ND	230	62	56	10.2	69	61	12.3	30 - 130	30	
Hexachlorocyclopentadiene	ND	230	36	45	22.2	34	24	34.5	30 - 130	30	m,r
Hexachloroethane	ND	130	48	40	18.2	54	48	11.8	30 - 130	30	
Indeno(1,2,3-cd)pyrene	ND	230	72	76	5.4	81	74	9.0	30 - 130	30	
Isophorone	ND	130	56	57	1.8	61	55	10.3	30 - 130	30	
Naphthalene	ND	230	63	59	6.6	69	61	12.3	30 - 130	30	
Nitrobenzene	ND	130	52	56	7.4	64	55	15.1	30 - 130	30	
N-Nitrosodimethylamine	ND	230	31	23	29.6	35	30	15.4	30 - 130	30	l
N-Nitrosodi-n-propylamine	ND	130	57	63	10.0	66	60	9.5	30 - 130	30	
N-Nitrosodiphenylamine	ND	130	81	83	2.4	88	76	14.6	30 - 130	30	
Pentachlorophenol	ND	230	61	69	12.3	62	45	31.8	30 - 130	30	r
Phenanthrene	ND	130	73	77	5.3	77	71	8.1	30 - 130	30	
Phenol	ND	230	57	64	11.6	68	60	12.5	30 - 130	30	
Pyrene	ND	230	75	76	1.3	81	74	9.0	30 - 130	30	
% 2,4,6-Tribromophenol	28	%	67	71	5.8	67	61	9.4	30 - 130	30	s
% 2-Fluorobiphenyl	56	%	66	68	3.0	69	59	15.6	30 - 130	30	
% 2-Fluorophenol	44	%	53	52	1.9	57	52	9.2	30 - 130	30	
% Nitrobenzene-d5	50	%	52	56	7.4	62	55	12.0	30 - 130	30	
% Phenol-d5	51	%	58	67	14.4	69	60	14.0	30 - 130	30	
% Terphenyl-d14	61	%	66	68	3.0	74	65	12.9	30 - 130	30	

Comment:

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 515068 (ug/L), QC Sample No: CF15543 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15548, CF15549, CF15550, CF15551, CF15556, CF15557)

Semivolatiles (SIM) - Ground Water, Surface Water, Liquid

Acenaphthylene	ND	0.50	75						30 - 130	20	
Anthracene	ND	0.50	94						30 - 130	20	
Benz(a)anthracene	ND	0.50	97						30 - 130	20	
Benzo(a)pyrene	ND	0.50	108						30 - 130	20	

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Benzo(b)fluoranthene	ND	0.50	120						30 - 130	20
Benzo(ghi)perylene	ND	0.50	102						30 - 130	20
Benzo(k)fluoranthene	ND	0.50	131						30 - 130	20
Bis(2-chloroethyl)ether	ND	0.50	61						30 - 130	20
Chrysene	ND	0.50	106						30 - 130	20
Dibenz(a,h)anthracene	ND	0.50	115						30 - 130	20
Fluoranthene	ND	0.50	91						30 - 130	20
Fluorene	ND	0.50	86						30 - 130	20
Hexachlorobenzene	ND	0.50	87						30 - 130	20
Hexachlorobutadiene	ND	0.50	59						30 - 130	20
Hexachlorocyclopentadiene	ND	0.50	20						30 - 130	20
Indeno(1,2,3-cd)pyrene	ND	0.50	110						30 - 130	20
Nitrobenzene	ND	0.50	67						30 - 130	20
N-Nitrosodimethylamine	ND	0.05	56						30 - 130	20
Pentachlorophenol	ND	0.50	74						30 - 130	20
Phenanthrene	ND	0.50	87						30 - 130	20
Pyrene	ND	0.50	95						30 - 130	20
% 2,4,6-Tribromophenol	65	%	90						15 - 110	20
% 2-Fluorobiphenyl	63	%	71						30 - 130	20
% 2-Fluorophenol	55	%	53						15 - 110	20
% Nitrobenzene-d5	59	%	63						30 - 130	20
% Phenol-d5	46	%	56						15 - 110	20
% Terphenyl-d14	60	%	70						30 - 130	20

Comment:

This batch consists of a Blank and LCS (LCSD was lost during extraction)

QA/QC Batch 515097 (ug/kg), QC Sample No: CF15554 (CF15552, CF15553, CF15554, CF15555)

Volatiles - Sediment (Low Level)

1,1,1-Trichloroethane	ND	5.0	97	89	8.6				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	101	92	9.3				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	97	89	8.6				70 - 130	30
1,1-Dichloroethane	ND	5.0	96	88	8.7				70 - 130	30
1,1-Dichloroethene	ND	5.0	95	90	5.4				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	88	79	10.8				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	83	74	11.5				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	105	96	9.0				70 - 130	30
1,2-Dibromoethane	ND	5.0	98	90	8.5				70 - 130	30
1,2-Dichlorobenzene	ND	5.0	91	82	10.4				70 - 130	30
1,2-Dichloroethane	ND	5.0	96	87	9.8				70 - 130	30
1,2-Dichloropropane	ND	5.0	97	90	7.5				70 - 130	30
1,3-Dichlorobenzene	ND	5.0	90	82	9.3				70 - 130	30
1,4-Dichlorobenzene	ND	5.0	88	79	10.8				70 - 130	30
1,4-dioxane	ND	100	102	85	18.2				70 - 130	30
2-Hexanone	ND	25	101	92	9.3				70 - 130	30
4-Methyl-2-pentanone	ND	25	105	96	9.0				70 - 130	30
Acetone	ND	10	84	79	6.1				70 - 130	30
Benzene	ND	1.0	97	89	8.6				70 - 130	30
Bromochloromethane	ND	5.0	99	90	9.5				70 - 130	30
Bromodichloromethane	ND	5.0	100	91	9.4				70 - 130	30
Bromoform	ND	5.0	108	98	9.7				70 - 130	30
Bromomethane	ND	5.0	106	101	4.8				70 - 130	30
Carbon Disulfide	ND	5.0	102	95	7.1				70 - 130	30
Carbon tetrachloride	ND	5.0	116	92	23.1				70 - 130	30

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Chlorobenzene	ND	5.0	95	87	8.8				70 - 130	30
Chloroethane	ND	5.0	99	89	10.6				70 - 130	30
Chloroform	ND	5.0	97	89	8.6				70 - 130	30
Chloromethane	ND	5.0	101	90	11.5				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	92	88	4.4				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	97	87	10.9				70 - 130	30
Cyclohexane	ND	5.0	93	84	10.2				70 - 130	30
Dibromochloromethane	ND	3.0	106	96	9.9				70 - 130	30
Dichlorodifluoromethane	ND	5.0	93	84	10.2				70 - 130	30
Ethylbenzene	ND	1.0	97	88	9.7				70 - 130	30
Isopropylbenzene	ND	1.0	96	87	9.8				70 - 130	30
m&p-Xylene	ND	2.0	97	88	9.7				70 - 130	30
Methyl ethyl ketone	ND	5.0	96	89	7.6				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	100	94	6.2				70 - 130	30
Methylacetate	ND	5.0	106	100	5.8				70 - 130	30
Methylcyclohexane	ND	5.0	108	99	8.7				70 - 130	30
Methylene chloride	ND	5.0	78	73	6.6				70 - 130	30
o-Xylene	ND	2.0	98	90	8.5				70 - 130	30
Styrene	ND	5.0	98	90	8.5				70 - 130	30
Tetrachloroethene	ND	5.0	95	87	8.8				70 - 130	30
Toluene	ND	1.0	96	88	8.7				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	95	88	7.7				70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	96	88	8.7				70 - 130	30
Trichloroethene	ND	5.0	95	88	7.7				70 - 130	30
Trichlorofluoromethane	ND	5.0	106	96	9.9				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	106	97	8.9				70 - 130	30
Vinyl chloride	ND	5.0	106	99	6.8				70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	101	1.0				70 - 130	30
% Bromofluorobenzene	97	%	101	101	0.0				70 - 130	30
% Dibromofluoromethane	102	%	98	101	3.0				70 - 130	30
% Toluene-d8	97	%	100	100	0.0				70 - 130	30

Comment:

The Low Level MS/MSD are not reported for this batch.

QA/QC Batch 515097H (ug/kg), QC Sample No: CF15554 50X (CF15554 (50X))

Volatiles - Sediment (High Level)

1,1,2,2-Tetrachloroethane	ND	250	99	99	0.0	102	100	2.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	250	95	96	1.0	88	94	6.6	70 - 130	30
1,2,4-Trichlorobenzene	ND	250	94	96	2.1	90	94	4.3	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	250	105	97	7.9	100	102	2.0	70 - 130	30
1,2-Dichlorobenzene	ND	250	95	95	0.0	95	96	1.0	70 - 130	30
1,3-Dichlorobenzene	ND	250	95	96	1.0	97	97	0.0	70 - 130	30
1,4-Dichlorobenzene	ND	250	95	95	0.0	95	95	0.0	70 - 130	30
Isopropylbenzene	ND	250	97	97	0.0	100	99	1.0	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	99	100	1.0	70 - 130	30
% Bromofluorobenzene	94	%	100	100	0.0	103	102	1.0	70 - 130	30
% Dibromofluoromethane	94	%	97	96	1.0	92	95	3.2	70 - 130	30
% Toluene-d8	96	%	99	99	0.0	99	99	0.0	70 - 130	30

QA/QC Batch 515824 (ug/L), QC Sample No: CF15558 (CF15543, CF15544, CF15545, CF15546, CF15547, CF15548, CF15549, CF15550, CF15551, CF15558)

Volatiles - Ground Water, Surface Water, Liquid

1,1,1-Trichloroethane	ND	1.0	88	88	0.0				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50	107	104	2.8				70 - 130	30

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,1,2-Trichloroethane	ND	1.0	99	99	0.0				70 - 130	30
1,1-Dichloroethane	ND	1.0	96	94	2.1				70 - 130	30
1,1-Dichloroethene	ND	1.0	93	91	2.2				70 - 130	30
1,2,3-Trichlorobenzene	ND	1.0	105	105	0.0				70 - 130	30
1,2,4-Trichlorobenzene	ND	1.0	101	102	1.0				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	1.0	101	101	0.0				70 - 130	30
1,2-Dibromoethane	ND	1.0	100	99	1.0				70 - 130	30
1,2-Dichlorobenzene	ND	1.0	96	97	1.0				70 - 130	30
1,2-Dichloroethane	ND	1.0	97	99	2.0				70 - 130	30
1,2-Dichloropropane	ND	1.0	100	99	1.0				70 - 130	30
1,3-Dichlorobenzene	ND	1.0	99	97	2.0				70 - 130	30
1,4-Dichlorobenzene	ND	1.0	97	95	2.1				70 - 130	30
1,4-dioxane	ND	100	113	105	7.3				70 - 130	30
2-Hexanone	ND	5.0	100	101	1.0				70 - 130	30
4-Methyl-2-pentanone	ND	5.0	101	104	2.9				70 - 130	30
Acetone	ND	5.0	93	92	1.1				70 - 130	30
Benzene	ND	0.70	87	87	0.0				70 - 130	30
Bromochloromethane	ND	1.0	99	99	0.0				70 - 130	30
Bromodichloromethane	ND	0.50	96	101	5.1				70 - 130	30
Bromoform	ND	1.0	101	104	2.9				70 - 130	30
Bromomethane	ND	1.0	94	96	2.1				70 - 130	30
Carbon Disulfide	ND	1.0	101	99	2.0				70 - 130	30
Carbon tetrachloride	ND	1.0	89	89	0.0				70 - 130	30
Chlorobenzene	ND	1.0	97	97	0.0				70 - 130	30
Chloroethane	ND	1.0	88	87	1.1				70 - 130	30
Chloroform	ND	1.0	98	94	4.2				70 - 130	30
Chloromethane	ND	1.0	82	81	1.2				70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	97	95	2.1				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	98	99	1.0				70 - 130	30
Cyclohexane	ND	5.0	77	77	0.0				70 - 130	30
Dibromochloromethane	ND	0.50	101	100	1.0				70 - 130	30
Dichlorodifluoromethane	ND	1.0	67	66	1.5				70 - 130	30
Ethylbenzene	ND	1.0	89	87	2.3				70 - 130	30
Isopropylbenzene	ND	1.0	95	93	2.1				70 - 130	30
m&p-Xylene	ND	1.0	89	88	1.1				70 - 130	30
Methyl ethyl ketone	ND	5.0	103	103	0.0				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	91	92	1.1				70 - 130	30
Methylacetate	ND	2.5	112	114	1.8				70 - 130	30
Methylcyclohexane	ND	1.0	93	91	2.2				70 - 130	30
Methylene chloride	ND	1.0	89	87	2.3				70 - 130	30
o-Xylene	ND	1.0	91	90	1.1				70 - 130	30
Styrene	ND	1.0	100	99	1.0				70 - 130	30
Tetrachloroethene	ND	1.0	90	89	1.1				70 - 130	30
Toluene	ND	1.0	86	87	1.2				70 - 130	30
trans-1,2-Dichloroethene	ND	1.0	94	94	0.0				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	99	103	4.0				70 - 130	30
Trichloroethene	ND	1.0	93	91	2.2				70 - 130	30
Trichlorofluoromethane	ND	1.0	83	81	2.4				70 - 130	30
Trichlorotrifluoroethane	ND	1.0	88	88	0.0				70 - 130	30
Vinyl chloride	ND	1.0	87	87	0.0				70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0				70 - 130	30
% Bromofluorobenzene	94	%	102	102	0.0				70 - 130	30
% Dibromofluoromethane	100	%	101	102	1.0				70 - 130	30

QA/QC Data

SDG I.D.: GCF15543

Parameter	Blank	Blk RL		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Toluene-d8	102	%		99	101	2.0				70 - 130	30

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
m = This parameter is outside laboratory MS/MSD specified recovery limits.
r = This parameter is outside laboratory RPD specified recovery limits.
s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference

Phyllis Shiller, Laboratory Director
February 13, 2020

Thursday, February 13, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF15543 - CASHIN-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF15543	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15543	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15543	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15543	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15543	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	81.4	1.1	20	20	mg/L
CF15544	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15544	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15544	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15544	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15544	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	40.8	0.01	0.3	0.3	mg/L
CF15544	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	13.1	0.053	0.3	0.3	mg/L
CF15544	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	32.9	0.11	20	20	mg/L
CF15545	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15545	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15545	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L

Thursday, February 13, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF15543 - CASHIN-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF15545	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15545	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15545	CLD-WM	Chloride	NY / TOGS - Water Quality / GA Criteria	255	15.0	250	250	mg/L
CF15545	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	2.23	0.01	0.3	0.3	mg/L
CF15545	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	0.791	0.005	0.3	0.3	mg/L
CF15545	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	110	1.1	20	20	mg/L
CF15546	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15546	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15546	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.04	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.08	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.07	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.05	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	0.06	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.07	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	0.07	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	0.08	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	0.04	0.02	0.002	0.002	ug/L
CF15546	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	0.06	0.02	0.002	0.002	ug/L
CF15546	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	23.7	0.11	20	20	mg/L
CF15547	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15547	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15547	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15547	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15547	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	53.6	0.01	0.3	0.3	mg/L
CF15547	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	12.5	0.053	0.3	0.3	mg/L
CF15547	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	26.6	0.11	20	20	mg/L
CF15548	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15548	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15548	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L

Thursday, February 13, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF15543 - CASHIN-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF15548	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15548	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15548	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	1.02	0.020	0.1	0.1	mg/L
CF15548	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	26.7	0.01	0.3	0.3	mg/L
CF15548	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	16.1	0.050	0.3	0.3	mg/L
CF15549	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15549	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15549	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15549	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15549	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	0.39	0.01	0.3	0.3	mg/L
CF15550	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15550	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15550	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15550	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L

Thursday, February 13, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF15543 - CASHIN-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF15550	FE-WMDP	Iron	NY / TOGS - Water Quality / GA Criteria	0.58	0.01	0.3	0.3	mg/L
CF15550	MN-WMDP	Manganese	NY / TOGS - Water Quality / GA Criteria	0.554	0.005	0.3	0.3	mg/L
CF15550	NA-WM	Sodium	NY / TOGS - Water Quality / GA Criteria	103	1.0	20	20	mg/L
CF15551	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15551	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L
CF15551	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15551	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15551	AL-WM	Aluminum	NY / TOGS - Water Quality / GA Criteria	0.113	0.020	0.1	0.1	mg/L
CF15556	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15556	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15556	DFE-WMDP	Iron, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	40.7	0.01	0.3	0.3	mg/L
CF15556	DMN-WMDP	Manganese, (Dissolved)	NY / TOGS - Water Quality / GA Criteria	13.2	0.053	0.3	0.3	mg/L
CF15556	D-NA	Sodium (Dissolved)	NY / TOGS - Water Quality / GA Criteria	26.8	0.11	20	20	mg/L
CF15557	$DPWMSIM_T	Benz(a)anthracene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Chrysene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benzo(a)pyrene	NY / TAGM - Semi-Volatiles / Groundwater Standards	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benzo(b)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benzo(k)fluoranthene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Chrysene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L

Thursday, February 13, 2020

Criteria: NY: GW

State: NY

Sample Criteria Exceedances Report

GCF15543 - CASHIN-NY

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CF15557	$DPWMSIM_T	Indeno(1,2,3-cd)pyrene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15557	$DPWMSIM_T	Benz(a)anthracene	NY / TOGS - Water Quality / GA Criteria	ND	0.02	0.002	0.002	ug/L
CF15558	$DP8260_TCL	1,2-Dibromoethane	NY / TOGS - Water Quality / GA Criteria	ND	0.25	0.0006	0.0006	ug/L
CF15558	$DP8260_TCL	1,2-Dibromo-3-chloropropane	NY / TOGS - Water Quality / GA Criteria	ND	0.50	0.04	0.04	ug/L

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

NY Temperature Narration

February 13, 2020

SDG I.D.: GCF15543

The samples in this delivery group were received at 3.1°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐
Temp 2.1 °C Pg 1 of 1

PHOENIX
Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☒ Phone: 631-348-7600 x41
☐ Fax:
☒ Email: MCalifano@Ca-PC.com

Customer: Cashin Associates, P.C.
Address: 1200 Veterans memorial Hwy Hauppauge, NY 11788

Project: NYS DOT Harrison Landfill Project P.O: D037853.01
Report to: Marc Califano
Invoice to: Marc Califano
QUOTE # :

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Marc Califano Date: 1/17/2020

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	TCL VOC	TCL SVOC	Dissolved TAL metals*	Total Cyanide	Total Chloride	Total TAL metals	High level TCL VOC	Low level TCL VOC	GL Amber 8 oz. w/H3PO4	Soil VOA Vials [ ] methanol [X] H2O	GL Soil container (8) oz	GL Soil container ( ) oz	40 ml VOA Vial [ ] As is [X] HCl	GL Amber 1000ml [X] As is [ ] H2SO4	PL As is [X] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [X] 250ml [ ] 500ml	PL NaOH 250ml	PL HNO3 250ml	Bacteria Bottle as is
15543	PC-1 1/16/2020	GW	1/16/2020	4:50	X	X	X	X	X								X	X	X		X	X	X
15544	PC-2 1/16/2020	GW	1/16/2020	3:40	X	X	X	X	X								X	X	X		X	X	X
15545	PC-3 1/17/2020	GW	1/17/2020	11:56	X	X	X	X	X								X	X	X		X	X	X
15546	LMW-2 1/16/2020	GW	1/16/2020	11:42	X	X	X	X	X								X	X	X		X	X	X
15547	LMW-4 1/16/2020	GW	1/16/2020	2:05	X	X	X	X	X								X	X	X		X	X	X
15548	SW-1 1/16/2020	SW	1/16/2020	12:03	X	X		X	X	X							X	X			X	X	X
15549	SW-2 1/16/2020	SW	1/16/2020	2:40	X	X		X	X	X							X	X			X	X	X
15550	SW-3 1/16/2020	SW	1/16/2020	5:00	X	X		X	X	X							X	X			X	X	X
15551	SW-4 1/17/2020	SW	1/17/2020	10:30	X	X		X	X	X							X	X			X	X	X
15552	SD-1 1/16/2020	SE	1/16/2020	12:31		X		X	X	X	X	X		X	X								
15553	SD-2 1/16/2020	SE	1/16/2020	250		X		X	X	X	X	X		X	X								

Relinquished by:	Accepted by:	Date:	Time:
Marc Califano	[illegible]	1/17/2020	1900
	[illegible]	1-17-20	1600

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 5 Days
☐ 10 Days
☐ Other
* SURCHARGE
STD

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

NY
☒ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil Subpart 5 DW

PA
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected?

Comments, Special Requirements or Regulations:
*Lab to Filter for Dissolved TAL Metals sample

Data Format:
☒ Phoenix Std Report
☒ Excel
☒ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other

Data Package:
☐ NJ Reduced Deliv. *
☐ Other
☒ NY Enhanced (ASP B) *

Cooler: Yes ☑ No ☐
Coolant: IPK ☐ ICE ☑ No ☐
Temp 3.1 °C Pg 2 of 2

PHOENIX
Environmental Laboratories, Inc.

NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☑ Phone: 631-348-7600 x41
☐ Fax:
☑ Email:

Customer: Cashin Associates, P.C.
Address: 1200 Veterans Memorial Hwy
Hauppauge, NY 11788

Project: NYSDOT Harrison Landfill
Report to: Marc Califano
Invoice to: Marc Califano
QUOTE # :

Project P.O: D037853-01

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Marc Califano Date: 1/17/2020

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
15554	SD-3 1/16/2020	SE	1/16/2020	5:15
15555	SD-4 1/17/2020	SE	1/17/2020	10:40
15556	GW-Dup 1/16/2020	GW	1/16/2020	0000
15557	Field Blank 1/17/2020	L	1/17/2020	12:55
☆ 15558	Trip Blank	L	/	/

High Level TCL VOC; Low Level TCL VOC; TCL SVOC; TAL Metals; Cyanide; Chloride; TCL VOC; TCL SVOC; Dissolved TAL Metals*; Total Cyanide; Chloride; GL Amber 8 oz. w/H3PO4; Soil VOA Vials [ ] methanol 2 H2O; GL Soil container (3) oz; GL Soil container ( ) oz; 40 ml VOA Vial [ ] As is 3 HCl; GL Amber 1000ml 2 As is [ ] H2SO4; PL As is [ ] 250ml [ ] 500ml [ ] 1000ml; PL H2SO4 [ ] 250ml [ ] 500ml; PL NaOH 250ml; PL HNO3 250ml; Bacteria Bottle as is

Relinquished by:	Accepted by:	Date:	Time:
Marc Califano	Krystal Hall	1/17/2020	14:10
		1-17-20	14:16

Comments, Special Requirements or Regulations:
*Lab to Filter for Dissolved TAL metals Sample
#1TB, 1CUC 1 Hour Hold (KD)

Data Format:
☒ Phoenix Std Report ☐ EQuIS
☒ Excel ☐ NJ Hazsite EDD
☒ PDF ☐ NY EZ EDD (ASP)
☐ GIS/Key ☐ Other

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ 5 Days
☐ 10 Days
☐ Other
* SURCHARGE
STD

Data Package:
☐ NJ Reduced Deliv. * ☐ Other
☒ NY Enhanced (ASP B) *

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

NY
☒ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☐ Subpart 5 DW

PA
☐ Clean Fill Limits
☐ PA-GW
☐ Reg Fill Limits
☐ PA Soil Restricted
☐ PA Soil non-restricted

State Samples Collected?

Appendix B

Sampling Logs

GROUNDWATER SAMPLING LOG

Site Name: Harrison Landfill
Site Location: Harrison Subresidency, Harrison, NY
Date: 1/16/2020
Purge Method: Whale Pump
Purge Start Time: 1605
Purge End Time: 1635
Well Casing Condition: Good
Initial Depth to Water (DTW): 3.45 Feet

Well/Sampling Point ID: PC-1
Well Diameter: 2"
Weather: Sunny, Windy 47° F

Water Level & Water Column Height (feet)

Depth to Water (DTW)	Depth to Well Bottom (DTB)	Water Column Height (DTB-DTW)	WELL CAPACITY (gallons):
3.45	16.73	13.28	2.1

Purge Volume Conversions

0.75"=0.02	1"=0.04	1.25"=0.06	2"=0.16	3"=0.37	4"=0.65	5"=1.02	6"=1.47	12"=5.88

*1 well volume = volume/linear foot x water column height

Well Purge Water Quality

TIME	VOLUME PURGED (gal)	PH	TEMP (C)	COND (ms/cm)	DO (mg/L)	TURB (NTUs)	ORP
1605	0	6.91	4.30	0.745	3.33	30.1	-75
1615	2	6.84	4.80	0.825	4.01	6.2	-56
1625	4	6.89	5.23	0.827	2.93	9.9	-41
1635	6	6.93	5.09	0.830	3.43	5.1	-34
1650	Sample	6.98	4.92	0.849	3.81	3.3	-18

Groundwater Sampling Data

SAMPLED BY:
Marc Califano & Rachel Lambert

SAMPLING METHOD:	SAMPLE COLLECTED AT:	REMARKS:
Dedicated bailer	1650	No Well Lock, initial PID 0.0 ppm

ANALYSIS:
TCL VOCs, TCL SVOCs, TAL Metals (lab filtered), Cyanide, Chloride

GROUNDWATER SAMPLING LOG

Site Name: Harrison Landfill
Site Location: Harrison Subresidency, Harrison, NY
Date: 1/16/2020
Purge Method: Peristaltic Pump
Purge Start Time: 1500
Purge End Time: 1530
Well Casing Condition: Good
Initial Depth to Water (DTW): 2.37 Feet

Well/Sampling Point ID: PC-2
Well Diameter: 2"
Weather: Sunny, Windy 47° F

Water Level & Water Column Height (feet)

Depth to Water (DTW)	Depth to Well Bottom (DTB)	Water Column Height (DTB-DTW)	WELL CAPACITY (gallons):
2.37	9.5	7.13	1.1

Purge Volume Conversions

0.75"=0.02	1"=0.04	1.25"=0.06	2"=0.16	3"=0.37	4"=0.65	5"=1.02	6"=1.47	12"=5.88

*1 well volume = volume/linear foot x water column height

Well Purge Water Quality

TIME	VOLUME PURGED (gal)	PH	TEMP (C)	COND (ms/cm)	DO (mg/L)	TURB (NTUs)	ORP
1500	0	6.55	6.67	0.873	2.71	80.0	-43
1510	1.1	6.35	7.19	0.824	2.69	45.0	-68
1520	1.2	6.35	7.10	0.812	3.34	20.7	-63
1530	3.3	6.36	4.42	0.807	2.21	11.9	-68
1540	Sample	6.30	7.64	0.799	1.30	16.5	-62

Groundwater Sampling Data

SAMPLED BY:

Marc Califano & Rachel Lambert

SAMPLING METHOD:	SAMPLE COLLECTED AT:	REMARKS: Well lock cut, initial PID 0.0 ppm.
Dedicated bailer	1540	

ANALYSIS:

TCL VOCs, TCL SVOCs, TAL Metals (lab filtered), Cyanide, Chloride

GROUNDWATER SAMPLING LOG

Site Name: Harrison Landfill
Site Location: Harrison Subresidency, Harrison, NY
Date: 1/17/2020
Purge Method: Whale Pump
Purge Start Time: 1130
Purge End Time: 1145
Well Casing Condition: Good
Initial Depth to Water (DTW): 9.27 Feet

Well/Sampling Point ID: PC-3
Well Diameter: 2"
Weather: Sunny, Cold 24° F

Water Level & Water Column Height (feet)

Depth to Water (DTW)	Depth to Well Bottom (DTB)	Water Column Height (DTB-DTW)	WELL CAPACITY (gallons):
9.27	18.37	9.1	1.5

Purge Volume Conversions

0.75"=0.02	1"=0.04	1.25"=0.06	2"=0.16	3"=0.37	4"=0.65	5"=1.02	6"=1.47	12"=5.88

*1 well volume = volume/linear foot x water column height

Well Purge Water Quality

TIME	VOLUME PURGED (gal)	PH	TEMP (C)	COND (ms/cm)	DO (mg/L)	TURB (NTUs)	ORP
1130	0	7.00	6.63	0.974	4.89	67.6	150
1135	5	6.77	7.51	1.07	2.95	15.7	93
1140	10	6.73	7.52	1.09	2.50	1.7	41
1145	15	6.73	7.66	1.09	3.75	0.4	16
1156	Sample	6.69	7.94	1.09	1.99	0.3	3

Groundwater Sampling Data

SAMPLED BY:

Marc Califano & Rachel Lambert

SAMPLING METHOD:	SAMPLE COLLECTED AT:	REMARKS: Well lock cut, initial PID 0.0 ppm.
Dedicated bailer	1156	

ANALYSIS:

TCL VOCs, TCL SVOCs, TAL Metals (lab filtered), Cyanide, Chloride

GROUNDWATER SAMPLING LOG

Site Name: Harrison Landfill
Site Location: Harrison Subresidency, Harrison, NY
Date: 1/16/2020
Purge Method: Whale Pump
Purge Start Time: 1050
Purge End Time: 1120
Well Casing Condition: Good
Initial Depth to Water (DTW): 9.86 Feet

Well/Sampling Point ID: LMW-2
Well Diameter: 2"
Weather: Sunny, windy 47° F

Water Level & Water Column Height (feet)

Depth to Water (DTW)	Depth to Well Bottom (DTB)	Water Column Height (DTB-DTW)	WELL CAPACITY (gallons):
9.86	20	10.14	1.6

Purge Volume Conversions

0.75"=0.02	1"=0.04	1.25"=0.06	2"=0.16	3"=0.37	4"=0.65	5"=1.02	6"=1.47	12"=5.88

*1 well volume = volume/linear foot x water column height

Well Purge Water Quality

TIME	VOLUME PURGED (gal)	PH	TEMP (C)	COND (ms/cm)	DO (mg/L)	TURB (NTUs)	ORP
1050	0	6.08	9.87	0.527	2.27	9.9	136
1100	1.5	6.15	10.02	0.526	2.77	31.4	140
1110	3.0	6.42	9.23	0.547	2.53	42.2	55
1120	4.5	6.11	9.33	0.555	2.56	30.0	66
1142	Sample	6.31	9.93	0.552	2.52	20.3	82

Groundwater Sampling Data

SAMPLED BY:

Marc Califano & Rachel Lambert

SAMPLING METHOD:	SAMPLE COLLECTED AT:	REMARKS: No well lock, initial PID 0.0 ppm. Recommend that well be redeveloped –screens may be clogged, very slow recharge.
Dedicated bailer	1142	

ANALYSIS:

TCL VOCs, TCL SVOCs, TAL Metals (lab filtered), Cyanide, Chloride

GROUNDWATER SAMPLING LOG

Site Name: Harrison Landfill
Site Location: Harrison Subresidency, Harrison, NY
Date: 1/16/2020
Purge Method: Whale Pump
Purge Start Time: 1310
Purge End Time: 1335
Well Casing Condition: Good
Initial Depth to Water (DTW): 2.61 Feet

Well/Sampling Point ID: LMW-4
Well Diameter: 2"
Weather: Sunny, windy 47° F

Groundwater Duplicate

Water Level & Water Column Height (feet)

Depth to Water (DTW)	Depth to Well Bottom (DTB)	Water Column Height (DTB-DTW)	WELL CAPACITY (gallons):
2.61	12	9.39	1.5

Purge Volume Conversions

0.75"=0.02	1"=0.04	1.25"=0.06	2"=0.16	3"=0.37	4"=0.65	5"=1.02	6"=1.47	12"=5.88

*1 well volume = volume/linear foot x water column height

Well Purge Water Quality

TIME	VOLUME PURGED (gal)	PH	TEMP (C)	COND (ms/cm)	DO (mg/L)	TURB (NTUs)	ORP
1310	0	6.31	7.35	0.730	10.70	621	-60
1320	1.5	6.15	7.69	0.749	2.93	245	-57
1325	3.0	6.18	7.96	0.755	2.11	111	-66
1335	4.5	6.22	8.11	0.740	1.80	84	-65
1405	Sample	6.24	8.19	0.696	2.15	41.3	-56

Groundwater Sampling Data

SAMPLED BY:

Marc Califano & Rachel Lambert

SAMPLING METHOD:	SAMPLE COLLECTED AT:	REMARKS: Well lock cut, Initial PID 0.0 ppm. Recommend that well be redeveloped – screens may be clogged, very slow recharge. Water initially rusty, cleared after 3-gallons.
Dedicated bailer	1405	

ANALYSIS:

TCL VOCs, TCL SVOCs, TAL Metals (lab filtered), Cyanide, Chloride

CASHIN ASSOCIATES, P.C.

SURFACE WATER SAMPLING LOG

Surface Water and Sediment Sampling Field Data

SURFACE WATER

Station ID	Sample Date	Sample Time	Stream Depth (in)	Stream Width (ft)	Temp (C°)	pH	Conductivity (mS/cm)	Dissolved Oxygen mg/L	Turbidity (NTU)	Flow (ft/s)
SW-1	1/16/2020	1203	5	8	6.57	6.67	0.557	2.24	142	0
SW-2	1/16/2020	1440	3	4	6.90	6.54	0.269	10.85	1.2	0.15
SW-3	1/16/2020	1700	16	6	4.54	7.10	1.04	2.19	4.7	0
SW-4	1/17/2020	1030	6	4	0.07	7.38	0.286	12.31	10.9	0.17

Sampling Information and Notes

SAMPLED BY:

Marc Califano & Rachel Lambert

SAMPLING METHOD:

Stainless Steel Ladle

ANALYSIS:

TCL VOCs, TCL SVOCs, TAL Metals, Cyanide, Chloride

NOTES:
SW-4 was sampled on 1/17/2020 at 1030 – Sunny, cold 22° F
Stream width and depth measured using a measuring tape, stream depths were measured at the center of the stream.
Water quality parameters were measured using a Horiba U-52
Flow rates were measured using Hach FH950 portable velocity meter
in – inches
ft – feet
mS/cm – millisiemens per centimeter
mg/L – milligrams per liter
NTU – nephelometric turbidity units
ft/s – feet per second