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Director: Division of Environmental/Solid Waste
Niagara County Department of Public Works
59 Park Avenue, Lockport, NY 14094

Re: Groundwater Monitoring Sampling Results: 2022-Q4
Niagara County Department of Public Works
Niagara County Refuse Disposal District RFP 2021-22
State Route 93, Lockport, NY

Ms. Timm,

LiRo Engineers, Inc. (LiRo) has prepared this letter report to document results of the Fourth Quarter 2022 Environmental monitoring and sampling tasks performed at the Niagara County Refuse Disposal District (NCRDD) (Figure 1 and Figure 2).

Background
The NCRDD facility consists of three adjacent sanitary landfills: a C&D Landfill (north landfill), Landfill #1 (center landfill) and, Landfill #2 (south landfill) (see Figure 2) operated under New York State Department of Environmental Conservation (NYSDEC) permits. Hydraulically, Landfill #1 and Landfill #2 are contiguous (i.e. not separated by a liner) and are monitored as a single unit. Landfill #1 and Landfill #2 groundwater monitoring wells are set within the Lockport Formation (8 monitoring wells) and Rochester Formation (7 monitoring wells) water-bearing zones. C&D Landfill monitoring wells are installed in the Uppermost Water-Bearing Zone (8 monitoring wells) and are divided into 2 groups: Group I (hydraulically up-gradient wells) and Group II (6 monitoring wells).

NCRDD Monitoring and Sampling Program
In accordance with NYSDEC permit requirements, monitoring and/or sampling of the NCRDD is conducted at 23 monitoring wells, a surface water monitoring location (i.e. Pond), four landfill gas-vent monitoring points (i.e. MP-1 through MP-4), site Sump, groundwater collection manhole (GWCM), and a leachate collection, storage and transfer system (see Table 1).

This report summarizes the results of the quarterly and monthly monitoring performed by LiRo for the fourth quarter of 2022 (i.e. 2022-Q4). Specific monitoring tasks for the NCRDD included monthly landfill gas-vent monitoring (i.e. October 2022, November 2022 and December 2022) at four locations, measuring groundwater elevations from Site wells, the collection of groundwater, surface water and leachate samples from:

1) 21 Site monitoring wells,
2) A surface water sample (i.e. Pond),
3) Five leachate system locations
   a. Groundwater collector manhole, Sump, Landfill #2 Leachate Storage, C&D Primary Leachate, and C&D Secondary Leachate

Landfill Gas-Vent Monitoring
The NYSDEC permit requires monthly monitoring of effluent/fugitive gas at four gas-vent monitoring points (i.e. MP-1 through MP-4 for 4 parameters: Oxygen (O_2), Methane (CH_4), Lower Explosive Limit (LEL) and Hydrogen Sulfide (H_2S). LiRo conducted 2022-Q4 gas-vent monitoring on October 12, 2022, November 30, 2022, and December 14, 2022. The results of 2022 gas-vent monitoring are presented in Table 2.

Groundwater Gauging and Elevation Contour Maps
LiRo developed groundwater contour maps for the Lockport Formation (i.e. shallow bedrock groundwater) and the Rochester Formation (i.e. deep bedrock groundwater) based on water-level measurements recorded on November 28, 2022. Water level and groundwater elevation data are provided in Table 3. The Lockport Formation contour map is presented in Figure 3 and the Rochester Formation contour map is presented in Figure 4.

Groundwater flow in the Lockport Formation is monitored by shallow wells screened at elevations ranging between 549.30 and 575.10 feet above mean sea level (AMSL). Based on the 2022-Q4 water level measurements, shallow groundwater flow in the Lockport Formation is generally to the southwest, from a high elevation at GZ-20SR of 575.10 feet AMSL to a low elevation at GZ-15 of 549.30 feet AMSL, see Figure 3. The typical hydraulic gradient in the Lockport Formation, as calculated between GZ-20SR and GZ-25S, is approximately 0.028 feet per foot (ft/ft).

Groundwater flow in the Rochester Formation is monitored by deep bedrock wells screened at elevations ranging between 498.30 and 547.21 feet AMSL. Groundwater elevations within the Rochester Formation generally indicate that groundwater flows radially inward from high elevations at GZ-7D (541.26 feet AMSL), MW-27DD (542.99 feet AMSL), MW-28D (540.57 feet AMSL) and MW-29D (547.21 feet AMSL) to low elevations of 535.60 feet AMSL at GZ-25D (Figure 4). Calculated hydraulic gradients in the Rochester Formation range from a high of 0.17 ft/ft between MW-28D and GZ-22D to a low of 0.012 ft/ft between MW-27DD and GZ-25D).

Groundwater Sampling
Between November 28, 2022, and November 30, 2022, LiRo conducted groundwater, surface water and leachate collection-system sampling (Table 4).

Site Q4 Sample Schedule (see Table 1):

- Uppermost Water-Bearing Zone Wells:
  - Group II Wells: GZ-12, GZ-13, GZ-14, GZ-15, GZ-17 and GZ-18.

- Lockport Formation Monitoring Wells:
  - Up-gradient Wells: GZ-20SR and GZ-21S.
  - Down-gradient Wells: GZ-7S, GZ-22S, GZ-23S, GZ-24S, GZ-25S, and MW-27S.

- Rochester Formation Wells:
  - Up-Gradient Wells: MW-28D and MW-29D.
  - Down-Gradient Wells: GZ-7D, GZ-22D, GZ-25D, MW-26D, and MW-27DD.

Additional water samples from:
- Pond,
- Groundwater Collector Manhole (GWCM),
- Sump
- C&D Primary Leachate,
- C&D Secondary Leachate, and
- Landfill #2 Leachate Storage

The following deviations for the 2022-Q4 sampling event are noted:

- GZ-22D: Well went dry during sampling, only VOC, Metals, Metals-hg, and dissolved metals submitted for analysis.
- MW-26D: Well was dry before purging, no sample collected.

Prior to sampling at each groundwater monitoring location, LiRo personnel purged a minimum of three well volumes of groundwater or until dry conditions were noted in each well. Well locations were allowed time to recharge following well purging for sample collection. Purging and sample collection from monitoring wells was completed using dedicated bailers and/or a Waterra™ pump. A summary of sampling and field monitoring information is presented in Table 4. The 2022 Q1 to Q4 sample analytic results are provided in Table 5.

Field Measurements

During well purging LiRo measured and recorded water quality data for temperature, specific conductance/conductivity, pH, dissolved Oxygen and turbidity prior to sample collection. Data is provided on groundwater purge and sampling logs presented in Attachment A and presented in Table 4. All samples were packed in ice upon collection and transported to ALS Environmental, Rochester, New York in accordance with applicable chain-of-custody procedures for analytical testing.

Field measurements of pH, specific conductance, and temperature were generally below the Site-Specific Statistical Trigger Values (SSSTVs) for each sampling location at the time of sample collection. Turbidity measurements taken at the time of sample collection exceeded New York State Department of Environmental Conservation's *Technical and Operational Guidance Series (TOGS) 1.1.1* Class GA Ambient Water Quality Standards and Guidance Value (AWQSGV) of 5 nephelometric turbidity units (NTUs) in all 26 sample locations for 2022-Q4.

Analytical Result Summary Tables

The 2022-Q4 analytical results for water samples collected from the C&D Landfill monitoring wells, Landfill #1 and Landfill #2 monitoring wells, C&D Primary Collector, C&D Secondary Collector, Groundwater Collector, Sump, and Pond are presented in Table 5.

Analytical results in Table 5 were compared to the NYSDEC Memorandum: Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS) Ambient Water Quality Standards and Guidance values (AWQSGVs), and background Site-Specific Statistical Trigger Values (SSSTVs). The parameters values that exceed their respective NYSDEC AWQSGV are shaded in gray. Reported parameter values that exceed their respective SSSTVs are presented in bold text. A Data Usability Summary Report (DUSR) was prepared for a sample data group (SDG) No. R2205363 and is provided in Attachment B.

Discussion of Analytical Results

<u>Lockport Formation - Volatile Organic Compounds</u>

The 2022-Q4 groundwater samples collected from Lockport Formation down-gradient wells GZ-12, GZ-13, GZ-17, GZ-22S, GZ-24S, GZ-25S, and MW-27S were submitted for VOC analysis. Parameters that exceeded their respective NYSDEC AWQSGVs are indicated with gray shaded test. No parameters exceeded their respective SSSTV.

Lockport Formation VOC Result Exceedances

Parameter	Units	GZ-12
Benzene	ug/L	2

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) ug/L = micrograms per liter (i.e. parts per billion).

Rochester Formation – Volatile Organic Compounds

The 2022-Q4 groundwater samples collected from Rochester Formation down-gradient wells GZ-7D, GZ-22D, GZ-25D, and MW-27DD were submitted for VOC analysis. Parameters that exceeded their respective NYSDEC AWQSGVs in these samples are indicated with gray shaded text while parameters that exceeded their respective SSSTVs are indicated with **bold** text as summarized in the table below:

Rochester Formation VOC Result Exceedances

Parameter	Units	GZ-7D	GZ-25D	GZ-25D[2]	MW-27DD	GZ-22D
Benzene	ug/L	11	**84**	**78**	14	1.5
Toluene	ug/L		22	19	23	
m,p-Xylenes	ug/L		**33**	**30**	**6.3**	
Ethylbenzene	ug/L		6.1	5.3		
2-Butanone	ug/L		**31**	**30**	**8.8**	
Acetone	ug/L		55	59		
o-xylenes	ug/L		**13**	**12**		

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) ug/L = micrograms per liter (i.e. parts per billion).
2) 2022-Q4 Blind Duplicate #2

Lockport Formation Leachate Indicators

Part 360 leachate indicators were detected at the site in the Lockport Formation monitoring wells. The table below summarizes the detected concentrations of leachate indicator parameters exceeding the SSSTVs and NYSDEC AWQSGVs. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Lockport Formation Leachate Indicator Exceedances

Parameter	Units	GZ-7S	GZ-20SR	GZ-21S	GZ-22S	GZ-23S	GZ-23S[1]	GZ-24S	GZ-25S
Ammonia	mg/L-N				2.65	6.5	6.61	10.8	25.4
Bromide	mg/L		3			2.4	2.7	115	**455**
Chloride	mg/L		299					10700	**51200**
Color	C.U.				**170**			**175**	**250**
Nitrate	mg/L		**2.9**						
Sulfate	mg/L		780			472	469	3070	2220
TDS	mg/L		1870	928	680	1520	1520	24000	72800
COD	mg/L								**2250**
Total Phenolics	mg/L							0.003	
Hex. Chrome	mg/L	**0.063**							

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented

1) 2022-Q4 Blind Duplicate Sample #1
2) mg/L = milligrams per liter (i.e. parts per million)
3) C.U. = Color Units

Lockport Formation Leachate Indicator Exceedances (Continued)

Parameter	Units	MW-27S	GZ-12	GZ-13	GZ-14	GZ-15	GZ-17	GZ-18
Ammonia	mg/L-N		7.88				2.7	
Bromide	mg/L		40.4		11.4		8.7	7.8
Chloride	mg/L		5990		1060		931	791
Sulfate	mg/L	1320	4230	484	748	1130	1870	623
TDS	mg/L	2650	16800	1190	3290	2110	4550	2520
Color	C.U.	**100**	**100**	18			**130**	

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented

4) 2022-Q4 Blind Duplicate Sample #1
5) mg/L = milligrams per liter (i.e. parts per million)
6) C.U. = Color Units

Rochester Formation Leachate Indicators

Part 360 leachate indicators were detected at the site in the Rochester Formation monitoring wells. The table below summarizes the detected concentrations of leachate indicator parameters exceeding the SSSTVs and NYSDEC AWQSGVs. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Rochester Formation Leachate Indicator Exceedances

Parameter	Units	GZ-7D	GZ-25D	GZ-25D[2]	MW-27DD	MW-28D	MW-29D
Ammonia	mg/L-N	11.7	33.7	33.5	37.1	5.61	
Bromide	mg/L	143	674	806	801	49.4	3.2
Chloride	mg/L	14700	59800	62700	72100	4930	609
Sulfate	mg/L	1100	1860	2250	1540	1390	281
Color	C.U.	**625**		**130**	**150**		
Hex. Chrome (T)	mg/L					**0.01**	
TDS	mg/L	27100	105000	109000	132000	10300	2000
COD	mg/L	**1580**		**3990**	**5310**		
Total Phenolics	mg/L	0.0048					
Total Alkalinity	mg/L					**527**	
TOC	mgL						**14.3**

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).
2) 2022-Q4 Blind Duplicate #2
3) C.U. = Color Units

Lockport Formation Inorganic Analytes

Inorganic analytes (i.e. Metals) were detected at the site in the Lockport Formation monitoring wells. The table below summarizes the detected concentrations of inorganic leachate indicator parameters exceeding the SSSTVs and NYSDEC AWQSGVs. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Lockport Formation Inorganic Analyte Exceedances (Total Concentrations)

Parameter	Units	GZ-7S	GZ-20SR	GZ-21S	GZ-22S	GZ-23S	GZ-23S[1]	GZ-24S	GS-25S
Arsenic (T)	mg/L				**0.007**				
Barium (T)	mg/L								
Boron (T)	mg/L		**0.99**			**0.67**	**0.72**	**3.95**	**3.89**
Chromium (T)	mg/L								**0.096**
Iron (T)	mg/L	1.14	**59.4**	4.72	3.4	1.03	**33.8**	1.52	2.76
Lead (T)	mg/L		0.035						
Magnesium (T)	mg/L		89.6	46.5	49.7	83.7	90.4	578	2230
Manganese (T)	mg/L		**1.29**		0.318	0.357	0.468		
Nickel (T)	mg/L								**0.036**
Sodium (T)	mg/L	44.3	288	167	57.9	117	121	6440	16200
Thallium (T)	mg/L				0.007			**0.07**	

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) 2022-Q4 Blind Duplicate #1
2) mg/L = milligrams per liter (i.e. parts per million).

Lockport Formation Inorganic Analyte Exceedances (Total Concentrations) (Continued)

Parameter	Units	MW-27S	GZ-12	GZ-13	GZ-14	GZ-15	GZ-17	GZ-18
Aluminum (T)	mg/L				**7.79**			
Antimony (T)	mg/L						0.007	
Boron (T)	mg/L	**0.78**	**4.62**		**0.51**	**0.47**	**1.18**	**0.74**
Iron (T)	mg/L	1.23		0.51	3.51	0.35	0.43	
Lead (T)	mg/L				**0.008**			
Magnesium (T)	mg/L	196	269		126	161	249	84.1
Sodium (T)	mg/L	192	4910	251	520	65	607	514

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).

Lockport Formation Inorganic Analyte Exceedances (Dissolved Concentrations)

Parameter	Units	GZ-22S	GZ-24S	GS-25S	GZ-12	GZ-13	GZ-17	MW-27S
Boron (D)	mg/L		**3.83**	**3.86**	**4.64**		**1.17**	**0.8**
Magnesium (D)	mg/L	40	471	2250	253		236	202
Sodium (D)	mg/L	31	6240	17000	4850	247	631	195

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).

Rochester Formation Inorganic Analytes

Inorganic analytes (i.e. Metals) were detected at the site in the Rochester Formation monitoring wells. The table below summarizes the detected concentrations of inorganic leachate indicator parameters exceeding the SSSTVs and NYSDEC AWQSGVs. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Rochester Formation Inorganic Analyte Exceedances (Total Concentrations)

Parameter	Units	GZ-7D	GZ-22D	GZ-25D[2]	GZ-25D	MW-27DD	MW-28D	MW-29D
Arsenic (T)	mg/L					**0.009**		
Boron (T)	mg/L	4.38	5.29	**3.31**	**3.27**	**3.59**	**4.95**	2.06
Calcium (T)	mg/L			**5160**	**5090**	**6900**		
Iron (T)	mg/L	4.05	9.1	2.48	1.1	0.4	0.41	0.58
Lead (T)	mg/L	0.031	0.04					
Magnesium (T)	mg/L	455	759	**3280**	**3230**	**3870**	103	
Manganese (T)	mg/L			0.462	0.468	**0.735**		
Potassium (T)	mg/L					**496**		
Sodium (T)	mg/L	7240	10100	19600	**30400**	**32400**	3870	613
Thallium (T)	mg/L					**0.139**		
Zinc (T)	mg/L			**0.707**	**0.344**			

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).
2) 2022-Q4 Blind Duplicate #2

Rochester Formation Inorganic Analyte Exceedances (Dissolved Concentrations)

Parameter	Units	GZ-7D	GZ-22D	GZ-25D	GZ-25D[2]	MW-27DD
Boron (D)	mg/L		5.21	**3.26**	**3.35**	**3.64**
Calcium (D)	mg/L			**5130**	**5110**	**6810**
Iron (D)	mg/L		2.92			
Magnesium (D)	mg/L		787	**3260**	**3240**	**3950**
Manganese (D)	mg/L	0.464		0.469	0.463	**0.722**
Potassium (D)	mg/L					**509**
Sodium (D)	mg/L	21.9	10400	**29700**	20000	**32000**
Thallium (D)	mg/L					**0.131**

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).
2) 2022-Q4 Blind Duplicate #2

Pond, Sump, GWCM and Leachate System VOCs

The following VOCs were reported at concentrations above their NYSDEC AWQSGVs in 2022-Q4 samples collected from the Pond, Sump, and leachate system locations.

Pond, Sump, GWCM and Leachate System VOC Result Exceedances

Parameter	Units	LF#2
Benzene	ug/L	2.9

Note: Only Gray-Shade (AWQSGVs) exceedance concentrations are presented.

1) ug/L = micrograms per liter (i.e. parts per billion).

Pond, GWCM, and Leachate System Part 360 Leachate Indicators

Part 360 leachate indicators were detected at the Site in the Pond, Sump, C&D Primary (i.e. CD1), C&D Secondary (i.e. CD2), Landfill #2 Leachate (i.e. LF#2), and GWCM sampling locations. The table below summarizes the detected concentrations of leachate indicator parameters exceeding the NYSDEC

AWQSGVs for leachate system samples and the NYSDEC AWQSGV or SSSTVs in the Pond and Sump samples. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Pond, GWCM and Leachate System Leachate Indicator Exceedances

Parameter	Units	Pond	Sump	CDPL	CDSL	LF#2	GWCM
Alkalinity (T)	mg/L						**265**
Ammonia	mg/L-N					245	
BOD	mg/L	**6.8**	**2.2**				
Color	C.U.	**15**	**80**	375	110	500	**150**
Bromide	mg/L		**0.5**			54.1	
Chloride	mg/L					1190	
Hardness (T)	mg/L		**625**				**625**
Sulfate	mg/L		323	1090	1270		319
TDS	mg/L	531	812	2330	2420	3420	832
TKN	mg/L-N	**0.81**	**0.35**				**0.3**
Cyanide (T)	mg/L					0.0107	
Total Phenols	mg/L		**0.0039**			0.0119	

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).
2) C.U. = Color Units

Pond, GWCM, and Leachate System Inorganic Analytes

Inorganic analytes were detected at the site in the Pond, Sump, CD1, CD2, LF#2, and GWCM sampling locations. The table below summarizes the detected concentrations of inorganic leachate indicator parameters exceeding the SSSTVs and NYSDEC AWQSGVs. Concentrations exceeding the SSSTVs are presented as **bold** text and concentrations exceeding NYSDEC AWQSGVs are presented with a gray-shaded text. These results are also included in the site-wide summary of exceedances.

Pond, GWCM and Leachate System Inorganic Analyte Exceedances (Total Concentrations)

Parameter	Units	Pond	Sump	CDPL	CDSL	LF#2	GWCM
Arsenic (T)	mg/L				0.043		
Barium (T)	mg/L	**0.026**					**0.038**
Boron (T)	mg/L					3.41	
Calcium (T)	mg/L		**129**				**153**
Iron (T)	mg/L			24.7	165	3.33	1.44
Lead (T)	mg/L				0.116		
Magnesium (T)	mg/L		**42.9**	135	121	174	**46.1**
Manganese (T)	mg/L			0.62	0.4		
Sodium (T)	mg/L	29	**55.1**	21	22	602	35
Thallium (T)				0.008			
Molybdenum (T)	mg/L				0.005		

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).

Pond, GWCM and Leachate System Inorganic Analyte Exceedances (Dissolved Concentrations)

Parameter	Units	Pond	Sump	GWCM
Barium (D)	mg/L			**0.03**
Calcium (D)	mg/L		**126**	**147**
Magnesium (D)	mg/L		**42**	**44.2**
Sodium (D)	mg/L	28.8	54.3	34

Note: Only Gray-Shade (AWQSGVs) and/or **Bold** (SSSTVs) exceedance concentrations are presented.

1) mg/L = milligrams per liter (i.e. parts per million).

Should you have any questions regarding this matter please contact me anytime at 716-882-5476 ext. 417.

Sincerely,

LiRo Engineers, Inc.

Craig Taylor
Project Manager

cc: LiRo File 22-033-2914

Attachments

TABLES

FIGURES

ATTACHMENTS

TABLES

TABLE 1
SITE MONITORING SCHEDULE
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT NEW YORK

ACTIVITIES and TASKS			NCRDD 2022 MONITORING and SAMPLING SCHEDULE		
			FREQUENCY	**GENERAL NOTES**	**SPECIFIC INSTRUCTIONS AND COMMENTS**
TASK	**MONITORING**	Gas-Vent Monitoring	Monthly	Landfill Gas-Vent Monitoring at MP-01, MP-02, MP-03 and MP-04	1) Methane (CH_4) 2) Oxygen (0_2) 3) Hydrogen Sulfide (H_2S) 4) Lower Explosive Limit (LEL)
		Second Leachate Collection System Monitoring	Each Quarter	Measure the quantity of liquid present in the secondary leachate collection system and compare it to an action leakage rate.	--
		Gauge Monitoring Wells and Miscellaneous Locations	Each Quarter	Gauging of Site Monitoring Wells to be completed by Water-Bearing Zone or Formation Group: i.e. Uppermost Water-Bearing Zone, Lockport Formation, and Rochester Formation	**Miscellaneous Locations (3 Locations):** Sump, Pond, and Groundwater Collector Manhole
					Uppermost Water-Bearing Zone (8 Wells): GZ-04S, GZ-04D, GZ-12, GZ-13, GZ-14, GZ-15, GZ-17, GZ-18
					Lockport (8 Wells): GZ-7S, GZ-20SR, GZ-21S, GZ-22S, GZ-23S, GZ-24S, GZ-25S and MW-27S
					Rochester (7 Wells): GZ-7D, GZ-22D, GZ-25D, MW-26D, MW-27DD, MW-28D and MW-29D
	SAMPLING	NCRDD Routine Parameters	Q1, Q3 and Q4	9 **Locations**: GZ-07S, GZ-14, GZ-15, GZ-18, GZ-20SR, GZ-21S, GZ-23S, MW-28D, MW-29D	**Routine Parameters** 'NH3, BOD, Bromide, COD, Chloride, Total CN, Cr+6, NO3, Sulfate, Alkalinity, TDS, Hardness, TKN, TOC, Total Recoverable Phenolics, and Total Metals[1]
		NCRDD Baseline Parameters	Q1, Q3 and Q4	**15 Locations**: GZ-07D, GZ-12, GZ-13, GZ-17, GZ-22S, GZ-22D, GZ-24S, GZ-25S, GZ-25D, MW-26D, MW-27DD, MW-27S, Pond, Sump and groundwater manhole collector	**Baseline Parameters** Routine Parameters Plus: Total and Dissolved Metals[2], Color, and NYSDEC Part 360 VOCs
			Q2	**All 24 Locations:** (i.e. All Q1, Q3 and Q4 Routine and Baseline Locations)	
		NCRDD Expanded Parameters	Q2 and Q4	**3 Locations:** C&D Primary Leachate, C&D Secondary Leachate, and Landfill #2 Leachate Storage	**Expanded Parameters** Baseline Parameters Plus: Total Metals[3], NYSDEC Part 360 SVOCs, Pesticides, Herbicides, and PCBs
	REPORTING	Quarter	Quarterly Summary Report (Q1, Q2 and Q3)	All Data	--
		Annual	Annual Summary Report (with Q4)	All Data	--

Notes:
1) Routine Total Metals (9): Cd, Ca, Fe, Pb, Mg, Mn, K, Na and Boron
2) Baseline Total and Dissolved Metals (22): Al, Sb, As, Ba, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, K, Se, Ag, Na, Hg, Tl, V, Zn and Boron
3) Expanded Total Metals (22): Al, Sb, As, Ba, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, K, Se, Ag, Na, Hg, Tl, V, Zn and Boron

TABLE 2
SUMMARY OF GAS-VENT MONITORING
2022 Q1 to Q4
NCRDD-NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
400 HINMAN AVENUE, LOCKPORT, NEW YORK

Well Designation	Date Measured	Hyrogen Sulfide (ppm)	Methane (%)	LEL (%)	Oxygen (%)	Comments
MP-1	Jan-2022	NM	NM	NM	NM	Monitoring Not Conducted
MP-2	Jan-2022	NM	NM	NM	NM	Monitoring Not Conducted
MP-3	Jan-2022	NM	NM	NM	NM	Monitoring Not Conducted
MP-4	Jan-2022	NM	NM	NM	NM	Monitoring Not Conducted
MP-1	2/17/2022	0.00	0.10	0.00	20.90	
MP-2	2/17/2002	0.00	0.00	0.00	20.90	
MP-3	2/17/2022	NM	NM	NM	NM	Inaccessible: Flooded
MP-4	2/17/2022	NM	NM	NM	NM	Inaccessible: Flooded
MP-1	3/28/2022	0.00	0.10	0.00	20.90	
MP-2	3/28/2022	0.00	0.00	0.00	20.90	
MP-3	3/28/2022	0.00	0.00	0.00	20.90	
MP-4	3/28/2022	0.00	0.00	0.00	20.90	
MP-1	4/13/2022	0.00	0.00	2.00	20.90	
MP-2	4/13/2022	0.00	0.00	2.00	20.90	
MP-3	4/13/2022	0.00	0.00	2.00	20.90	
MP-4	4/13/2022	0.00	0.00	2.00	20.90	
MP-1	5/11/2022	0.00	0.00	0.00	20.90	
MP-2	5/11/2022	0.00	0.00	0.00	20.90	
MP-3	5/11/2022	0.00	0.00	0.00	20.90	
MP-4	5/11/2022	0.00	0.00	0.00	20.90	
MP-1	6/1/2022	0.00	0.00	0.00	20.90	
MP-2	6/1/2022	0.00	0.00	0.00	20.90	
MP-3	6/1/2022	0.00	0.00	0.00	20.90	
MP-4	6/1/2022	0.00	0.00	0.00	20.90	
MP-1	7/13/2022	0.00	0.00	0.00	20.90	
MP-2	7/13/2022	0.00	0.00	0.00	20.90	
MP-3	7/13/2022	0.00	0.00	0.00	20.90	
MP-4	7/13/2022	0.00	0.00	0.00	20.90	
MP-1	8/9/2022	0.00	0.00	0.00	20.90	
MP-2	8/9/2022	0.00	0.00	0.00	20.90	
MP-3	8/9/2022	0.00	0.00	0.00	20.90	
MP-4	8/9/2022	0.00	0.00	0.00	20.90	
MP-1	9/22/2022	0.00	0.00	0.00	20.90	
MP-2	9/22/2022	0.00	0.00	0.00	20.90	
MP-3	9/22/2022	0.00	0.00	0.00	20.90	
MP-4	9/22/2022	0.00	0.00	0.00	20.90	
MP-1	10/12/2022	0.00	0.00	0.00	20.40	
MP-2	10/12/2022	0.00	0.00	0.00	20.40	
MP-3	10/12/2022	0.00	0.00	0.00	20.40	
MP-4	10/12/2022	0.00	0.00	0.00	20.40	
MP-1	11/30/2022	0.00	0.00	0.00	20.10	
MP-2	11/30/2022	0.00	0.00	0.00	20.10	
MP-3	11/30/2022	0.00	0.00	0.00	20.10	
MP-4	11/30/2022	0.00	0.00	0.00	20.10	
MP-1	12/14/2022	0.00	0.00	0.00	19.90	
MP-2	12/14/2022	0.00	0.00	0.00	19.90	
MP-3	12/14/2022	0.00	0.00	0.00	19.90	
MP-4	12/14/2022	0.00	0.00	0.00	19.90	

TABLE 3
SUMMARY OF WATER LEVEL DATA: NOVEMBER 28, 2022
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT, NEW YORK

Well Designation	Date Measured	Measuring Point Elevation	Depth to Water (ft)	Groundwater Elevation (ft)	Comments
GZ-7S	11/28/2022	561.50	10.70	550.80	
GZ-7D	11/28/2022	561.60	20.34	541.26	
Collector	11/28/2022	NA	20.50	NA	
Pond	11/28/2022	NA	19.63	NA	
GZ-21S	11/28/2022	598.00	40.40	557.60	
GZ-22S	11/28/2022	560.50	9.40	551.10	
GZ-22D	11/28/2022	560.40	62.10	498.30	
GZ-23S	11/28/2022	557.10	6.50	550.60	
GZ-24S	11/28/2022	624.00	73.60	550.40	
GZ-25S	11/28/2022	622.00	72.48	549.52	
GZ-25D	11/28/2022	620.80	85.20	535.60	
GZ-17	11/28/2022	578.90	26.60	552.30	
GZ-18	11/28/2022	552.30	2.50	549.80	
MW-26D	11/28/2022	557.34	NM	NA	Dry.
MW-27S	11/28/2022	565.69	13.20	552.49	
MW-27DD	11/28/2022	565.09	22.10	542.99	
MW-28D	11/28/2022	559.97	19.40	540.57	
MW-29D	11/28/2022	598.71	51.50	547.21	
GZ-15	11/28/2022	552.50	3.20	549.30	
GZ-14	11/28/2022	554.00	4.40	549.60	
GZ-13	11/28/2022	564.30	11.20	553.10	
GZ-12	11/28/2022	603.20	51.75	551.45	
GZ-20SR	11/28/2022	596.00	20.90	575.10	
Landfill#2 leachate	11/28/2022		18.50		
C&D primary leachate	11/28/2022		11.90		
C&D Secondary leachate	11/28/2022		12.80		

Notes:

1) NA - Not Available

2) NM - Not Measured

3) All depths are presented in feet from measuring point.

4) Groundwater elevations are presented in feet as referenced to mean sea level.

TABLE 4
MONITORING AND SAMPLING SUMMARY: 2022-Q4
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT NEW YORK

WELL CONSTRUCTION DATA, QUARTERLY MONITORING AND SAMPLING SUMMARY													
Location ID	**Date of Purging**	**Sampling Date**	**Sampling Time**	**Purge Start Time**	**Measuring Point Elevation (feet AMSL)**	**Depth to Groundwater (ft.)**	**Groundwater Elevation (feet)**	**Bottom of Well (feet)**	**Single Well Volume (gallon)**	**pH (SU)**	**Specific Conductivity (mS/cm)**	**Turbidity (NTU)**	**Temp (°C)**
GZ-7S	11/28/2022	11/28/2022	10:05 AM	9:58 AM	561.50	10.70	550.80	24.35	2.00	6.85	1.28	176	11.07
GZ-7D	11/28/2022	11/28/2022	9:45 AM	9:38 AM	561.60	20.34	541.26	30.00	1.00	7.10	38.8	883.0	9.80
GZ-8S	--	--	--	--	592.60	--	--	60.00	--	--	--	--	--
GZ-8D (R)	--	--	--	--	590.50	--	--	97.15	--	--	--	--	--
GZ-10S	--	--	--	--	595.30	--	--	45.35	--	--	--	--	--
GZ-10D	--	--	--	--	597.70	--	--	110.00	--	--	--	--	--
GZ-12	11/28/2022	11/28/2022	1:20 PM	1:08 PM	603.20	51.75	551.45	82.00	4.50	7.12	22.6	79.1	10.50
GZ-13	11/28/2022	11/29/2022	11:45 AM	11:38 AM	564.30	11.20	553.10	29.70	2.50	6.88	2.04	83.0	11.62
GZ-14	11/29/2022	11/29/2022	12:45 PM	12:36 PM	554.00	4.40	549.60	18.50	2.50	7.00	5.39	406	13.09
GZ-15	11/29/2022	11/29/2022	1:00 PM	12:52 PM	552.50	3.20	549.30	10.10	1.00	6.91	2.95	19.6	10.16
GZ-17	11/30/2022	11/30/2022	9:50 AM	8:42 AM	578.90	26.60	552.30	47.70	3.00	6.93	6.20	137.0	10.96
GZ-18	11/28/2022	11/29/2022	1:15 PM	1:09 PM	552.30	2.50	549.80	19.60	3.00	6.99	5.20	49.5	12.43
GZ-20S (R)	11/28/2022	11/28/2022	8:47 AM	8:40 AM	596.00	20.9	575.10	44.30	3.50	7.02	3.73	193	11.1
GZ-21S	11/28/2022	11/28/2022	12:20 PM	12:12 PM	598.00	40.40	557.60	58.80	2.50	6.96	2.39	74.2	9.94
GZ-22S	11/28/2022	11/28/2022	11:05 AM	11:00 AM	560.50	9.40	551.10	22.10	2.00	6.93	1.12	64	11.36
GZ-22D	11/28/2022	11/30/2022	10:30 AM	11:17 AM	560.40	62.10	498.30	63.35	0.30	7.04	17.90	64	10.08
GZ-23S	11/28/2022	11/28/2022	10:45 AM	10:40 AM	557.10	6.50	550.60	20.30	2.00	6.95	2.18	90.2	13.17
GZ-24S	11/29/2022	11/29/2022	10:00 AM	9:48 AM	624.00	73.60	550.40	85.10	1.50	6.94	27.2	49.4	9.90
GZ-25S	11/29/2022	11/29/2022	9:22 AM	9:15 AM	622.00	72.48	549.52	83.70	1.50	6.89	91.9	240	10.10
GZ-25D	11/29/2022	11/29/2022	8:45 AM	8:35 AM	620.80	85.20	535.60	110.00	3.50	6.91	>100	70.6	9.10
MW-26D	--	--	--	--	557.34	NA	NA	40.20	--	--	--	--	--
MW-27S	11/30/2022	11/30/2022	8:40 AM	8:32 AM	565.69	13.20	552.49	32.60	3.50	7.05	4.09	92.8	11.95
MW-27D	--	--	--	--	565.69	NA	NA	50.30	--	--	--	--	--
MW-27DD	11/30/2022	11/30/2022	9:30 AM	8:55 AM	565.09	22.10	542.99	74.40	8.40	7.08	>100	75.5	10.79
MW-28D	11/28/2022	11/28/2022	12:20 PM	11:30 AM	559.97	19.40	540.57	76.30	9.00	7.02	17.9	71.2	9.80
MW-29D	11/28/2022	11/28/2022	12:45 PM	12:33 PM	598.71	51.50	547.21	113.00	9.80	6.98	3.37	32.5	9.98
Groundwater Collector	--	11/29/2022	10:25 AM	10:22 AM	NA	20.5	NA	NA	NA	6.94	14.10	26.6	9.69
Sump	--	11/30/2022	9:40 AM	9:39 AM	NA	NA	NA	NA	NA	7	72	55.3	8.93
Pond	--	11/28/2022	1:45 PM	1:44 PM	NA	19.63	NA	NA	NA	7.03	5.37	17.8	5.20
Landfill #2 Leachate Storage	--	11/29/2022	1:50 PM	1:48 PM	NA	18.5	NA	NA	NA	6.99	7.68	52.1	14.01
C&D Primary Leachate	--	11/29/2022	12:00 PM	11:59 AM	NA	11.9	NA	NA	NA	6.9	2.62	113	12.17
C&D Secondary Leachate	--	11/29/2022	11:10 AM	11:07 AM	NA	12.8	NA	NA	NA	7.01	2.78	160	10.35

Notes:

NA = Not Applicable

-- = Not Sampled

Over = Turbidity measurement was over the meter range (>1,000)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-7S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.60	(FPHSU)	**9.51**	7.76	8.21	6.85
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	3.12	1.89	2.06	1.28
Temperature	deg. C	NA	18.6	(TEMP)	10.2	13.17	15.28	11.07
Turbidity	NTU	5	252.7	(TURB)	**870**	238	**963**	176
Aluminum - Total	MG/L	NA	7.538	T7429-90-5	3.89	3.08		
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2	**0.0067 J**	**0.009 J**		
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0492	0.067		
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3		0.032		
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7		0.0002 J		
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	0.207	0.18 J	0.19 J	0.05 J
Boron, Dissolved	MG/L	1	0.44	T7440-42-8				
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9	0.0007 J	0.0022 J	**0.0045 J**	0.0005 J
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	142	170	201	137
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		80.3		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0119	**0.028**		
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3		**0.017**		
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0015 J	0.002 J		
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0042 J	0.011 J		
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6	2.58 E	3.78	**19.3**	1.14
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1	**0.0079 J**	**0.04 J**	**0.064**	0.004 J
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	13.1	27.3	31.8	3.3
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		7.5		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.056	0.214	0.39	0.03
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5				
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0		0.007 J		
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	19.6	20.3	31.1	18.7
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		19.2		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	143	155	116	44.3
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		157		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0		0.008 J		
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0058 J	0.005 J		
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.024	0.081		
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	2.59	2.23	1.83	0.595
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	2.1			
Bromide	MG/L	2	417.5	BROMIDE	1.3		0.8 J	
Chemical Oxygen Demand	MG/L	NA	862.4	COD	3.8	9.5	9.4	
Chloride	MG/L	250	46347.8	CL	149	129	105	43.1
Color	C.U.	15	93.6	COLOR		2		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9			**0.028**	**0.063**
Nitrate	MG/L-N	10	0.9	NITRATE		**3.3**		0.4 J
Sulfate	MG/L	250	5890.3	SULFATE	382	400	345	208
Total Alkalinity	MG/L	NA	981.2	TALK	33.3	47.2		113
Total Dissolved Solids	MG/L	500	75646.2	TDS	854	919	768	499
Total Hardness	MG/L	NA	23726.9	THARD	417	440	767	500
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	2.96	2.84	2.45	0.9
Total Organic Carbon	MG/L	NA	21.2	TOC	2.7	3.3	3.1	1.8
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS		0.0032 J		

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-7S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3		1.1 J		
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3		0.96 J		
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-20S [R] Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	2.92-13.96	(FPHSU)	7.0	7.17	6.79	7.02
Specific Conductance	umhos/cm	NA	20992.6	(FSPECON)	2.7	7.05	10.1	3.73
Temperature	deg. C	NA	17.2	(TEMP)	9.5	13.77	14	11.1
Turbidity	NTU	5	313.9	(TURB)	**445.0**	157	154	193
Aluminum - Total	MG/L	NA	8.433	T7429-90-5		5.5		
Aluminum, Dissolved	MG/L	NA	8.433	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0172	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0172	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2	**0.0183**			
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.4659	T7440-39-3	**0.594**	0.149		
Barium, Dissolved	MG/L	1	0.4659	T7440-39-3		0.08		
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7		0.0003 J		
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.4	T7440-42-8	**0.841**	**1.63**	**1.81**	**0.99**
Boron, Dissolved	MG/L	1	2.3	T7440-42-8		1.6		
Cadmium - Total	MG/L	0.01	0.0056	T7440-43-9	0.0023 J	0.0005 J		0.0013 J
Cadmium, Dissolved	MG/L	0.01	0.0056	T7440-43-9				
Calcium - Total	MG/L	NA	717.6	T7440-70-2		375	376	312
Calcium, Dissolved	MG/L	NA	717.6	T7440-70-2		337		
Chromium - Total	MG/L	0.05	0.0712	T7440-47-3	**0.441**	0.011		
Chromium, Dissolved	MG/L	0.05	0.0712	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4		0.004 J		
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.7905	T7440-50-8		0.006 J		
Copper, Dissolved	MG/L	0.2	0.7905	T7440-50-8				
Iron - Total	MG/L	0.3	27.4	T7439-89-6	**122**	16.5	27	**59.4**
Iron, Dissolved	MG/L	0.3	27.4	T7439-89-6				
Lead - Total	MG/L	0.025	0.0603	T7439-92-1	**0.0645**	0.006 J	0.003 J	0.035 J
Lead, Dissolved	MG/L	0.025	0.0603	T7439-92-1				
Magnesium - Total	MG/L	35	108.11	T7439-95-4		107	104	89.6
Magnesium, Dissolved	MG/L	35	108.11	T7439-95-4		103		
Manganese - Total	MG/L	0.3	0.4782	T7439-96-5		**0.88**	**0.951**	**1.29**
Manganese, Dissolved	MG/L	0.3	0.4782	T7439-96-5		**0.72**		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6	0.00008 J			
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.0492	T7440-02-0		0.012 J		
Nickel, Dissolved	MG/L	0.1	0.0492	T7440-02-0				
Potassium - Total	MG/L	NA	93.75	T7440-09-7		30.8	31	41.8
Potassium, Dissolved	MG/L	NA	93.75	T7440-09-7		29		
Selenium - Total	MG/L	0.01	0.0075	T7782-49-2	**0.01**			
Selenium, Dissolved	MG/L	0.01	0.0075	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4	0.0012 J			
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	1903.46	T7440-23-5		574	600	288
Sodium, Dissolved	MG/L	20	1903.46	T7440-23-5		559		
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0		**0.008 J**		
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2		0.008 J		
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.3792	T7440-66-6		0.304		
Zinc, Dissolved	MG/L	2	0.3792	T7440-66-6				
Ammonia	MG/L-N	2	2.9	7664-41-7	0.73	0.791	0.814	0.471
Biochemical Oxygen Demand	MG/L	NA	35.8	BOD	6.6			3.4
Bromide	MG/L	2	8.0	BROMIDE	3.4	6.9	5.9	3
Chemical Oxygen Demand	MG/L	NA	525.3	COD	65.5	42.2	24.4	
Chloride	MG/L	250	1386.4	CL	318	643	603	299
Color	C.U.	15	180.8	COLOR		8		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5	**0.0043 J**			
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.31	NITRATE			**0.6 J**	**2.9**
Sulfate	MG/L	250	1950.0	SULFATE	629	1210	820	780
Total Alkalinity	MG/L	NA	554.4	TALK	341	336	340	350
Total Dissolved Solids	MG/L	500	4658.5	TDS	1840	3380	3320	1870
Total Hardness	MG/L	NA	2152.0	THARD	1350	800	1550	833
Total Kjeldahl Nitrogen	MG/L-N	NA	4.3	TKN	1.5	3.5 J		1.54
Total Organic Carbon	MG/L	NA	13.6	TOC		12.9	5.4	7.2
Total Recoverable Phenolics	MG/L	0.001	0.01	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-20S [R]			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	6.5	78-93-3		5 J		
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	5.9	67-64-1		5.9 J		
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	8.7	71-43-2		0.73 J		
Bromochloromethane	UG/L	5	3.9	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.9	74-83-9				
Carbon Disulfide	UG/L	60	69.6	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	16.3	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.9	124-48-1				
Dibromomethane	UG/L	5	3.9	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	11.8	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	10.7	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-21S			Statistical		2022			
			Trigger	Lab Sample	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	2.92-13.96	(FPHSU)	7.3	6.58	6.95	6.96
Specific Conductance	umhos/cm	NA	20992.6	(FSPECON)	3.6	2.18	2.98	2.39
Temperature	deg. C	NA	17.2	(TEMP)	9.8	15.72	12.73	9.94
Turbidity	NTU	5	313.9	(TURB)	27.1	71.9	90.10	74.2
Aluminum - Total	MG/L	NA	8.43	T7429-90-5	0.0785 J	0.3		
Aluminum, Dissolved	MG/L	NA	8.43	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0172	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0172	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.4659	T7440-39-3	0.0145 J	0.029		
Barium, Dissolved	MG/L	1	0.4659	T7440-39-3		0.026		
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	2.3	T7440-42-8	0.239	0.25	0.23	0.29
Boron, Dissolved	MG/L	1	2.3	T7440-42-8		0.25		
Cadmium - Total	MG/L	0.01	0.0056	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0056	T7440-43-9				
Calcium - Total	MG/L	NA	717.6	T7440-70-2	106	99.8	103	97
Calcium, Dissolved	MG/L	NA	717.6	T7440-70-2		98.9		
Chromium - Total	MG/L	0.05	0.0712	T7440-47-3	0.0093 J	0.008 J		
Chromium, Dissolved	MG/L	0.05	0.0712	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4				
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.7905	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.7905	T7440-50-8				
Iron - Total	MG/L	0.3	27.4	T7439-89-6	3.61	2.93	3.57	4.72
Iron, Dissolved	MG/L	0.3	27.4	T7439-89-6				
Lead - Total	MG/L	0.025	0.0603	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0603	T7439-92-1				
Magnesium - Total	MG/L	35	108.1	T7439-95-4	51.3	48.6	49.4	46.5
Magnesium, Dissolved	MG/L	35	108.1	T7439-95-4		48.2		
Manganese - Total	MG/L	0.3	0.478	T7439-96-5	0.0529 E	0.043	0.068	0.088
Manganese, Dissolved	MG/L	0.3	0.478	T7439-96-5		0.034		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.0492	T7440-02-0	0.0034 J	0.004 J		
Nickel, Dissolved	MG/L	0.1	0.0492	T7440-02-0				
Potassium - Total	MG/L	NA	93.75	T7440-09-7	8.43 E	8	7.4	8.6
Potassium, Dissolved	MG/L	NA	93.75	T7440-09-7		7.8		
Selenium - Total	MG/L	0.01	0.0075	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0075	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	1903.5	T7440-23-5	153	157	145	167
Sodium, Dissolved	MG/L	20	1903.5	T7440-23-5		157		
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.3792	T7440-66-6	0.0042 J	0.009 J		
Zinc, Dissolved	MG/L	2	0.3792	T7440-66-6				
Ammonia	MG/L-N	2	2.9	7664-41-7	0.411	0.272	0.298	0.54
Biochemical Oxygen Demand	MG/L	NA	35.8	BOD		13.6		
Bromide	MG/L	2	8.0	BROMIDE				0.5 J
Chemical Oxygen Demand	MG/L	NA	525.3	COD	6.9	7.2	7	
Chloride	MG/L	250	1386.4	CL	204	184	183	204
Color	C.U.	15	180.8	COLOR	34	5		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.31	NITRATE		**1.1**		
Sulfate	MG/L	250	1950.0	SULFATE	169	137	125	128
Total Alkalinity	MG/L	NA	554.4	TALK	386	392	387	403
Total Dissolved Solids	MG/L	500	4658.5	TDS	930	892	871	928
Total Hardness	MG/L	NA	2152.0	THARD	533	567	550	500
Total Kjeldahl Nitrogen	MG/L-N	NA	4.3	TKN	0.71	0.54		1.01
Total Organic Carbon	MG/L	NA	13.6	TOC	1.5	2.9	2.6	3
Total Recoverable Phenolics	MG/L	0.001	0.01	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-21S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	6.5	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	5.9	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	8.7	71-43-2				
Bromochloromethane	UG/L	5	3.9	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.9	74-83-9				
Carbon Disulfide	UG/L	60	69.6	75-15-0		2.8 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	16.3	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.9	124-48-1				
Dibromomethane	UG/L	5	3.9	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	11.8	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	10.7	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-22S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	7.2	6.05	6.72	6.93
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	4.0	1.64	2.29	1.12
Temperature	deg. C	NA	18.6	(TEMP)	10.1	11.8	14.93	11.36
Turbidity	NTU	5	252.7	(TURB)	172.1	110	221	64.4
Aluminum - Total	MG/L	NA	7.538	T7429-90-5	**16.8**	2.45	1.98	0.45
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2	**0.0149**			**0.007 J**
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.162	0.101	0.097	0.072
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.12	0.085	0.09	0.051
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0007 J	0.0002 J		
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**1.05**	**0.59**	**0.5**	0.37
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**0.924**	**0.53**	**0.49**	0.24
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9	0.0006 J			
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	289	223	191	184
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2	181	176	178	167
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	**0.0185**	0.004 J	0.003 J	
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0057 J	0.0009 J	0.001 J	
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4			**0.001 J**	
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0108 J			
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	**21.9**	4.22	5.43	3.4
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6	0.0628 J			
Lead - Total	MG/L	0.025	0.0076	T7439-92-1	**0.0293 J**			
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	129	82.2	57.4	49.7
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4	75.3	56.2	51.7	40
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	**0.621**	0.424	0.318	0.318
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5	0.261	0.274	0.273	0.281
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	0.0106 J		0.004 J	0.003 J
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0	0.0037 J			
Potassium - Total	MG/L	NA	443.5	T7440-09-7	38.9	20	17.9	12.2
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7	29.2	17.6	17.4	9.1
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	165	116	99.2	57.9
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5	157	107	102	31
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0				0.007 J
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0			0.011	
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	**0.0193**	0.004 J	0.003 J	0.001 BJ
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2	0.001 J			
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0669	0.017 J	0.009 J	
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6	0.0067 J			
Ammonia	MG/L-N	2	38.5	7664-41-7	10.5	7.5	7.17	2.65
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	7.6	10.1	5.9	4.9
Bromide	MG/L	2	417.5	BROMIDE	5.5	3.6	3.2	0.7 J
Chemical Oxygen Demand	MG/L	NA	862.4	COD	31.3	41.2	38.2	
Chloride	MG/L	250	46347.8	CL	253	142	158	31
Color	C.U.	15	93.6	COLOR	9.0	2	50	**170**
Cyanide - Total	MG/L	0.2	0.0	T57-12-5	0.0048 J			
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	97.4	97.2	69.9	42.2
Total Alkalinity	MG/L	NA	981.2	TALK	773	651	650	588
Total Dissolved Solids	MG/L	500	75646.2	TDS	1300	999	999	680
Total Hardness	MG/L	NA	23726.9	THARD	1250	1000	867	733
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	11.2	7.1	8.34	3.01
Total Organic Carbon	MG/L	NA	21.2	TOC	10.5	**28.6**	12.6	6.9
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS		0.0036 J		

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-22S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3	0.26 J	0.23 J	0.25 J	0.23 J
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7	0.4 J	0.28 J	0.34 J	0.2 J
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0		3.3 J	1.4 J	
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7	1.2 J	0.85 J	0.8 J	0.48 J
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7	0.22 J			
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-23S			Statistical		2022			
			Trigger	Lab Sample	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.3	5.9	6.76	6.95
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	3.0	2.94	4.83	2.18
Temperature	deg. C	NA	18.6	(TEMP)	13.0	14.15	18.44	13.17
Turbidity	NTU	5	252.7	(TURB)	46.6	76	28.3	90.2
Aluminum - Total	MG/L	NA	7.538	T7429-90-5	0.124	0.1		
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.2	**0.274**		
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3		**0.269**		
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**1.07**	**0.81**	**0.95**	**0.67**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		**0.74**		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	215	221	225	230
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		223		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0017 J			
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.001 J			
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	0.512 E	0.46	0.13	1.03
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	83.7	80.5	82.5	83.7
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		77.8		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.378	0.416	0.392	0.357
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.434		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	0.0047 J			
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	35.9	26.4	28	21.6
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		23.9		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	149	124	136	117
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		117		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	0.01			
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0008 J			
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0026 J	0.004 J		
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	18.2	9.2	10.6	6.5
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	7.4	4.3	5.6	3.6
Bromide	MG/L	2	417.5	BROMIDE	4.2	2.6	4.5	2.4
Chemical Oxygen Demand	MG/L	NA	862.4	COD	42.7	23.7	39.3	6.3
Chloride	MG/L	250	46347.8	CL	224	174	269	180
Color	C.U.	15	93.6	COLOR		3		
Cyanide - Total	MG/L	0.2	0.0	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	321	395	295	472
Total Alkalinity	MG/L	NA	981.2	TALK	678	502	625	462
Total Dissolved Solids	MG/L	500	75646.2	TDS	1450	1410	1520	1520
Total Hardness	MG/L	NA	23726.9	THARD	870	1150	1000	933
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	19	10.8	11.9	7.3
Total Organic Carbon	MG/L	NA	21.2	TOC	10.6	7.2	11.1	6.1
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS		0.0045 J	0.0066	

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-23S			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1		0.24 J		
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7		1.3 J		
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0		3.3 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7		1.7 J		
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-23S			Statistical Trigger	Lab Sample	**2022**			
					Quarter 1	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.3	5.9	6.76	6.95
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	3.0	2.94	4.83	2.18
Temperature	deg. C	NA	18.6	(TEMP)	13.0	14.15	18.44	13.17
Turbidity	NTU	5	252.7	(TURB)	46.6	76	28.3	90.2
Aluminum - Total	MG/L	NA	7.538	T7429-90-5	0.124	0.1		
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.2	**0.274**		
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3		**0.269**		
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**1.07**	**0.81**	**0.96**	**0.72**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		**0.74**		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				0.0019 J
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	215	221	225	250
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		223		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0017 J			
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.001 J			
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	0.512 E	0.46	0.08 J	**33.8**
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	83.7	80.5	82.7	90.4
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		77.8		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.378	0.416	0.389	0.468
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.434		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	0.0047 J			
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	35.9	26.4	28.5	22.4
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		23.9		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	149	124	138	121
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		117		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	0.01			
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0008 J			
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0026 J	0.004 J		
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	18.2	9.2	11.7	6.61
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	7.4	4.3	7	3.8
Bromide	MG/L	2	417.5	BROMIDE	4.2	2.6	4.9	2.7
Chemical Oxygen Demand	MG/L	NA	862.4	COD	42.7	23.7	41.6	
Chloride	MG/L	250	46347.8	CL	224	174	264	193
Color	C.U.	15	93.6	COLOR		3		
Cyanide - Total	MG/L	0.2	0.0	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	321	395	274	469
Total Alkalinity	MG/L	NA	981.2	TALK	678	502	644	475
Total Dissolved Solids	MG/L	500	75646.2	TDS	1450	1410	1480	1520
Total Hardness	MG/L	NA	23726.9	THARD	870	1150	1130	1000
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	19	10.8	12.7	
Total Organic Carbon	MG/L	NA	21.2	TOC	10.6	7.2	11.8	6.5
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS		0.0045 J	0.0072	

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-23S			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1		0.24 J		
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7		1.3 J		
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0		3.3 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7		1.7 J		
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-24S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.7	6.79	6.64	6.94
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	24.9	24	49.2	27.2
Temperature	deg. C	NA	18.6	(TEMP)	10.9	14.8	12.63	9.9
Turbidity	NTU	5	252.7	(TURB)	18.8	**283**	155	49.4
Aluminum - Total	MG/L	NA	7.538	T7429-90-5		1.31	0.23	0.29
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0039 J	0.017 J	0.008 J	0.013 J
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0037 J			
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**3.65**	**3.8**	**3.91**	**3.95**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**3.56**	**3.88**	**3.84**	**3.83**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9		0.0011 J		
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	502	502	639	1100
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2	487	552	642	1050
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0024 J	**0.018**	0.002 J	0.003 J
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0011 J			
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4	0.0009 J			
Copper - Total	MG/L	0.2	0.0788	T7440-50-8		0.015 J		
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6		2.56	0.93	1.52
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1		**0.008 J**		
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	170	191	280	578
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4	166	239	277	471
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.0243 E	0.093	0.035	0.04
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5	0.0236 E	0.028	0.018	0.021
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0		0.012 J		
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	58.4 E	67.1	92.3	111
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7	56.5 E	75.7	90.9	126
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	2540	3070	4240	6440
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5	2480	3570	4310	6240
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.0182**	**0.025 B**	**0.03**	**0.07 J**
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0	**0.0185**	**0.017**		
Vanadium - Total	MG/L	NA	0.015	T7440-62-2		0.002 J		0.001 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.061	0.013 J	0.007 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	4.93	5.44	7.01	10.8
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	6.9	17.7	30.4	42.1
Bromide	MG/L	2	417.5	BROMIDE	23.8	31.1	55.5	115
Chemical Oxygen Demand	MG/L	NA	862.4	COD	44.7	157	369	543
Chloride	MG/L	250	46347.8	CL	2200	2900	5390	10700
Color	C.U.	15	93.6	COLOR	5	2	1	**175**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	3970	4090	3730	3070
Total Alkalinity	MG/L	NA	981.2	TALK	250	281	285	269
Total Dissolved Solids	MG/L	500	75646.2	TDS	9800	11000	11400	24000
Total Hardness	MG/L	NA	23726.9	THARD	2000	3000	3200	5600
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	4.79	8.4	8.3	10.8
Total Organic Carbon	MG/L	NA	21.2	TOC	0.7 J	1.8	5.6	3.3
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS			0.0041 J	0.003 J

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-24S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0	0.98 J	22 J	8.7 J	5.4 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7			1 J	
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25S			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.0	6.25	6.05	6.89
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	**>100**	**>100**	**>100**	91.9
Temperature	deg. C	NA	18.6	(TEMP)	10.3	16.16	13.56	10.1
Turbidity	NTU	5	252.7	(TURB)	55.5	187	**256**	240
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5	2.14	0.2	3.2	3.8
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5	0.0605 J			
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0279	0.031	0.031	0.028
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0242	0.03	0.026	0.023
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0002 J			
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**5.08**	**4.8**	**4.24**	**3.89**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**4.83**	**4.75**	**4.21**	**3.86**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	3670	3460	3600	3320
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2	3600	3430	3630	3340
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	**0.145**	0.011	**0.104**	**0.096**
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3	0.0019 J			
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0046 J	0.001 J	0.002 J	0.002 J
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0131 J		0.01 J	0.009 J
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8	0.02			
Iron - Total	MG/L	0.3	16.1	T7439-89-6	2.02	1.35	3.29	2.76
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6	0.1	0.58		
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				0.004 J
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1	0.0022 J			
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	2690	2440	2290	2230
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4	2600	2370	2310	2250
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.226 E	0.318	0.162	0.15
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5	0.188 E	0.314	0.128	0.137
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6		**0.0009 J**		
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	**0.0661**	0.003 J	**0.042**	**0.036 J**
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	326 E	307	330	240
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7	308 E	299	331	240
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4	0.0007 J			
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	18800	17900	19400	16200
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5	18500	17700	19600	17000
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.159**	**0.143**		
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0	**0.149**	**0.146**		
Vanadium - Total	MG/L	NA	0.015	T7440-62-2			0.0008 J	0.004 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0094 J	0.014 J	0.017 J	0.016 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	26.3	24.5	25.1	25.4
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	-	30.2	66.9	78
Bromide	MG/L	2	417.5	BROMIDE	**493**	**456**	**593**	**455**
Chemical Oxygen Demand	MG/L	NA	862.4	COD	-	**1590**	**2030**	**2250**
Chloride	MG/L	250	46347.8	CL	45300	40400	**46600**	**51200**
Color	C.U.	15	93.6	COLOR	8	2	8	**250**
Cyanide - Total	MG/L	0.2	0.0	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE		0.007 J	**12.8**	
Sulfate	MG/L	250	5890.3	SULFATE	2530	2650	2430	2220
Total Alkalinity	MG/L	NA	981.2	TALK	-	139	170	176
Total Dissolved Solids	MG/L	500	75646.2	TDS	72800	72000	75200	72800
Total Hardness	MG/L	NA	23726.9	THARD	20500	**28500**	19300	18800
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	20.6	25.5	24.9	12.2
Total Organic Carbon	MG/L	NA	21.2	TOC	2.1	5.7	7.4	11
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS			**0.063**	

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25S			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0		**66 J**	**54 J**	29 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3	**2.8 J**			
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-27S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.8	7.22	6.67	7.05
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	8.4	6.75	8.88	4.09
Temperature	deg. C	NA	18.6	(TEMP)	6.3	11	14.47	11.95
Turbidity	NTU	5	252.7	(TURB)	0.0	63	105	92.8
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5		0.1	0.09 J	0.08 J
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0119 J	0.01 J	0.012 J	0.011 J
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0121 J			
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**0.599**	**0.71**	**0.8**	**0.78**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**0.616**	**0.69**	**0.79**	**0.8**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	334	328	392	343
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2	344	334	391	346
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3				
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0013 J		0.001 J	
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4	0.0009 J			
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6	0.691	0.9	1.66	1.23
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6	0.347			
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	212	197	230	196
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4	217	202	228	202
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.0467	0.063	0.097	0.082
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5	0.0499	0.078	0.089	0.074
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	27.9	26.5	29.1	27.4
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7	28.7	25.1	28.8	28.2
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	190	280	228	192
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5	204	205	229	195
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0			0.011	
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.007 J	0.004 J	0.005 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	0.542	0.429	0.67	0.597
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD				
Bromide	MG/L	2	417.5	BROMIDE	1.8	2.2	1.7	1.8
Chemical Oxygen Demand	MG/L	NA	862.4	COD	4 J		4.9 J	
Chloride	MG/L	250	46347.8	CL	195	218	186	158
Color	C.U.	15	93.6	COLOR	3	1	3	**100**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	1590	1390	1740	1320
Total Alkalinity	MG/L	NA	981.2	TALK	241	308	316	326
Total Dissolved Solids	MG/L	500	75646.2	TDS	2790	2790	3130	2650
Total Hardness	MG/L	NA	23726.9	THARD	1750	1700	2100	1750
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	0.74	3.3 J		0.84
Total Organic Carbon	MG/L	NA	21.2	TOC	1.1	2.4	4.9	1.6
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-27S			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7		0.25 J		
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-12			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.5	6.5	6.41	7.12
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	6.3	37.7	52.7	22.6
Temperature	deg. C	NA	18.6	(TEMP)	**58.5**	14.15	13.5	10.5
Turbidity	NTU	5	252.7	(TURB)	65.3	82.4	77	79.1
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5	7.39	0.16	0.06 J	0.07 J
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2	**0.014**			
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0305	0.007 J	0.008 J	0.009 J
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0117 J			
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0002 J			
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**5.59**	**4.85**	**4.73**	**4.62**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**5.43**	**4.9**	**4.74**	**4.64**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9	0.0012 J			
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	971	639	618	695
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		644	628	661
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	**0.116**			
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.003 J			
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0395			
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6	9.19	0.16		0.08 J
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1	**0.022 J**	0.004 J		
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	505	276	256	269
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		276	257	253
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.221	0.054	0.078	0.113
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.05	0.078	0.075
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	**0.0543**			
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	144	92	96.3	104
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		94.6	96.9	99.4
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	6770	4770	4580	4910
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		4790	4690	4850
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.0436**	**0.024 B**		
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0		**0.021**		
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0136 J			0.0007 BJ
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0803	0.008 J	0.004 J	
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	7.73	7.7	7.57	7.88
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	9.2	7.7	35.1	18.4
Bromide	MG/L	2	417.5	BROMIDE	88	54	51	40.4
Chemical Oxygen Demand	MG/L	NA	862.4	COD	86.6	457	414	577
Chloride	MG/L	250	46347.8	CL	8280	6170	5700	5990
Color	C.U.	15	93.6	COLOR	4	1	15	**100**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE		**15**		
Sulfate	MG/L	250	5890.3	SULFATE	4180	4600	4380	4230
Total Alkalinity	MG/L	NA	981.2	TALK	308	296	301	326
Total Dissolved Solids	MG/L	500	75646.2	TDS	20400	16600	17000	16800
Total Hardness	MG/L	NA	23726.9	THARD	2900	3000	3000	2900
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	7.7	10	8.4	9.97
Total Organic Carbon	MG/L	NA	21.2	TOC	3.7		8.2	9.2
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-12			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3		**12 J**		
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2	0.37 J		1.2 J	2.0 J
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0	0.94 J	**37 J**	6.6 J	2.8 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	NA	8.5	108-10-2				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4			0.82 J	
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6			**31**	
Trichlorofluoromethane	UG/L	5	2.5	75-69-4			**21**	
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-13 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	2.92-13.96	(FPHSU)	6.6	4.97	7.3	6.88
Specific Conductance	umhos/cm	NA	20992.6	(FSPECON)	7.0	2.68	4.36	2.04
Temperature	deg. C	NA	17.2	(TEMP)	9.7	14.08	15.25	11.62
Turbidity	NTU	5	313.9	(TURB)	116	97.2	107	83
Aluminum - Total	MG/L	NA	8.433	T7429-90-5	1.34	3.5	0.21	0.44
Aluminum, Dissolved	MG/L	NA	8.433	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0172	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0172	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.4659	T7440-39-3	0.0416	0.016 J	0.004 J	0.008 J
Barium, Dissolved	MG/L	1	0.4659	T7440-39-3	0.0352			
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	2.3	T7440-42-8	0.729	0.38	0.47	0.49
Boron, Dissolved	MG/L	1	2.3	T7440-42-8	0.695	0.37	0.46	0.48
Cadmium - Total	MG/L	0.01	0.0056	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0056	T7440-43-9				
Calcium - Total	MG/L	NA	717.6	T7440-70-2	353	124	112	117
Calcium, Dissolved	MG/L	NA	717.6	T7440-70-2		118	111	115
Chromium - Total	MG/L	0.05	0.0712	T7440-47-3	0.0031 J	0.005 J		
Chromium, Dissolved	MG/L	0.05	0.0712	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4				0.002 J
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.7905	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.7905	T7440-50-8				
Iron - Total	MG/L	0.3	27.4	T7439-89-6	2.48	3.11	0.37	0.51
Iron, Dissolved	MG/L	0.3	27.4	T7439-89-6				
Lead - Total	MG/L	0.025	0.0603	T7439-92-1		0.006 J		
Lead, Dissolved	MG/L	0.025	0.0603	T7439-92-1				
Magnesium - Total	MG/L	35	108.11	T7439-95-4	90.8	39.3	33.2	31.2
Magnesium, Dissolved	MG/L	35	108.11	T7439-95-4		36.1	32.7	30.7
Manganese - Total	MG/L	0.3	0.4782	T7439-96-5	0.0765	0.053	0.02	0.021
Manganese, Dissolved	MG/L	0.3	0.4782	T7439-96-5		0.015	0.015	0.011
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.0492	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.0492	T7440-02-0				
Potassium - Total	MG/L	NA	93.75	T7440-09-7	19.5	13.1	12.8	12.9
Potassium, Dissolved	MG/L	NA	93.75	T7440-09-7		11.8	12.5	12.5
Selenium - Total	MG/L	0.01	0.0075	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0075	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	1903.46	T7440-23-5	601	218	240	251
Sodium, Dissolved	MG/L	20	1903.46	T7440-23-5		221	233	247
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0	**0.0168**			
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0011 J	0.005 J		0.001 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.3792	T7440-66-6	0.203	0.18	0.008 J	0.018 J
Zinc, Dissolved	MG/L	2	0.3792	T7440-66-6				
Ammonia	MG/L-N	2	2.9	7664-41-7	0.908	0.602	0.76	0.704
Biochemical Oxygen Demand	MG/L	NA	35.8	BOD				
Bromide	MG/L	2	8.0	BROMIDE	**9.2**		0.6 J	1.1
Chemical Oxygen Demand	MG/L	NA	525.3	COD	9.5	6.6	10.1	8
Chloride	MG/L	250	1386.4	CL	786	257	250	195
Color	C.U.	15	180.8	COLOR	11	5	7	18
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.31	NITRATE				
Sulfate	MG/L	250	1950.0	SULFATE	1170	273	334	484
Total Alkalinity	MG/L	NA	554.4	TALK	294	260	258	249
Total Dissolved Solids	MG/L	500	4658.5	TDS	3360	1130	1190	1190
Total Hardness	MG/L	NA	2152.0	THARD	1230	513	470	500
Total Kjeldahl Nitrogen	MG/L-N	NA	4.3	TKN	1.35	1.07		1.16
Total Organic Carbon	MG/L	NA	13.6	TOC	3.1	2.3	2.4	2.2
Total Recoverable Phenolics	MG/L	0.001	0.01	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-13			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	6.5	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	5.9	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	8.7	71-43-2				
Bromochloromethane	UG/L	5	3.9	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.9	74-83-9				
Carbon Disulfide	UG/L	60	69.6	75-15-0		1.1 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	16.3	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.9	124-48-1				
Dibromomethane	UG/L	5	3.9	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	11.8	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	10.7	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-14 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.4	6.63	6.62	7
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	7.0	2.15	7.84	5.39
Temperature	deg. C	NA	18.6	(TEMP)	11.5	12.58	17.61	13.09
Turbidity	NTU	5	252.7	(TURB)	33.7	122	**262**	**406**
Aluminum - Total	MG/L	NA	7.538	T7429-90-5		2.27		**7.79**
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0106 J	0.014 J		0.048
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3				
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				0.0003 J
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**1.18**	0.26	**0.53**	**0.51**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		0.26		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2		106	281	385
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		107		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3				0.003 J
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4				0.002 J
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				0.004 J
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	1	1.67	3.65	3.51
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1		0.003 J	0.005 J	**0.008 J**
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4		38.5	98.7	126
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		38.3		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5		0.034	0.087	0.08
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.023		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				0.005 J
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7		12	24	25.3
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		11.9		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4	0.0006 J			
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5		129	342	520
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		131		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0		0.009 BJ		
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				0.002 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.101		0.049
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6		0.029		
Ammonia	MG/L-N	2	38.5	7664-41-7	2.38	0.07	0.402	0.337
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	3			
Bromide	MG/L	2	417.5	BROMIDE	18.3	0.4 J	6.5	11.4
Chemical Oxygen Demand	MG/L	NA	862.4	COD	27.4		19.7	20.3
Chloride	MG/L	250	46347.8	CL	1690	226	768	1060
Color	C.U.	15	93.6	COLOR		5		
Cyanide - Total	MG/L	0.2	0.0	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	1190	242	475	748
Total Alkalinity	MG/L	NA	981.2	TALK	292	215	236	205
Total Dissolved Solids	MG/L	500	75646.2	TDS	4820	934	2100	3290
Total Hardness	MG/L	NA	23726.9	THARD	1870	575	1250	1650
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	2.39			0.74
Total Organic Carbon	MG/L	NA	21.2	TOC	1.8	1.9	2.3	1.9
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-14 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7		0.38 J		
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-15 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.7	6.42	6.64	6.91
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	6.7	4.43	6.43	2.95
Temperature	deg. C	NA	18.6	(TEMP)	5.2	11.55	14.54	10.16
Turbidity	NTU	5	252.7	(TURB)	42.6	39.9	97.7	19.6
Aluminum - Total	MG/L	NA	7.538	T7429-90-5		0.13		0.37
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0153 J	0.013 J		0.01 J
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3				
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**0.472**	**0.45**	**0.56**	**0.47**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		**0.46**		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2		387	399	286
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		385		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3				
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4				
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	0.457	0.22	0.47	0.35
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4		224	219	161
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		225		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5		0.017	0.058	0.039
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.011		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0		0.004 J		
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7		23.7	25.6	21.6
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		24		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5		63	66.6	65
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		64.1		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0		0.013		
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.018 J		0.009 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7			0.044 J	0.094
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD				
Bromide	MG/L	2	417.5	BROMIDE		0.4 J		0.6 J
Chemical Oxygen Demand	MG/L	NA	862.4	COD				
Chloride	MG/L	250	46347.8	CL	96.1	60	83.4	66
Color	C.U.	15	93.6	COLOR		1		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5	**0.0051**			
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.880	NITRATE		0.3 J		
Sulfate	MG/L	250	5890.3	SULFATE	1730	1680	1530	1130
Total Alkalinity	MG/L	NA	981.2	TALK	236	289	260	267
Total Dissolved Solids	MG/L	500	75646.2	TDS	2960	2660	2620	2110
Total Hardness	MG/L	NA	23726.9	THARD	2200	2050	2100	1550
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	0.21			0.25
Total Organic Carbon	MG/L	NA	21.2	TOC				0.7 J
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-15			Statistical Trigger	Lab Sample	**2022**			
Parameter	Units	Standards	Value	ID CAS #	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7		0.25 J		
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-17 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.4	7.08	7	6.93
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	8.1	6.97	11.3	6.2
Temperature	deg. C	NA	18.6	(TEMP)	7.8	14.85	12.57	10.96
Turbidity	NTU	5	252.7	(TURB)	53.2	93.9	142	137
Aluminum - Total	MG/L	NA	7.538	T7429-90-5	0.134	0.86	0.23	0.19
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				0.007 J
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0193 J	0.016 J	0.014 J	0.021
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0073 J			
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**1.01**	**1.11**	**1.06**	**1.18**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**0.959**	**1.11**	**1.06**	**1.17**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	377	386	389	544
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		378	380	540
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0014 J	0.002 J		
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4				
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	0.189	0.61	0.22	0.43
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				0.003 J
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	168	166	170	249
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		165	170	236
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.0353	0.049	0.042	0.086
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.026	0.034	0.043
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	32.2	31.5	33.9	40.4
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		32.1	33.6	39.7
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	459	508	561	607
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		529	550	631
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	0.0138	0.013 B		
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0		0.015		
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	0.0084 J	0.01 J	0.005 J	0.014 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	2.33	2.27	2.31	2.7
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	2.6	2.3	39	10.4
Bromide	MG/L	2	417.5	BROMIDE	4.6	4.1	5.6	8.7
Chemical Oxygen Demand	MG/L	NA	862.4	COD	5.3	5.9	53.4	30.4
Chloride	MG/L	250	46347.8	CL	482	428	576	931
Color	C.U.	15	93.6	COLOR	5	2	1	**130**
Cyanide - Total	MG/L	0.2	0.0	T57-12-5	**0.0081**			
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE		**1.3**		
Sulfate	MG/L	250	5890.3	SULFATE	1630	1950	1580	1870
Total Alkalinity	MG/L	NA	981.2	TALK	239	292	276	299
Total Dissolved Solids	MG/L	500	75646.2	TDS	3460	3570	3690	4550
Total Hardness	MG/L	NA	23726.9	THARD	1650	2150	1850	2600
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	2.55	5.2	4	3.71
Total Organic Carbon	MG/L	NA	21.2	TOC	2.3	1.4	9.7	3.5
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-17 Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022** Quarter 1	Quarter 2	Quarter 3	Quarter 4
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-18			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	5.79-8.6	(FPHSU)	6.2	6.8	6.79	6.99
Specific Conductance	umhos/cm	NA	134435.8	(FSPECON)	8.1	3.71	4.87	5.2
Temperature	deg. C	NA	18.6	(TEMP)	6.1	12.9	16.87	12.43
Turbidity	NTU	5	252.7	(TURB)	35.9	47	95.7	49.5
Aluminum - Total	MG/L	NA	7.538	T7429-90-5		0.17		0.05 J
Aluminum, Dissolved	MG/L	NA	7.538	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0061 J	0.003 J		0.006 J
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3				
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**0.865**	**0.52**	**0.67**	**0.74**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		**0.57**		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2		129	163	189
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		143		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3				
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4				0.001 J
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.14	T7439-89-6	0.207	0.42	0.15	0.1
Iron, Dissolved	MG/L	0.3	16.14	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4		53.7	75.6	84.1
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		64.3		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5		0.021	0.02	0.02
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.014		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7		15.6	23.6	23.4
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		18.7		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5		303	560	514
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		439		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.004 J		
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	38.5	7664-41-7	1.3	1.02	1.56	1.39
Biochemical Oxygen Demand	MG/L	NA	93.6	BOD	2		2.3	
Bromide	MG/L	2	417.5	BROMIDE	6.5	2.6	6.5	7.8
Chemical Oxygen Demand	MG/L	NA	862.4	COD	7.6	6.3	23.1	11.8
Chloride	MG/L	250	46347.8	CL	645	402	872	791
Color	C.U.	15	93.6	COLOR		1		
Cyanide - Total	MG/L	0.2	0.0	T57-12-5	**0.0054**			
Hexavalent Chromium - Total	MG/L	0.05	0.0	T18540-29-9				
Nitrate	MG/L-N	10	0.9	NITRATE				
Sulfate	MG/L	250	5890.3	SULFATE	760	351	483	623
Total Alkalinity	MG/L	NA	981.2	TALK	323	284	286	283
Total Dissolved Solids	MG/L	500	75646.2	TDS	2590	1480	2330	2520
Total Hardness	MG/L	NA	23726.9	THARD	983	3400	800	1000
Total Kjeldahl Nitrogen	MG/L-N	NA	43.7	TKN	1.49		4.4	1.65
Total Organic Carbon	MG/L	NA	21.2	TOC	2.3	2.3	2.1	2.2
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-18			Statistical Trigger	Lab Sample	**2022**			
					Quarter 1	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.8	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	6.3	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.8	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	3.0	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.5	108-10-1				
Acetone	UG/L	50	9.6	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	14.4	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	8.0	74-83-9				
Carbon Disulfide	UG/L	60	31.0	75-15-0		2 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.8	108-90-7				
Chloroethane	UG/L	5	2.8	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	5.7	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	5.8	74-95-3				
Ethylbenzene	UG/L	5	2.8	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	3.7	1330-20-7				
Methylene chloride	UG/L	5	12.2	75-09-2				
o-Xylenes	UG/L	5	3.7	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	4.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	36.6	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-7D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	**9.5**	6.47	6.66	7.1
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	3.1	64.1	87	38.8
Temperature	deg. C	NA	14.2	(TEMP)	10.2	13.6	13.92	9.8
Turbidity	NTU	5	377.1	(TURB)	**870.0**	0	**828**	**883**
Aluminum - Total	MG/L	NA	42.4	T7429-90-5	**353**	8.9	14.9	7.16
Aluminum, Dissolved	MG/L	NA	42.4	T7429-90-5	0.0385 J			
Antimony - Total	MG/L	0.003	0.0386	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0386	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2	**0.0057 J**			
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.1297	T7440-39-3	0.115	0.064	0.075	0.062
Barium, Dissolved	MG/L	1	0.1297	T7440-39-3	0.0535	0.049	**0.051**	0.071
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0009 J	0.0004 J	0.0006 J	0.0003 J
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	7.6	T7440-42-8	4.96	4.97	4.6	4.38
Boron, Dissolved	MG/L	1	7.6	T7440-42-8	4.64	4.94	4.51	
Cadmium - Total	MG/L	0.01	0.0092	T7440-43-9	**0.0095**	0.0058	0.0063	0.0035 J
Cadmium, Dissolved	MG/L	0.01	0.0092	T7440-43-9				
Calcium - Total	MG/L	NA	7082.2	T7440-70-2	1000	931	970	865
Calcium, Dissolved	MG/L	NA	7082.2	T7440-70-2	876	849	880	69.9
Chromium - Total	MG/L	0.05	0.0496	T7440-47-3	0.0333	0.011	0.016	0.008 J
Chromium, Dissolved	MG/L	0.05	0.0496	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0608	T7440-48-4	0.0051 J	0.002 J	0.004 J	
Cobalt, Dissolved	MG/L	NA	0.0608	T7440-48-4				
Copper - Total	MG/L	0.2	0.0718	T7440-50-8	0.0404 N		0.01 J	
Copper, Dissolved	MG/L	0.2	0.0718	T7440-50-8				
Iron - Total	MG/L	0.3	105.9	T7439-89-6	13.7 E	4.92	8.39	4.05
Iron, Dissolved	MG/L	0.3	105.9	T7439-89-6	0.147 E			
Lead - Total	MG/L	0.025	0.3375	T7439-92-1	0.13	0.062	0.055	0.031 J
Lead, Dissolved	MG/L	0.025	0.3375	T7439-92-1				
Magnesium - Total	MG/L	35	4398.0	T7439-95-4	638	570	582	455
Magnesium, Dissolved	MG/L	35	4398.0	T7439-95-4	576	544	540	33.4
Manganese - Total	MG/L	0.3	3.0181	T7439-96-5	0.431	0.295	0.318	0.227
Manganese, Dissolved	MG/L	0.3	3.0181	T7439-96-5	0.0243	0.026	0.021	0.464
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.1114	T7440-02-0			0.015 J	0.009 J
Nickel, Dissolved	MG/L	0.1	0.1114	T7440-02-0				
Potassium - Total	MG/L	NA	624.7	T7440-09-7	148	148	161	145
Potassium, Dissolved	MG/L	NA	624.7	T7440-09-7	125	143	146	
Selenium - Total	MG/L	0.01	0.0025	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0025	T7782-49-2				
Silver - Total	MG/L	0.05	0.0461	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0461	T7440-22-4				
Sodium - Total	MG/L	20	41454.7	T7440-23-5	7730	7550	7760	7240
Sodium, Dissolved	MG/L	20	41454.7	T7440-23-5	7330	7510	7680	21.9
Thallium - Total	MG/L	0.0005	0.0574	T7440-28-0	0.051 N	0.046		
Thallium, Dissolved	MG/L	0.0005	0.0574	T7440-28-0	0.0399 N	0.039		
Vanadium - Total	MG/L	NA	0.041	T7440-62-2	0.0319 J	0.008 J	0.015 J	0.008 BJ
Vanadium, Dissolved	MG/L	NA	0.041	T7440-62-2				
Zinc - Total	MG/L	2	0.29	T7440-66-6	0.181	0.098	0.102	0.056
Zinc, Dissolved	MG/L	2	0.29	T7440-66-6				
Ammonia	MG/L-N	2	52.7	7664-41-7	11.7	11.1	11.2	11.7
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD	33.3	27	34.6	30.5
Bromide	MG/L	2	1897.2	BROMIDE	162	159	137	143
Chemical Oxygen Demand	MG/L	NA	751.4	COD	592	**1770**	**1810**	**1580**
Chloride	MG/L	250	114233.4	CL	16500	14700	15900	14700
Color	C.U.	15	81.6	COLOR	10	10	25	**625**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9	0.003			
Nitrate	MG/L-N	10	0.1	NITRATE				
Sulfate	MG/L	250	3941.6	SULFATE	1180	1050	1140	1100
Total Alkalinity	MG/L	NA	507.8	TALK	276	264	290	277
Total Dissolved Solids	MG/L	500	166500.4	TDS	26600	25200	25900	27100
Total Hardness	MG/L	NA	37332.4	THARD	5600	5000	4800	4600
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN	16.6	12.1	11.6	12.1
Total Organic Carbon	MG/L	NA	13.1	TOC	2.2	1.5	1.5	1.5
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS			0.0115	0.0048 J

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-7D			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2	12.0 J	10 J	11 J	11 J
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0			7.8 J	8.1 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3	**3.7 J**			
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-22D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	6.9	**3.02**	**4.21**	7.04
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	87.7	70	63.25	17.9
Temperature	deg. C	NA	14.2	(TEMP)	11.8	**22.11**	**16.7**	10.08
Turbidity	NTU	5	377.1	(TURB)	192.2	143	112	64
Aluminum - Total	MG/L	NA	42.38	T7429-90-5	4.27		2.32	1.06
Aluminum, Dissolved	MG/L	NA	42.38	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0386	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0386	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2			**0.008 J**	
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.1297	T7440-39-3	0.0433		0.043	0.037
Barium, Dissolved	MG/L	1	0.1297	T7440-39-3	0.0368			0.032
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0002 J			
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	7.6	T7440-42-8	6.39		5.57	5.29
Boron, Dissolved	MG/L	1	7.6	T7440-42-8	6.29			5.21
Cadmium - Total	MG/L	0.01	0.0092	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0092	T7440-43-9				
Calcium - Total	MG/L	NA	7082.2	T7440-70-2	1260		1250	1150
Calcium, Dissolved	MG/L	NA	7082.2	T7440-70-2	1260			1190
Chromium - Total	MG/L	0.05	0.0496	T7440-47-3	0.0038 J		0.006 J	
Chromium, Dissolved	MG/L	0.05	0.0496	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0608	T7440-48-4			0.002 J	
Cobalt, Dissolved	MG/L	NA	0.0608	T7440-48-4	0.0012 J			
Copper - Total	MG/L	0.2	0.0718	T7440-50-8	0.0095 J		0.007 J	
Copper, Dissolved	MG/L	0.2	0.0718	T7440-50-8				
Iron - Total	MG/L	0.3	105.86	T7439-89-6	7.65		12.9	9.1
Iron, Dissolved	MG/L	0.3	105.86	T7439-89-6				2.92
Lead - Total	MG/L	0.025	0.3375	T7439-92-1	0.206		0.072	0.04 J
Lead, Dissolved	MG/L	0.025	0.3375	T7439-92-1	0.003 J			
Magnesium - Total	MG/L	35	4397.97	T7439-95-4	856		822	759
Magnesium, Dissolved	MG/L	35	4397.97	T7439-95-4	863			787
Manganese - Total	MG/L	0.3	3.018	T7439-96-5	0.372		0.346	0.255
Manganese, Dissolved	MG/L	0.3	3.018	T7439-96-5	0.299			0.231
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.1114	T7440-02-0			0.007 J	0.004 J
Nickel, Dissolved	MG/L	0.1	0.1114	T7440-02-0				
Potassium - Total	MG/L	NA	624.72	T7440-09-7	172		167	165
Potassium, Dissolved	MG/L	NA	624.72	T7440-09-7	173			171
Selenium - Total	MG/L	0.01	0.0025	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0025	T7782-49-2				
Silver - Total	MG/L	0.05	0.0461	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0461	T7440-22-4				
Sodium - Total	MG/L	20	41454.74	T7440-23-5	11800		10900	10100
Sodium, Dissolved	MG/L	20	41454.74	T7440-23-5	11400			10400
Thallium - Total	MG/L	0.0005	0.0574	T7440-28-0	**0.0631 N**		**37 B**	
Thallium, Dissolved	MG/L	0.0005	0.0574	T7440-28-0	**0.0599 N**			
Vanadium - Total	MG/L	NA	0.041	T7440-62-2	0.0019 J		0.002 J	0.002 J
Vanadium, Dissolved	MG/L	NA	0.041	T7440-62-2				
Zinc - Total	MG/L	2	0.29	T7440-66-6	0.0276		0.027	0.016 J
Zinc, Dissolved	MG/L	2	0.29	T7440-66-6	0.0238			
Ammonia	MG/L-N	2	52.7	7664-41-7			13.3	
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD				
Bromide	MG/L	2	1897.2	BROMIDE			224	
Chemical Oxygen Demand	MG/L	NA	751.4	COD			**1000**	
Chloride	MG/L	250	114233.4	CL			19800	
Color	C.U.	15	81.6	COLOR				
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.1	NITRATE				
Sulfate	MG/L	250	3941.6	SULFATE			2060	
Total Alkalinity	MG/L	NA	507.8	TALK				
Total Dissolved Solids	MG/L	500	166500.4	TDS			36200	
Total Hardness	MG/L	NA	37332.4	THARD				
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN			13.3	
Total Organic Carbon	MG/L	NA	13.1	TOC				
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-22D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2	1 J		1 J	1.5 J
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4	0.56 J		0.48 J	0.65 J
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				0.22 J
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	3.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3	0.25 J		0.41 J	0.4 J
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25D Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	**6.1**	**6.32**	**6.16**	6.91
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	**>100**	**>100**	**>100**	**>100**
Temperature	deg. C	NA	14.2	(TEMP)	6.4	**19.04**	13.68	9.1
Turbidity	NTU	5	377.1	(TURB)	98.5	117	113	70.6
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5	0.825		1.33	0.61
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0716	0.1 J	0.084	0.065
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0677		0.075	0.064
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0002 J		0.0002 J	
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**4.21**	**4.3**	**3.61**	**3.27**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**4.07**	**4.3**	**3.64**	**3.26**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	**5080**	**5430**	**5490**	**5090**
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		**5530**	**5560**	**5130**
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0082 J		0.01	
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0017 J			0.0009 J
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0075 J		0.004 J	
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6	2.53	1.8	2.52	1.1
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6		1.6	0.86	0.17
Lead - Total	MG/L	0.025	0.0076	T7439-92-1	0.0031 J			
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	**3580**	**3510**	**3320**	**3230**
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		**3560**	**3430**	**3260**
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.535	**0.82**	0.614	0.468
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		**0.81**	0.599	0.469
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0			0.008 J	
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	427	**451**	**490**	350
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		**451**	**455**	350
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	**28000**	**28300**	**27200**	**30400**
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		**28500**	**27500**	**29700**
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.226**			
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	**7.07**	**0.25**	0.229	**0.344**
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	52.7	7664-41-7	34.9	34.5	35.6	33.7
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD		5.1	147	10.5
Bromide	MG/L	2	1897.2	BROMIDE	735	781	761	674
Chemical Oxygen Demand	MG/L	NA	751.4	COD	**3350**	**3760**	**3230**	375
Chloride	MG/L	250	114233.4	CL	66200	71800	48000	59800
Color	C.U.	15	81.6	COLOR	3	6	20	12
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9			**0.02**	
Nitrate	MG/L-N	10	0.1	NITRATE			**85.9**	
Sulfate	MG/L	250	3941.6	SULFATE	1990	2160	1890	1860
Total Alkalinity	MG/L	NA	507.8	TALK	104	99.3	96.2	97.7
Total Dissolved Solids	MG/L	500	166500.4	TDS	107000	107000	107000	105000
Total Hardness	MG/L	NA	37332.4	THARD	30500	1550	29200	29000
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN	33.4	33.1	32.5	15.4
Total Organic Carbon	MG/L	NA	13.1	TOC	4.1	11.4	**46.1**	6.2
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS			**0.029 J**	

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3		**35 J**	**33 J**	**31 J**
2-Hexanone	UG/L	50	5.0	591-78-6	1.8 J		1.4 J	
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1	43		57	55
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2	58	49 J	63	**84**
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0	5.7 J	**48 J**	39 J	31 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4	3.1 J		3.8 J	6.1 J
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7	**16**	**9.8 J**	**19 J**	**33**
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8	**6.6**		**8 J**	**13 J**
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3	15	19 J	15 J	22 J
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25D Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	**6.1**	**6.32**	**6.16**	6.91
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	**>100**	**>100**	**>100**	**>100**
Temperature	deg. C	NA	14.2	(TEMP)	6.4	**19.04**	13.68	9.1
Turbidity	NTU	5	377.1	(TURB)	98.5	117	113	70.6
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5	0.825		1.33	1.41
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0716	0.1 J	0.084	0.068
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.0677		0.075	0.065
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7	0.0002 J		0.0002 J	
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**4.21**	**4.3**	**3.61**	**3.31**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**4.07**	**4.3**	**3.64**	**3.35**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	**5080**	**5430**	**5490**	**5160**
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		**5530**	**5560**	**5110**
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.0082 J		0.01	0.003 J
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4	0.0017 J			0.002 J
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8	0.0075 J		0.004 J	
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6	2.53	1.8	2.52	2.48
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6		1.6	0.86	0.19
Lead - Total	MG/L	0.025	0.0076	T7439-92-1	0.0031 J			
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	**3580**	**3510**	**3320**	**3280**
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		**3560**	**3430**	**3240**
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	0.535	**0.82**	0.614	0.462
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		**0.81**	0.599	0.463
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0			0.008 J	
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	427	**451**	**490**	340
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		**451**	**455**	340
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	**28000**	**28300**	**27200**	19600
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		**28500**	**27500**	20000
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.226**			
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6	**7.07**	**0.25**	0.229	**0.707**
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				0.02
Ammonia	MG/L-N	2	52.7	7664-41-7	34.9	34.5	35.6	33.5
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD		5.1	147	10.1
Bromide	MG/L	2	1897.2	BROMIDE	735	781	761	806
Chemical Oxygen Demand	MG/L	NA	751.4	COD	**3350**	**3760**	**3230**	**3990**
Chloride	MG/L	250	114233.4	CL	66200	71800	48000	62700
Color	C.U.	15	81.6	COLOR	3	6	20	**130**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9			**0.02**	
Nitrate	MG/L-N	10	0.1	NITRATE			**85.9**	
Sulfate	MG/L	250	3941.6	SULFATE	1990	2160	1890	2250
Total Alkalinity	MG/L	NA	507.8	TALK	104	99.3	96.2	98.2
Total Dissolved Solids	MG/L	500	166500.4	TDS	107000	107000	107000	109000
Total Hardness	MG/L	NA	37332.4	THARD	30500	1550	29200	29000
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN	33.4	33.1	32.5	32
Total Organic Carbon	MG/L	NA	13.1	TOC	4.1	11.4	**46.1**	11.2
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS			**0.029 J**	

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GZ-25D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3		**35 J**	**33 J**	**30**
2-Hexanone	UG/L	50	5.0	591-78-6	1.8 J		1.4 J	1.2 J
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1	43		57	59
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2	58	49 J	63	**78**
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0	5.7 J	**48 J**	39 J	29
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4	3.1 J		3.8 J	5.3 J
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7	**16**	**9.8 J**	**19 J**	**30**
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8	**6.6**		**8 J**	**12 J**
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3	15	19 J	15 J	19
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-27DD			Statistical		2022			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	**3.8**	**5.92**	**5.93**	7.08
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	**>100**	**>100**	**>100**	**>100**
Temperature	deg. C	NA	14.2	(TEMP)	5.7	12.13	**14.51**	10.79
Turbidity	NTU	5	377.1	(TURB)	34.1	77	166	75.5
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5	1	0.3 J	1.99	0.83
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5	1			
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				**0.009 J**
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.123 J	0.14 J	0.117	0.115
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3	0.121 J		**0.114**	0.109
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7			**0.0003 J**	0.0002 J
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**4.34**	**4.4**	**3.71**	**3.59**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	**4.26**	**4.4**	**3.69**	**3.64**
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2	**6390**	**6500**	**6680**	**6900**
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2	**6330**	**6480**	**6770**	**6810**
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3			0.006 J	0.004 J
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4			**0.002 J**	
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6			1.03	0.4
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1			**0.006 J**	0.004 J
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4	**4120**	**4110**	**3960**	**3870**
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4	**4050**	**4150**	**4030**	**3950**
Manganese - Total	MG/L	0.3	0.616	T7439-96-5	**1.04**	**1.05**	**0.908**	**0.735**
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5	**1.03**	**1.02**	**0.849**	**0.722**
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0			**0.004 J**	0.004 J
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7	**497**	**513**	**554**	**496**
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7	**490**	**519**	**560**	**509**
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5	**32500**	**34100**	**34000**	**32400**
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5	**33700**	**33500**	**32700**	**32000**
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0	**0.34**	**0.27**	**0.15**	**0.139**
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0	**0.296**	**0.25**	**0.16**	**0.131**
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6			**0.011**	0.012 J
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	52.7	7664-41-7	41.1	38.7	38.9	37.1
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD	23.7	16.1	**25.9**	22.7
Bromide	MG/L	2	1897.2	BROMIDE	870	976	918	801
Chemical Oxygen Demand	MG/L	NA	751.4	COD	**4780**	**5140**	**3420**	**5310**
Chloride	MG/L	250	114233.4	CL	76000	85900	70700	72100
Color	C.U.	15	81.6	COLOR	4	1	5	**150**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9				
Nitrate	MG/L-N	10	0.1	NITRATE			**110**	
Sulfate	MG/L	250	3941.6	SULFATE	1640	1890	1840	1540
Total Alkalinity	MG/L	NA	507.8	TALK	101	92.6	92.5	93
Total Dissolved Solids	MG/L	500	166500.4	TDS	125000	125000	126000	132000
Total Hardness	MG/L	NA	37332.4	THARD	35000	34500	34800	34400
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN	39	38.6	34.9	9.59
Total Organic Carbon	MG/L	NA	13.1	TOC		4.2	**1.6**	3.3
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-27DD			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3			**5.5 J**	**8.8 J**
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2	4.8 J	7.9 J	11 J	14 J
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0	**71 J**	33 J	12 J	13 J
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3	**3.5 J**			
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4			1.1 J	1.3 J
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7	**3.3 J**	**3.5 J**	**5.6 J**	**6.3 J**
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8	2.1 J		2.2 J	2 J
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3	10 J	15 J	18 J	23 J
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-28D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.44-7.52	(FPHSU)	**6.3**	**6.4**	6.94	7.02
Specific Conductance	umhos/cm	NA	138143.1	(FSPECON)	31.4	28.1	39.8	17.9
Temperature	deg. C	NA	14.2	(TEMP)	6.2	**14.72**	**14.7**	9.8
Turbidity	NTU	5	377.1	(TURB)	54.2	82.6	124	71.2
Aluminum - Total	MG/L	NA	7.5376	T7429-90-5		0.07 J		
Aluminum, Dissolved	MG/L	NA	7.5376	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0456	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0456	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.2145	T7440-39-3	0.0056 J	0.006 J		
Barium, Dissolved	MG/L	1	0.2145	T7440-39-3				
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	**5.28**	**5.29**	**5.14**	**4.95**
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		**5.38**		
Cadmium - Total	MG/L	0.01	0.0043	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0043	T7440-43-9				
Calcium - Total	MG/L	NA	4442.1	T7440-70-2		156	205	174
Calcium, Dissolved	MG/L	NA	4442.1	T7440-70-2		158		
Chromium - Total	MG/L	0.05	0.0159	T7440-47-3	0.002 J			
Chromium, Dissolved	MG/L	0.05	0.0159	T7440-47-3				
Cobalt - Total	MG/L	NA	0.0162	T7440-48-4				
Cobalt, Dissolved	MG/L	NA	0.0162	T7440-48-4				
Copper - Total	MG/L	0.2	0.0788	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0788	T7440-50-8				
Iron - Total	MG/L	0.3	16.1	T7439-89-6		0.07 J	0.16	0.41
Iron, Dissolved	MG/L	0.3	16.1	T7439-89-6				
Lead - Total	MG/L	0.025	0.0076	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0076	T7439-92-1				
Magnesium - Total	MG/L	35	3030.4	T7439-95-4		113	117	103
Magnesium, Dissolved	MG/L	35	3030.4	T7439-95-4		114		
Manganese - Total	MG/L	0.3	0.616	T7439-96-5		0.022	0.027	0.035
Manganese, Dissolved	MG/L	0.3	0.616	T7439-96-5		0.021		
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	443.5	T7440-09-7		65.7	70.3	67
Potassium, Dissolved	MG/L	NA	443.5	T7440-09-7		66.9		
Selenium - Total	MG/L	0.01	0.004	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.004	T7782-49-2				
Silver - Total	MG/L	0.05	0.0545	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.0545	T7440-22-4				
Sodium - Total	MG/L	20	24505.9	T7440-23-5		3470	3920	3870
Sodium, Dissolved	MG/L	20	24505.9	T7440-23-5		3530		
Thallium - Total	MG/L	0.0005	0.0167	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.0167	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.2437	T7440-66-6		0.003 J		
Zinc, Dissolved	MG/L	2	0.2437	T7440-66-6				
Ammonia	MG/L-N	2	52.7	7664-41-7	5.52	5.82	5.4	5.61
Biochemical Oxygen Demand	MG/L	NA	226.6	BOD	44.2	39	41.8	39.9
Bromide	MG/L	2	1897.2	BROMIDE	51.1	58.2	48	49.4
Chemical Oxygen Demand	MG/L	NA	751.4	COD	298	429	282	376
Chloride	MG/L	250	114233.4	CL	4940	5000	4880	4930
Color	C.U.	15	81.6	COLOR		30		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9		**0.026**	0.005 J	**0.01**
Nitrate	MG/L-N	10	0.1	NITRATE				
Sulfate	MG/L	250	3941.6	SULFATE	1440	1520	1530	1390
Total Alkalinity	MG/L	NA	507.8	TALK	**510**	499	**520**	**527**
Total Dissolved Solids	MG/L	500	166500.4	TDS	10600	12100	8100	10300
Total Hardness	MG/L	NA	37332.4	THARD	900	1000	1030	1050
Total Kjeldahl Nitrogen	MG/L-N	NA	46.7	TKN	5.23	5.43	5.38	5.72
Total Organic Carbon	MG/L	NA	13.1	TOC	0.07 J	0.0009 J	0.8 J	0.9 J
Total Recoverable Phenolics	MG/L	0.001	0.02	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-28D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	7.1	108-10-1				
Acetone	UG/L	50	146.4	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	68.5	71-43-2				
Bromochloromethane	UG/L	5	8.6	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	3.0	74-83-9				
Carbon Disulfide	UG/L	60	45.9	75-15-0		30 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	40.9	74-95-3				
Ethylbenzene	UG/L	5	6.9	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	5.3	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	143.0	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-29D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	4.47-12.69	(FPHSU)	7.4	7.01	7.04	6.98
Specific Conductance	umhos/cm	NA	31836.5	(FSPECON)	5.6	4.99	5.04	3.37
Temperature	deg. C	NA	17.8	(TEMP)	8.8	15.94	9.03	9.98
Turbidity	NTU	5	474.7	(TURB)	20.9	**560**	26.4	32.5
Aluminum - Total	MG/L	NA	0.5016	T7429-90-5		**7.61**		
Aluminum, Dissolved	MG/L	NA	0.5016	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0075	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0075	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.025	T7440-39-3		0.019 J		
Barium, Dissolved	MG/L	1	0.025	T7440-39-3				
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7		0.0003 J		
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	7.1	T7440-42-8	2.1	2.14	2.1	2.06
Boron, Dissolved	MG/L	1	7.1	T7440-42-8		2.1		
Cadmium - Total	MG/L	0.01	0.0025	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0025	T7440-43-9				
Calcium - Total	MG/L	NA	758.34	T7440-70-2		73.5	37.1	33.8
Calcium, Dissolved	MG/L	NA	758.34	T7440-70-2		31.3		
Chromium - Total	MG/L	0.05	0.0574	T7440-47-3	0.0044 J	0.008 J		
Chromium, Dissolved	MG/L	0.05	0.0574	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4		0.002 J		
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.0658	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0658	T7440-50-8				
Iron - Total	MG/L	0.3	1.11	T7439-89-6	0.167	**4.47**	**3.1**	0.58
Iron, Dissolved	MG/L	0.3	1.11	T7439-89-6				
Lead - Total	MG/L	0.025	0.0129	T7439-92-1		0.008 J		
Lead, Dissolved	MG/L	0.025	0.0129	T7439-92-1				
Magnesium - Total	MG/L	35	369.03	T7439-95-4		36.9	23.7	22.9
Magnesium, Dissolved	MG/L	35	369.03	T7439-95-4		23.2		
Manganese - Total	MG/L	0.3	0.1513	T7439-96-5		**0.197**	0.052	0.032
Manganese, Dissolved	MG/L	0.3	0.1513	T7439-96-5				
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.0655	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.0655	T7440-02-0				
Potassium - Total	MG/L	NA	171.768	T7440-09-7		21.9	18.6	18.6
Potassium, Dissolved	MG/L	NA	171.768	T7440-09-7		18.3		
Selenium - Total	MG/L	0.01	0.007	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.007	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	6395.169	T7440-23-5		622	629	613
Sodium, Dissolved	MG/L	20	6395.169	T7440-23-5		615		
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2		0.009 J		
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.3723	T7440-66-6		0.074		
Zinc, Dissolved	MG/L	2	0.3723	T7440-66-6				
Ammonia	MG/L-N	2	9.7	7664-41-7	1.62	1.62	1.45	1.51
Biochemical Oxygen Demand	MG/L	NA	250.4	BOD	5.3	5.8	26.7	39
Bromide	MG/L	2	128.8	BROMIDE	3.1	2.9	2.5	3.2
Chemical Oxygen Demand	MG/L	NA	239.0	COD	18.4	22.8	51.1	
Chloride	MG/L	250	9330.2	CL	606	595	611	609
Color	C.U.	15	180.8	COLOR		5		
Cyanide - Total	MG/L	0.2	0.005	T57-12-5	0.004			
Hexavalent Chromium - Total	MG/L	0.05	0.005	T18540-29-9	0.003			
Nitrate	MG/L-N	10	0.10	NITRATE				
Sulfate	MG/L	250	3336.4	SULFATE	297	277	296	281
Total Alkalinity	MG/L	NA	652.8	TALK	380	378	380	388
Total Dissolved Solids	MG/L	500	17111.5	TDS	1800	1670	1870	2000
Total Hardness	MG/L	NA	3101.7	THARD	180	410	222	210
Total Kjeldahl Nitrogen	MG/L-N	NA	10.4	TKN	1.61	1.76		2.89
Total Organic Carbon	MG/L	NA	6.4	TOC	1	1.6	**9.7**	**14.3**
Total Recoverable Phenolics	MG/L	0.001	0.0	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: MW-29D			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	17.5	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	10.2	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	2.5	74-83-9				
Carbon Disulfide	UG/L	60	71.9	75-15-0		3.3 J		
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	2.5	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	6.0	1330-20-7				
Methylene chloride	UG/L	5	8.9	75-09-2				
o-Xylenes	UG/L	5	6.0	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	32.6	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: POND			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.9-9.36	(FPHSU)	7.1	6.93	7.88	7.03
Specific Conductance	umhos/cm	NA	2820.5	(FSPECON)	2.0	1.73	1.63	5.37
Temperature	deg. C	NA	18.5	(TEMP)	13.0	**21.17**	**19.65**	5.2
Turbidity	NTU	5	54.3	(TURB)	42.1	51.5	**59.1**	17.8
Aluminum - Total	MG/L	NA	1.9109	T7429-90-5	0.0733 J	0.1 J	0.07 J	0.1
Aluminum, Dissolved	MG/L	NA	1.9109	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0075	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0075	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.025	T7440-39-3	**0.0277**	**0.03**	0.023	**0.026**
Barium, Dissolved	MG/L	1	0.025	T7440-39-3	**0.0261**	**0.026**	0.022	0.025
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	0.0531 J	0.07 J	0.05 J	0.09 J
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	0.0502 J		0.05 J	
Cadmium - Total	MG/L	0.01	0.0025	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0025	T7440-43-9				
Calcium - Total	MG/L	NA	121.1	T7440-70-2	92.1	92.5	75	90
Calcium, Dissolved	MG/L	NA	121.1	T7440-70-2	88.5	91.9	74.2	90.1
Chromium - Total	MG/L	0.05	0.0093	T7440-47-3				
Chromium, Dissolved	MG/L	0.05	0.0093	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4				
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.0284	T7440-50-8				
Copper, Dissolved	MG/L	0.2	0.0284	T7440-50-8				
Iron - Total	MG/L	0.3	2.986	T7439-89-6	0.102 E	0.28	0.17	0.16
Iron, Dissolved	MG/L	0.3	2.986	T7439-89-6				
Lead - Total	MG/L	0.025	0.0124	T7439-92-1				
Lead, Dissolved	MG/L	0.025	0.0124	T7439-92-1				
Magnesium - Total	MG/L	35	31.4	T7439-95-4	**41.7**	**33.1**	20.8	30
Magnesium, Dissolved	MG/L	35	31.4	T7439-95-4	**39.9**	**32.9**	20.5	29.9
Manganese - Total	MG/L	0.3	0.1186	T7439-96-5	0.017	0.044	0.014	0.022
Manganese, Dissolved	MG/L	0.3	0.1186	T7439-96-5	0.0041 J			0.011
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0				
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	105.9	T7440-09-7	5.83	5.4	4.2	6.3
Potassium, Dissolved	MG/L	NA	105.9	T7440-09-7	5.58	5.3	4	6.2
Selenium - Total	MG/L	0.01	0.0025	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0025	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	156.7	T7440-23-5	**163**	77.9	15.7	29
Sodium, Dissolved	MG/L	20	156.7	T7440-23-5	**158**	78.1	14.7	28.8
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.1841	T7440-66-6	0.0039 J	0.003 J	0.003 J	0.015 J
Zinc, Dissolved	MG/L	2	0.1841	T7440-66-6	0.0028 J			
Ammonia	MG/L-N	2	0.25	7664-41-7		0.047 J	0.036 J	0.031 J
Biochemical Oxygen Demand	MG/L	NA	2.0	BOD	**4**		**2.3**	**6.8**
Bromide	MG/L	2	0.1	BROMIDE				
Chemical Oxygen Demand	MG/L	NA	36.8	COD	**4.3 J**	13.9	8	8.7
Chloride	MG/L	250	266.3	CL	**286**	126	23.2	43.9
Color	C.U.	15	13.9	COLOR	8	13	12	**15**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.046	T18540-29-9				
Nitrate	MG/L-N	10	3.6	NITRATE				0.2 J
Sulfate	MG/L	250	339.9	SULFATE	286	259	160	216
Total Alkalinity	MG/L	NA	190.7	TALK	95.4	108	95.3	111
Total Dissolved Solids	MG/L	500	1053.1	TDS	927	693	405	531
Total Hardness	MG/L	NA	423.4	THARD	400	420	286	367
Total Kjeldahl Nitrogen	MG/L-N	NA	0.3	TKN	**0.68**	**3.1 J**	**0.52**	**0.81**
Total Organic Carbon	MG/L	NA	5.1	TOC	3.1 B	**5.4**	3.5	3.2
Total Recoverable Phenolics	MG/L	0.001	0.0	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: POND			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1	0.22 J	0.61 J		0.21 J
Acetone	UG/L	50	5.0	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	2.5	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	2.5	74-83-9				
Carbon Disulfide	UG/L	60	3.5	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	2.5	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	3.2	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	2.5	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GW COLLECTOR Parameter	Units	Standards	Statistical Trigger Value	Lab Sample ID CAS #	**2022 Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
pH	S.U.	6.5-8.5	6.67-9.73	(FPHSU)	7.2	7.23	7.41	6.94
Specific Conductance	umhos/cm	NA	1777.6	(FSPECON)	1.7	1.76	16	14.1
Temperature	deg. C	NA	23	(TEMP)	12.3	12.95	15.63	9.69
Turbidity	NTU	5	54.7	(TURB)	39.6	38.5	**89.1**	26.6
Aluminum - Total	MG/L	NA	1.9109	T7429-90-5			**5.58**	1.61
Aluminum, Dissolved	MG/L	NA	1.9109	T7429-90-5		0.19		
Antimony - Total	MG/L	0.003	0.0075	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0075	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2				
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.025	T7440-39-3	**0.0289**	**0.03**	**0.063**	**0.038**
Barium, Dissolved	MG/L	1	0.025	T7440-39-3	**0.0297**	**0.029**	**0.035**	**0.03**
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7			0.0002 J	
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8	0.148 J	0.14 J	0.17 J	0.14 J
Boron, Dissolved	MG/L	1	0.44	T7440-42-8	0.148 J			
Cadmium - Total	MG/L	0.01	0.0025	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0025	T7440-43-9				
Calcium - Total	MG/L	NA	121.1	T7440-70-2	**176**	**168**	**184**	**153**
Calcium, Dissolved	MG/L	NA	121.1	T7440-70-2	**179**	**156**	**176**	**147**
Chromium - Total	MG/L	0.05	0.0093	T7440-47-3			0.007 J	0.003 J
Chromium, Dissolved	MG/L	0.05	0.0093	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4			0.002 J	0.002 J
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.0284	T7440-50-8			0.005 J	
Copper, Dissolved	MG/L	0.2	0.0284	T7440-50-8				
Iron - Total	MG/L	0.3	2.986	T7439-89-6			**4.98**	1.44
Iron, Dissolved	MG/L	0.3	2.986	T7439-89-6		0.16		
Lead - Total	MG/L	0.025	0.0124	T7439-92-1			0.006 J	
Lead, Dissolved	MG/L	0.025	0.0124	T7439-92-1				
Magnesium - Total	MG/L	35	31.4	T7439-95-4	**53.4**	**50.2**	**53.6**	**46.1**
Magnesium, Dissolved	MG/L	35	31.4	T7439-95-4	**54.2**	**46.4**	**50.7**	**44.2**
Manganese - Total	MG/L	0.3	0.1186	T7439-96-5		0.061	**0.16**	
Manganese, Dissolved	MG/L	0.3	0.1186	T7439-96-5		0.06	0.047	0.03
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0	0.0029 J		0.009 J	
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	105.9	T7440-09-7	8.08	7.5	10	6.7
Potassium, Dissolved	MG/L	NA	105.9	T7440-09-7	8.16	7.3	7.8	6
Selenium - Total	MG/L	0.01	0.0025	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0025	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	156.7	T7440-23-5	27.1	30.4	38.2	35
Sodium, Dissolved	MG/L	20	156.7	T7440-23-5	27.2	32.5	38.2	34
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0				
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2	0.0009 J		0.012 J	0.005 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.1841	T7440-66-6	0.0027 J	0.004 J	0.031	0.013 J
Zinc, Dissolved	MG/L	2	0.1841	T7440-66-6	0.0025 J			
Ammonia	MG/L-N	2	0.25	7664-41-7	0.026	0.102	**0.254**	
Biochemical Oxygen Demand	MG/L	NA	2.0	BOD	2			
Bromide	MG/L	2	0.1	BROMIDE				
Chemical Oxygen Demand	MG/L	NA	36.8	COD	3.8	4.6 J	7.3	5.2
Chloride	MG/L	250	266.3	CL	35.5	34.1	57.6	41.6
Color	C.U.	15	13.9	COLOR	5	1	**15**	**150**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.046	T18540-29-9				
Nitrate	MG/L-N	10	3.6	NITRATE	1.4	1	0.3 J	0.5 J
Sulfate	MG/L	250	339.9	SULFATE	**455**	**374**	**361**	319
Total Alkalinity	MG/L	NA	190.7	TALK	**243**	**257**	**273**	**265**
Total Dissolved Solids	MG/L	500	1053.1	TDS	954	910	924	832
Total Hardness	MG/L	NA	423.4	THARD	**733**	**717**	**867**	**625**
Total Kjeldahl Nitrogen	MG/L-N	NA	0.3	TKN	**0.4**			**0.3**
Total Organic Carbon	MG/L	NA	5.1	TOC	2.8	2.6	2.8	2.8
Total Recoverable Phenolics	MG/L	0.001	0.0	TPHENOLS				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: GW COLLECTOR			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	5.0	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	2.5	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	2.5	74-83-9				
Carbon Disulfide	UG/L	60	3.5	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	2.5	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	3.2	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	2.5	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: SUMP			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
pH	S.U.	6.5-8.5	6.33-9.09	(FPHSU)		7.17		7
Specific Conductance	umhos/cm	NA	2610	(FSPECON)		4.29		72
Temperature	deg. C	NA	13.8	(TEMP)		**17.84**		8.93
Turbidity	NTU	5	5	(TURB)		**51.2**		**55.3**
Aluminum - Total	MG/L	NA	1.9109	T7429-90-5		0.178		0.07 J
Aluminum, Dissolved	MG/L	NA	1.9109	T7429-90-5				
Antimony - Total	MG/L	0.003	0.0075	T7440-36-0				
Antimony, Dissolved	MG/L	0.003	0.0075	T7440-36-0				
Arsenic - Total	MG/L	0.025	0.005	T7440-38-2		0.00128		
Arsenic, Dissolved	MG/L	0.025	0.005	T7440-38-2				
Barium - Total	MG/L	1	0.025	T7440-39-3		**0.02808**		0.023
Barium, Dissolved	MG/L	1	0.025	T7440-39-3		0.024		0.022
Beryllium - Total	MG/L	0.003	0.0015	T7440-41-7				
Beryllium, Dissolved	MG/L	0.003	0.0015	T7440-41-7				
Boron - Total	MG/L	1	0.44	T7440-42-8		**0.533**		0.15 J
Boron, Dissolved	MG/L	1	0.44	T7440-42-8		0.29		
Cadmium - Total	MG/L	0.01	0.0025	T7440-43-9				
Cadmium, Dissolved	MG/L	0.01	0.0025	T7440-43-9				
Calcium - Total	MG/L	NA	121.1	T7440-70-2		**236**		**129**
Calcium, Dissolved	MG/L	NA	121.1	T7440-70-2		**151**		**126**
Chromium - Total	MG/L	0.05	0.0093	T7440-47-3		0.00055 J		
Chromium, Dissolved	MG/L	0.05	0.0093	T7440-47-3				
Cobalt - Total	MG/L	NA	0.01	T7440-48-4		0.00173		
Cobalt, Dissolved	MG/L	NA	0.01	T7440-48-4				
Copper - Total	MG/L	0.2	0.0284	T7440-50-8		0.00218		
Copper, Dissolved	MG/L	0.2	0.0284	T7440-50-8				
Iron - Total	MG/L	0.3	2.986	T7439-89-6		0.38		0.08 J
Iron, Dissolved	MG/L	0.3	2.986	T7439-89-6				
Lead - Total	MG/L	0.025	0.0124	T7439-92-1		0.00049 J		
Lead, Dissolved	MG/L	0.025	0.0124	T7439-92-1				
Magnesium - Total	MG/L	35	31.4	T7439-95-4		**121**		**42.9**
Magnesium, Dissolved	MG/L	35	31.4	T7439-95-4		**69.7**		**42**
Manganese - Total	MG/L	0.3	0.1186	T7439-96-5		**0.2107**		0.012
Manganese, Dissolved	MG/L	0.3	0.1186	T7439-96-5				
Mercury - Total	MG/L	0.0007	0.0001	T7439-97-6				
Mercury, Dissolved	MG/L	0.0007	0.0001	T7439-97-6				
Nickel - Total	MG/L	0.1	0.015	T7440-02-0		0.00426		
Nickel, Dissolved	MG/L	0.1	0.015	T7440-02-0				
Potassium - Total	MG/L	NA	105.9	T7440-09-7		19.5		7.8
Potassium, Dissolved	MG/L	NA	105.9	T7440-09-7		11.4		7.5
Selenium - Total	MG/L	0.01	0.0025	T7782-49-2				
Selenium, Dissolved	MG/L	0.01	0.0025	T7782-49-2				
Silver - Total	MG/L	0.05	0.005	T7440-22-4				
Silver, Dissolved	MG/L	0.05	0.005	T7440-22-4				
Sodium - Total	MG/L	20	156.7	T7440-23-5		**167**		55.1
Sodium, Dissolved	MG/L	20	156.7	T7440-23-5		85.2		54.3
Thallium - Total	MG/L	0.0005	0.005	T7440-28-0		0.00017 J		
Thallium, Dissolved	MG/L	0.0005	0.005	T7440-28-0				
Vanadium - Total	MG/L	NA	0.015	T7440-62-2				0.0007 J
Vanadium, Dissolved	MG/L	NA	0.015	T7440-62-2				
Zinc - Total	MG/L	2	0.1841	T7440-66-6		0.00532 J		0.004 J
Zinc, Dissolved	MG/L	2	0.1841	T7440-66-6				
Ammonia	MG/L-N	2	0.25	7664-41-7		0.035 J		
Biochemical Oxygen Demand	MG/L	NA	2.0	BOD		**2.2**		
Bromide	MG/L	2	0.1	BROMIDE		**0.5 J**		
Chemical Oxygen Demand	MG/L	NA	36.8	COD		8.2		5.9
Chloride	MG/L	250	266.3	CL		162		60
Color	C.U.	15	13.9	COLOR		2		**80**
Cyanide - Total	MG/L	0.2	0.005	T57-12-5				
Hexavalent Chromium - Total	MG/L	0.05	0.046	T18540-29-9				
Nitrate	MG/L-N	10	3.6	NITRATE				0.2 J
Sulfate	MG/L	250	339.9	SULFATE		**758**		323
Total Alkalinity	MG/L	NA	190.7	TALK		**239**		176
Total Dissolved Solids	MG/L	500	1053.1	TDS		**1620**		812
Total Hardness	MG/L	NA	423.4	THARD		**767**		**625**
Total Kjeldahl Nitrogen	MG/L-N	NA	0.3	TKN				**0.35**
Total Organic Carbon	MG/L	NA	5.1	TOC		3.1		2.8
Total Recoverable Phenolics	MG/L	0.001	0.0	TPHENOLS				**0.0039 J**

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: SUMP			Statistical		**2022**			
			Trigger	Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	Value	ID CAS #				
1,1,1,2-Tetrachloroethane	UG/L	5	2.5	630-20-6				
1,1,1-Trichloroethane	UG/L	5	2.5	71-55-6				
1,1,2,2-Tetrachloroethane	UG/L	5	2.5	79-34-5				
1,1,2-Trichloroethane	UG/L	1	2.5	79-00-5				
1,1-Dichloroethane	UG/L	5	2.5	75-34-3				
1,1-Dichloroethene	UG/L	5	2.5	75-35-4				
1,2,3-Trichloropropane	UG/L	0.04	2.5	96-18-4				
1,2-Dibromo-3-chloropropane	UG/L	0.04	5.0	96-12-8				
1,2-Dibromoethane	UG/L	5	2.5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	2.5	95-50-1				
1,2-Dichloroethane	UG/L	0.6	2.5	107-06-2				
1,2-Dichloropropane	UG/L	1	2.5	78-87-5				
1,3-Dichlorobenzene	UG/L	3		541-73-1				
1,4-Dichlorobenzene	UG/L	3	2.5	106-46-7				
2-Butanone	UG/L	50	5.0	78-93-3				
2-Hexanone	UG/L	50	5.0	591-78-6				
4-Methyl-2-pentanone	UG/L	NA	5.0	108-10-1				
Acetone	UG/L	50	5.0	67-64-1				
Acrylonitrile	UG/L	5	50.0	107-13-1				
Benzene	UG/L	1	2.5	71-43-2				
Bromochloromethane	UG/L	5	2.5	74-97-5				
Bromodichloromethane	UG/L	50	2.5	75-27-4				
Bromoform	UG/L	50	2.5	75-25-2				
Bromomethane	UG/L	5	2.5	74-83-9				
Carbon Disulfide	UG/L	60	3.5	75-15-0				
Carbon Tetrachloride	UG/L	5	2.5	56-23-5				
Chlorobenzene	UG/L	5	2.5	108-90-7				
Chloroethane	UG/L	5	2.5	75-00-3				
Chloroform	UG/L	7	2.5	67-66-3				
Chloromethane	UG/L	5	2.5	74-87-3				
cis-1,2-Dichloroethene	UG/L	5	2.5	156-59-2				
cis-1,3-Dichloropropene	UG/L	0.4	2.5	10061-01-5				
Dibromochloromethane	UG/L	50	2.5	124-48-1				
Dibromomethane	UG/L	5	2.5	74-95-3				
Ethylbenzene	UG/L	5	2.5	100-41-4				
Iodomethane	UG/L	5	2.5	74-88-4				
m,p-Xylenes	UG/L	5	2.5	1330-20-7				
Methylene chloride	UG/L	5	3.2	75-09-2				
o-Xylenes	UG/L	5	2.5	1330-20-8				
Styrene	UG/L	5	2.5	100-42-5				
Tetrachloroethene	UG/L	5	2.5	127-18-4				
Toluene	UG/L	5	2.5	108-88-3				
trans-1,2-Dichloroethene	UG/L	5	2.5	156-60-5				
trans-1,3-Dichloropropene	UG/L	0.4	2.5	10061-02-6				
trans-1,4-Dichloro-2-butene	UG/L	5	5.0	110-57-6				
Trichloroethene	UG/L	5	2.5	79-01-6				
Trichlorofluoromethane	UG/L	5	2.5	75-69-4				
Vinyl acetate	UG/L	NA	25.0	108-05-4				
Vinyl chloride	UG/L	2	2.5	75-01-4				

Detectable concentrations only
J = Estimated Value
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
NR = Not Included in Laboratory Report
Bold = Analyte exceeds NCRDD Landfill trigger value
Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Primary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
Specific Conductance	umhos/cm	NA	(FSPECON)		6.56		2.62
Temperature	deg. C	NA	(TEMP)		18.09		12.17
pH	S.U.	6.5-8.5	(FPHSU)		5.77		6.9
Turbidity	NTU	5	(TURB)		94.8		113
Aluminum - Total	MG/L	NA	T7429-90-5		1.42		0.33
Antimony - Total	MG/L	0.003	T7440-36-0				
Arsenic - Total	MG/L	0.025	T7440-38-2		0.008 J		
Barium - Total	MG/L	1	T7440-39-3		0.048		0.029
Beryllium - Total	MG/L	0.003	T7440-41-7		0.0002 J		
Boron - Total	MG/L	1	T7440-42-8		0.56		0.4
Cadmium - Total	MG/L	0.01	T7440-43-9		0.0005 J		
Calcium - Total	MG/L	NA	T7440-70-2		545		480
Chromium - Total	MG/L	0.05	T7440-47-3		0.005 J		
Cobalt - Total	MG/L	NA	T7440-48-4		0.008 J		0.006 J
Copper - Total	MG/L	0.2	T7440-50-8		0.008 J		0.005 J
Iron - Total	MG/L	0.3	T7439-89-6		72.9		24.7
Lead - Total	MG/L	0.025	T7439-92-1		0.013 J		0.003 J
Magnesium - Total	MG/L	35	T7439-95-4		188		135
Manganese - Total	MG/L	0.3	T7439-96-5		0.894		0.62
Mercury - Total	MG/L	0.0007	T7439-97-6				
Molybdenum-Total	MG/L		T7439-98-7				
Nickel - Total	MG/L	0.1	T7440-02-0		0.037 J		0.025 J
Potassium - Total	MG/L	NA	T7440-09-7		8.6		8.3
Selenium - Total	MG/L	0.01	T7782-49-2				
Silver - Total	MG/L	0.05	T7440-22-4				
Sodium - Total	MG/L	20	T7440-23-5		36.1		21
Thallium - Total	MG/L	0.0005	T7440-28-0		0.014		0.008 J
Tin - Total	MG/L	NA	T7440-31-5				
Vanadium - Total	MG/L	NA	T7440-62-2		0.005 J		0.002 J
Zinc - Total	MG/L	2	T7440-66-6		0.165		0.06
Ammonia	MG/L-N	2	7664-41-7		0.193		0.322
Biochemical Oxygen Demand	MG/L	NA	BOD		3.6		5.4
Color	C.U.	15	COLOR		7		375
Hexavalent Chromium - Total	MG/L	0.05	T18540-29-9				
Nitrate	MG/L-N	10	NITRATE				
Total Alkalinity	MG/L	NA	TALK		599		590
Chloride	MG/L	250	CL		78.7		45.1
Chemical Oxygen Demand	MG/L	NA	COD		25.1		37.4
Sulfide	MG/L	NA	18496-25-8				
Sulfate	MG/L	250	SULFATE		1210		1,090
Cyanide - Total	MG/L	0.2	T57-12-5				
Total Dissolved Solids	MG/L	500	TDS		2540		2,330
Total Kjeldahl Nitrogen	MG/L-N	NA	TKN				1.63
Total Organic Carbon	MG/L	NA	TOC		10		7.4
Total Recoverable Phenolics	MG/L	0.001	TPHENOLS				
Total Hardness	MG/L	NA	THARD		18500		2,000
Bromide	MG/L	2	BROMIDE		2.5		1.3
Acetone	UG/L	50	67-64-1				
Acetonitrile	UG/L	NA	75-05-8				
Acrolein	UG/L	5	107-02-8				
Acrylonitrile	UG/L	5	107-13-1				
3-Chloropropene (Allyl Chlor.)	UG/L	5	107-05-1				
Benzene	UG/L	1	71-43-2				
Bromochloromethane	UG/L	5	74-97-5				
Bromodichloromethane	UG/L	50	75-27-4				
Bromoform	UG/L	5	75-25-2				
Carbon Disulfide	UG/L	60	75-15-0				
Carbon Tetrachloride	UG/L	5	56-23-5				
Chlorobenzene	UG/L	5	108-90-7				
Chloroethane	UG/L	5	75-00-3				
Chloroform	UG/L	7	67-66-3				
2-Chloro-1,3-butadiene	UG/L	5	126-99-8				
Dibromochloromethane	UG/L	50	124-48-1				
4-Bromofluorobenzene	UG/L		460-00-4				
Dibromofluoromethane	UG/L		1868-53-7				
1,2-Dibromo-3-chloropropane	UG/L	0.04	96-12-8				
1,2-Dibromoethane	UG/L	5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	95-50-1				
1,3-Dichlorobenzene	UG/L	3	541-73-1				
1,4-Dichlorobenzene	UG/L	3	106-46-7				
trans-1,4-Dichloro-2-butene	UG/L	5	110-57-6				
Dichlorodifluoromethane	UG/L						
1,1-Dichloroethane	UG/L	5	75-34-3				
1,2-Dichloroethane	UG/L	0.6	107-06-2				
1,1-Dichloroethene	UG/L	5	75-35-4				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Primary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
cis-1,2-Dichloroethene	UG/L	5	156-59-2				
trans-1,2-Dichloroethene	UG/L	5	156-60-5				
1,2-Dichloropropane	UG/L	1	78-87-5				
1,3-Dichloropropane	UG/L						
2,2-Dichloropropane	UG/L	5	594-20-7				
1,1-Dichloropropene	UG/L	5	563-58-6				
cis-1,3-Dichloropropene	UG/L	0.4	10061-01-5				
trans-1,3-Dichloropropene	UG/L	0.4	10061-02-6				
Ethylbenzene	UG/L	5	100-41-4				
Ethyl methacrylate	UG/L	NA	97-63-2				
2-Hexanone	UG/L	50	591-78-6				
Isobutanol	UG/L	NA	78-83-1				
Methacrylonitrile	UG/L	5	126-98-7				
Bromomethane	UG/L	50	74-83-9				
Chloromethane	UG/L	5	74-87-3				
2-Butanone	UG/L	50	78-93-3				
Iodomethane	UG/L	5	74-88-4				
4-Methyl-2-pentanone	UG/L	NA	108-10-1				
Methyl methacrylate	UG/L	50	80-62-6				
Dibromomethane	UG/L	NA	74-95-3				
Methylene chloride	UG/L	5	75-09-2				
Propionitrile	UG/L	NA	107-12-0				
Styrene	UG/L	5	100-42-5				
1,1,1,2-Tetrachloroethane	UG/L	5	630-20-6				
1,1,2,2-Tetrachloroethane	UG/L	5	79-34-5				
Tetrachloroethene	UG/L	5	127-18-4				
Toluene	UG/L	5	108-88-3				
1,1,1-Trichloroethane	UG/L	5	71-55-6				
1,1,2-Trichloroethane	UG/L	1	79-00-5				
Trichloroethene	UG/L	5	79-01-6				
Trichlorofluoromethane	UG/L	5	75-69-4				
1,2,3-Trichloropropane	UG/L	0.04	96-18-4				
Vinyl acetate	UG/L	NA	108-05-4				
Vinyl chloride	UG/L	2	75-01-4				
m,p- Xylenes	UG/L	5	1330-20-7				
o-Xylene	UG/L	5	1330-20-8				
Acenaphthene	UG/L	20	83-32-9				
Acenaphthylene	UG/L	NA	208-96-8				
Acetophenone	UG/L	NA	98-86-2				
2-Acetylaminofluorene	UG/L	NA	53-96-3				
4-Aminobiphenyl	UG/L	5	92-67-1				
Anthracene	UG/L	50	120-12-7				
Benzo(a)anthracene	UG/L	0.002	56-55-3				
Benzo(b)fluoranthene	UG/L	0.002	205-99-2				
Benzo(k)fluoranthene	UG/L	0.002	207-08-9				
Benzo(ghi)perylene	UG/L	NA	191-24-2				
Benzo(a)pyrene	UG/L	ND	50-32-8				
Benzyl alcohol	UG/L	NA	100-51-6				
Bis(2-chloroethoxy) methane	UG/L	5	111-91-1				
Bis(2-chloroethyl) ether	UG/L	1	111-44-4				
Bis(2-ethylhexyl) phthalate	UG/L	5	117-81-7				
4-Bromophenyl phenyl ether	UG/L	NA	101-55-3				
Butyl benzyl phthalate	UG/L	50	85-68-7				
4-Chloroaniline	UG/L	5	106-47-8				
Chlorobenzilate	UG/L	10	510-15-6				
4-Chloro-3-methylphenol	UG/L	5	59-50-7				
2-Chloronaphthalene	UG/L	10	91-58-7				
2-Chlorophenol	UG/L	NA	95-57-8				
4-Chlorophenyl phenyl ether	UG/L	NA	7005-72-3				
Chrysene	UG/L	0.002	218-01-9				
2-Methylphenol	UG/L	NA	95-48-7				
(3+4)-Methylphenol	UG/L	NA	106-44-5				
Diallate	UG/L	NA	2303-16-4				
Dibenzo(a,h)anthracene	UG/L	NA	53-70-3				
Dibenzofuran	UG/L	NA	132-64-9				
Di-n-butyl phthalate	UG/L	50	84-74-2				
3,3'-Dichlorobenzidine	UG/L	5	91-94-1				
2,4-Dichlorophenol	UG/L	5	120-83-2				
2,6-Dichlorophenol	UG/L	NA	87-65-0				
Diethyl phthalate	UG/L	50	84-66-2				
Dimethoate	UG/L	NA	60-51-5				
p-Dimethylaminoazobenzene	UG/L	NA	60-11-7				
7,12-Dimethylbenz(a)anthracene	UG/L	NA	57-97-6				
3,3'-Dimethylbenzidine	UG/L	5	119-93-7				
2,4-Dimethylphenol	UG/L	50	105-67-9				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Primary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
Dimethyl phthalate	UG/L	50	131-11-3				
m-Dinitrobenzene	UG/L	5	99-65-0				
4,6-Dinitro-2-methylphenol	UG/L	1	534-52-1				
2,4-Dinitrophenol	UG/L	10	51-28-5				
2,4-Dinitrotoluene	UG/L	5	121-14-2				
2,6-Dinitrotoluene	UG/L	5	606-20-2				
Di-n-octyl phthalate	UG/L	50	117-84-0				
Dinoseb	UG/L	NA	88-85-7A				
Diphenylamine	UG/L	5	122-39-4				
Disulfoton	UG/L	ND	298-04-4				
Ethyl methane sulfonate	UG/L	NA	62-50-0				
Fluoranthene	UG/L	50	206-44-0				
Fluorene	UG/L	50	86-73-7				
Hexachlorobenzene	UG/L	0.04	118-74-1				
Hexachlorobutadiene	UG/L	0.5	87-68-3				
Hexachlorocyclopentadiene	UG/L	5	77-47-4				
Hexachloroethane	UG/L	5	67-72-1				
Hexachloropropene	UG/L	5	1888-71-7				
Indeno(1,2,3-cd)pyrene	UG/L	0.002	193-39-5				
Isodrin	UG/L	5	465-73-6				
Isophorone	UG/L	50	78-59-1				
Isosafrole	UG/L	NA	120-58-1				
Methapyrilene	UG/L	NA	91-80-5				
3-Methylcholanthrene	UG/L	NA	56-49-5				
Methyl methanesulfonate	UG/L	NA	66-27-3				
2-Methylnaphthalene	UG/L	NA	91-57-6				
Methyl parathion	UG/L	1.5	298-00-0				
Naphthalene	UG/L	10	91-20-3				
1-Naphthylamine	UG/L	NA	134-32-7				
2-Naphthylamine	UG/L	NA	91-59-8				
2-Nitroaniline	UG/L	5	88-74-4				
3-Nitroaniline	UG/L	5	99-09-2				
4-Nitroaniline	UG/L	5	100-01-6				
Nitrobenzene	UG/L	0.4	98-95-3				
2-Nitrophenol	UG/L	NA	88-75-5				
4-Nitrophenol	UG/L	5	100-02-7				
N-Nitrosodi-n-butylamine	UG/L	NA	924-16-3				
N-Nitrosodiethylamine	UG/L	NA	55-18-5				
N-Nitrosodimethylamine	UG/L	NA	62-75-9				
N-nitrosodiphenylamine	UG/L	NA	86-30-6				
N-Nitroso-Di-n-propylamine	UG/L	NA	621-64-7				
N-Nitrosomethylethylamine	UG/L	NA	10595-95-6				
N-Nitrosopiperidine	UG/L	NA	100-75-4				
N-Nitrosopyrrolidine	UG/L	NA	930-55-2				
5-Nitro-o-toluidine	UG/L	5	99-55-8				
2,2'-Oxybis(1-Chloropropane)	UG/L	NA	108-60-1				
Parathion	UG/L	1.5	56-38-2				
Pentachlorobenzene	UG/L	5	608-93-5				
Pentachloronitrobenzene	UG/L	ND	82-68-8				
Pentachlorophenol	UG/L	1	87-86-5				
Phenacetin	UG/L	NA	62-44-2				
Phenanthrene	UG/L	50	85-01-8				
Phenol	UG/L	1	108-95-2				
p-Phenylenediamine	UG/L	5	106-50-3				
Phorate	UG/L	ND	298-02-2				
Pronamide	UG/L	ND	23950-58-5				
Pyrene	UG/L	50	129-00-0				
Safrole	UG/L	ND	94-59-7				
1,2,4,5-Tetrachlorobenzene	UG/L	5	95-94-3				
2,3,4,6-Tetrachlorophenol	UG/L	NA	58-90-2				
Thionazin	UG/L	ND	297-97-2				
o-Toluidine	UG/L	5	95-53-4				
1,2,4-Trichlorobenzene	UG/L	5	120-82-1				
2,4,5-Trichlorophenol	UG/L	5	95-95-4				
2,4,6-Trichlorophenol	UG/L	5	88-06-2				
0,0,0-Triethylphosphorothioate	UG/L	NA	126-68-1				
sym-Trinitrobenzene	UG/L	5	99-35-4				
2,4-D	UG/L	50	94-75-7				
2,4,5-T	UG/L	35	93-76-5				
4,4'-DDT	UG/L	0.2	50-29-3				
4,4'-DDE	UG/L	0.2	72-55-9				
4,4'-DDD	UG/L	0.3	72-54-8				
2,4,5-TP (Silvex)	UG/L	0.26	93-72-1				
Aldrin	UG/L	ND	309-00-2				
alpha-BHC	UG/L	0.01	319-84-6				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Primary Parameter	Units	Standards	Lab Sample ID CAS #	**2022** **Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
beta-BHC	UG/L	0.04	319-85-7				
gamma-BHC (Lindane)	UG/L	0.05	58-89-9				
delta-BHC	UG/L	0.04	319-86-8				
Chlordane	UG/L	0.1	57-74-9				
Dieldrin	UG/L	ND	60-57-1				
Endosulfan I	UG/L	ND	959-98-8				
Endosulfan II	UG/L	ND	33213-65-9				
Endosulfan Sulfate	UG/L	ND	1031-07-8				
Endrin	UG/L	ND	72-20-8				
Endrin aldehyde	UG/L	5	7421-93-4				
Famphur	UG/L	NA	52-85-7				
Heptachlor	UG/L	0.04	76-44-8				
Heptachlor epoxide	UG/L	0.03	1024-57-3				
Kepone	UG/L	ND	143-50-0				
Methoxychlor	UG/L	35	72-43-5				
Toxaphene	UG/L	0.06	8001-35-2				
Aroclor 1016	UG/L	0.1	12674-11-2				
Aroclor 1221	UG/L	0.1	11104-28-2				
Aroclor 1232	UG/L	0.1	11141-16-5				
Aroclor 1242	UG/L	0.1	53469-21-9				
Aroclor 1248	UG/L	0.1	12672-29-6				
Aroclor 1254	UG/L	0.1	11097-69-1				
Aroclor 1260	UG/L	0.1	11096-82-5				
Aroclor 1262	UG/L	0.1	37324-23-5				
Aroclor 1268	UG/L	0.1	11100-14-4				

Detectable concentrations only

J = Estimated Value

S.U. = standard units

ms/cm = millisiemens per centimeter

deg. C = degrees in Celsius

N.T.U. = nephelometric turbidity units

MG/L = milligrams per liter

UG/L = micrograms per liter

C.U. = color units

MG/L-N = nitrogen/nitrate

Bold =Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Secondary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
Specific Conductance	umhos/cm	NA	(FSPECON)		5.33		2.78
Temperature	deg. C	NA	(TEMP)		15.11		10.35
pH	S.U.	6.5-8.5	(FPHSU)		6.12		7.01
Turbidity	NTU	5	(TURB)		95		**160**
Aluminum - Total	MG/L	NA	T7429-90-5		0.2		1.68
Antimony - Total	MG/L	0.003	T7440-36-0				
Arsenic - Total	MG/L	0.025	T7440-38-2				**0.043**
Barium - Total	MG/L	1	T7440-39-3		0.034		0.047
Beryllium - Total	MG/L	0.003	T7440-41-7				0.0007 J
Boron - Total	MG/L	1	T7440-42-8		0.32		0.33
Cadmium - Total	MG/L	0.01	T7440-43-9				
Calcium - Total	MG/L	NA	T7440-70-2		466		569
Chromium - Total	MG/L	0.05	T7440-47-3		0.004 J		0.005 J
Cobalt - Total	MG/L	NA	T7440-48-4		0.003 J		0.013 J
Copper - Total	MG/L	0.2	T7440-50-8				0.008 J
Iron - Total	MG/L	0.3	T7439-89-6		34.7		**165**
Lead - Total	MG/L	0.025	T7439-92-1		0.008 J		**0.116**
Magnesium - Total	MG/L	35	T7439-95-4		172		**121**
Manganese - Total	MG/L	0.3	T7439-96-5		0.257		**0.4**
Mercury - Total	MG/L	0.0007	T7439-97-6				
Molybdenum-Total	MG/L		T7439-98-7				**0.005 J**
Nickel - Total	MG/L	0.1	T7440-02-0		0.018 J		0.066
Potassium - Total	MG/L	NA	T7440-09-7		7.9		7.5
Selenium - Total	MG/L	0.01	T7782-49-2				
Silver - Total	MG/L	0.05	T7440-22-4				
Sodium - Total	MG/L	20	T7440-23-5		49.9		**22**
Thallium - Total	MG/L	0.0005	T7440-28-0		0.013		
Tin - Total	MG/L	NA	T7440-31-5				
Vanadium - Total	MG/L	NA	T7440-62-2				0.008 J
Zinc - Total	MG/L	2	T7440-66-6		0.103		0.591
Ammonia	MG/L-N	2	7664-41-7		0.047 J		0.078
Biochemical Oxygen Demand	MG/L	NA	BOD				3.3
Color	C.U.	15	COLOR		2		**110**
Hexavalent Chromium - Total	MG/L	0.05	T18540-29-9				
Nitrate	MG/L-N	10	NITRATE				
Total Alkalinity	MG/L	NA	TALK		565		488
Chloride	MG/L	250	CL		111		27.8
Chemical Oxygen Demand	MG/L	NA	COD		11.4		13.5
Sulfide	MG/L	NA	18496-25-8				
Sulfate	MG/L	250	SULFATE		1150		**1,270**
Cyanide - Total	MG/L	0.2	T57-12-5				
Total Dissolved Solids	MG/L	500	TDS		2500		**2,420**
Total Kjeldahl Nitrogen	MG/L-N	NA	TKN				0.93
Total Organic Carbon	MG/L	NA	TOC		3.7		2.5
Total Recoverable Phenolics	MG/L	0.001	TPHENOLS				
Total Hardness	MG/L	NA	THARD		2100		2,100
Bromide	MG/L	2	BROMIDE		3.2		0.6 J
Acetone	UG/L	50	67-64-1				
Acetonitrile	UG/L	NA	75-05-8				
Acrolein	UG/L	5	107-02-8				
Acrylonitrile	UG/L	5	107-13-1				
3-Chloropropene (Allyl Chlor.)	UG/L	5	107-05-1				
Benzene	UG/L	1	71-43-2				
Bromochloromethane	UG/L	5	74-97-5				
Bromodichloromethane	UG/L	50	75-27-4				
Bromoform	UG/L	5	75-25-2				
Carbon Disulfide	UG/L	60	75-15-0				
Carbon Tetrachloride	UG/L	5	56-23-5				
Chlorobenzene	UG/L	5	108-90-7				
Chloroethane	UG/L	5	75-00-3				
Chloroform	UG/L	7	67-66-3				
2-Chloro-1,3-butadiene	UG/L	5	126-99-8				
Dibromochloromethane	UG/L	50	124-48-1				
4-Bromofluorobenzene	UG/L		460-00-4				
Dibromofluoromethane	UG/L		1868-53-7				
1,2-Dibromo-3-chloropropane	UG/L	0.04	96-12-8				
1,2-Dibromoethane	UG/L	5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	95-50-1				
1,3-Dichlorobenzene	UG/L	3	541-73-1				
1,4-Dichlorobenzene	UG/L	3	106-46-7				
trans-1,4-Dichloro-2-butene	UG/L	5	110-57-6				
Dichlorodifluoromethane	UG/L						
1,1-Dichloroethane	UG/L	5	75-34-3				
1,2-Dichloroethane	UG/L	0.6	107-06-2				
1,1-Dichloroethene	UG/L	5	75-35-4				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Secondary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
cis-1,2-Dichloroethene	UG/L	5	156-59-2				
trans-1,2-Dichloroethene	UG/L	5	156-60-5				
1,2-Dichloropropane	UG/L	1	78-87-5				
1,3-Dichloropropane	UG/L						
2,2-Dichloropropane	UG/L	5	594-20-7				
1,1-Dichloropropene	UG/L	5	563-58-6				
cis-1,3-Dichloropropene	UG/L	0.4	10061-01-5				
trans-1,3-Dichloropropene	UG/L	0.4	10061-02-6				
Ethylbenzene	UG/L	5	100-41-4				
Ethyl methacrylate	UG/L	NA	97-63-2				
2-Hexanone	UG/L	50	591-78-6				
Isobutanol	UG/L	NA	78-83-1				
Methacrylonitrile	UG/L	5	126-98-7				
Bromomethane	UG/L	50	74-83-9				
Chloromethane	UG/L	5	74-87-3				
2-Butanone	UG/L	50	78-93-3				
Iodomethane	UG/L	5	74-88-4				
4-Methyl-2-pentanone	UG/L	NA	108-10-1				
Methyl methacrylate	UG/L	50	80-62-6				
Dibromomethane	UG/L	NA	74-95-3				
Methylene chloride	UG/L	5	75-09-2				
Propionitrile	UG/L	NA	107-12-0				
Styrene	UG/L	5	100-42-5				
1,1,1,2-Tetrachloroethane	UG/L	5	630-20-6				
1,1,2,2-Tetrachloroethane	UG/L	5	79-34-5				
Tetrachloroethene	UG/L	5	127-18-4				
Toluene	UG/L	5	108-88-3				
1,1,1-Trichloroethane	UG/L	5	71-55-6				
1,1,2-Trichloroethane	UG/L	1	79-00-5				
Trichloroethene	UG/L	5	79-01-6				
Trichlorofluoromethane	UG/L	5	75-69-4				
1,2,3-Trichloropropane	UG/L	0.04	96-18-4				
Vinyl acetate	UG/L	NA	108-05-4				
Vinyl chloride	UG/L	2	75-01-4				
m,p- Xylenes	UG/L	5	1330-20-7				
o-Xylene	UG/L	5	95-47-6				
Acenaphthene	UG/L	20	83-32-9				
Acenaphthylene	UG/L	NA	208-96-8				
Acetophenone	UG/L	NA	98-86-2				
2-Acetylaminofluorene	UG/L	NA	53-96-3				
4-Aminobiphenyl	UG/L	5	92-67-1				
Anthracene	UG/L	50	120-12-7				
Benzo(a)anthracene	UG/L	0.002	56-55-3				
Benzo(b)fluoranthene	UG/L	0.002	205-99-2				
Benzo(k)fluoranthene	UG/L	0.002	207-08-9				
Benzo(ghi)perylene	UG/L	NA	191-24-2				
Benzo(a)pyrene	UG/L	ND	50-32-8				
Benzyl alcohol	UG/L	NA	100-51-6				
Bis(2-chloroethoxy) methane	UG/L	5	111-91-1				
Bis(2-chloroethyl) ether	UG/L	1	111-44-4				
Bis(2-ethylhexyl) phthalate	UG/L	5	117-81-7				
4-Bromophenyl phenyl ether	UG/L	NA	101-55-3				
Butyl benzyl phthalate	UG/L	50	85-68-7				
4-Chloroaniline	UG/L	5	106-47-8				
Chlorobenzilate	UG/L	10	510-15-6				
4-Chloro-3-methylphenol	UG/L	5	59-50-7				
2-Chloronaphthalene	UG/L	10	91-58-7				
2-Chlorophenol	UG/L	NA	95-57-8				
4-Chlorophenyl phenyl ether	UG/L	NA	7005-72-3				
Chrysene	UG/L	0.002	218-01-9				
2-Methylphenol	UG/L	NA	95-48-7				
(3+4)-Methylphenol	UG/L	NA	106-44-5				
Diallate	UG/L	NA	2303-16-4				
Dibenzo(a,h)anthracene	UG/L	NA	53-70-3				
Dibenzofuran	UG/L	NA	132-64-9				
Di-n-butyl phthalate	UG/L	50	84-74-2				
3,3'-Dichlorobenzidine	UG/L	5	91-94-1				
2,4-Dichlorophenol	UG/L	5	120-83-2				
2,6-Dichlorophenol	UG/L	NA	87-65-0				
Diethyl phthalate	UG/L	50	84-66-2				
Dimethoate	UG/L	NA	60-51-5				
p-Dimethylaminoazobenzene	UG/L	NA	60-11-7				
7,12-Dimethylbenz(a)anthracen	UG/L	NA	57-97-6				
3,3'-Dimethylbenzidine	UG/L	5	119-93-7				
2,4-Dimethylphenol	UG/L	50	105-67-9				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Secondary Parameter	Units	Standards	Lab Sample ID CAS #	2022 Quarter 1	Quarter 2	Quarter 3	Quarter 4
Dimethyl phthalate	UG/L	50	131-11-3				
m-Dinitrobenzene	UG/L	5	99-65-0				
4,6-Dinitro-2-methylphenol	UG/L	1	534-52-1				
2,4-Dinitrophenol	UG/L	10	51-28-5				
2,4-Dinitrotoluene	UG/L	5	121-14-2				
2,6-Dinitrotoluene	UG/L	5	606-20-2				
Di-n-octyl phthalate	UG/L	50	117-84-0				
Dinoseb	UG/L	NA	88-85-7A				
Diphenylamine	UG/L	5	122-39-4				
Disulfoton	UG/L	ND	298-04-4				
Ethyl methane sulfonate	UG/L	NA	62-50-0				
Fluoranthene	UG/L	50	206-44-0				
Fluorene	UG/L	50	86-73-7				
Hexachlorobenzene	UG/L	0.04	118-74-1				
Hexachlorobutadiene	UG/L	0.5	87-68-3				
Hexachlorocyclopentadiene	UG/L	5	77-47-4				
Hexachloroethane	UG/L	5	67-72-1				
Hexachloropropene	UG/L	5	1888-71-7				
Indeno(1,2,3-cd)pyrene	UG/L	0.002	193-39-5				
Isodrin	UG/L	5	465-73-6				
Isophorone	UG/L	50	78-59-1				
Isosafrole	UG/L	NA	120-58-1				
Methapyrilene	UG/L	NA	91-80-5				
3-Methylcholanthrene	UG/L	NA	56-49-5				
Methyl methanesulfonate	UG/L	NA	66-27-3				
2-Methylnaphthalene	UG/L	NA	91-57-6				
Methyl parathion	UG/L	1.5	298-00-0				
Naphthalene	UG/L	10	91-20-3				
1-Naphthylamine	UG/L	NA	134-32-7				
2-Naphthylamine	UG/L	NA	91-59-8				
2-Nitroaniline	UG/L	5	88-74-4				
3-Nitroaniline	UG/L	5	99-09-2				
4-Nitroaniline	UG/L	5	100-01-6				
Nitrobenzene	UG/L	0.4	98-95-3				
2-Nitrophenol	UG/L	NA	88-75-5				
4-Nitrophenol	UG/L	5	100-02-7				
N-Nitrosodi-n-butylamine	UG/L	NA	924-16-3				
N-Nitrosodiethylamine	UG/L	NA	55-18-5				
N-Nitrosodimethylamine	UG/L	NA	62-75-9				
N-nitrosodiphenylamine	UG/L	NA	86-30-6				
N-Nitroso-Di-n-propylamine	UG/L	NA	621-64-7				
N-Nitrosomethylethylamine	UG/L	NA	10595-95-6				
N-Nitrosopiperidine	UG/L	NA	100-75-4				
N-Nitrosopyrrolidine	UG/L	NA	930-55-2				
5-Nitro-o-toluidine	UG/L	5	99-55-8				
2,2'-Oxybis(1-Chloropropane)	UG/L	NA	108-60-1				
Parathion	UG/L	1.5	56-38-2				
Pentachlorobenzene	UG/L	5	608-93-5				
Pentachloronitrobenzene	UG/L	ND	82-68-8				
Pentachlorophenol	UG/L	1	87-86-5				
Phenacetin	UG/L	NA	62-44-2				
Phenanthrene	UG/L	50	85-01-8				
Phenol	UG/L	1	108-95-2				
p-Phenylenediamine	UG/L	5	106-50-3				
Phorate	UG/L	ND	298-02-2				
Pronamide	UG/L	ND	23950-58-5				
Pyrene	UG/L	50	129-00-0				
Safrole	UG/L	ND	94-59-7				
1,2,4,5-Tetrachlorobenzene	UG/L	5	95-94-3				
2,3,4,6-Tetrachlorophenol	UG/L	NA	58-90-2				
Thionazin	UG/L	ND	297-97-2				
o-Toluidine	UG/L	5	95-53-4				
1,2,4-Trichlorobenzene	UG/L	5	120-82-1				
2,4,5-Trichlorophenol	UG/L	5	95-95-4				
2,4,6-Trichlorophenol	UG/L	5	88-06-2				
0,0,0-Triethylphosphorothioate	UG/L	NA	126-68-1				
sym-Trinitrobenzene	UG/L	5	99-35-4				
2,4-D	UG/L	50	94-75-7				
2,4,5-T	UG/L	35	93-76-5				
4,4'-DDT	UG/L	0.2	50-29-3				
4,4'-DDE	UG/L	0.2	72-55-9				
4,4'-DDD	UG/L	0.3	72-54-8				
2,4,5-TP (Silvex)	UG/L	0.26	93-72-1				
Aldrin	UG/L	ND	309-00-2				
alpha-BHC	UG/L	0.01	319-84-6				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: C&D Secondary Parameter	Units	Standards	Lab Sample ID CAS #	**2022** **Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
beta-BHC	UG/L	0.04	319-85-7				
gamma-BHC (Lindane)	UG/L	0.05	58-89-9				
delta-BHC	UG/L	0.04	319-86-8				
Chlordane	UG/L	0.1	57-74-9				
Dieldrin	UG/L	ND	60-57-1				
Endosulfan I	UG/L	ND	959-98-8				
Endosulfan II	UG/L	ND	33213-65-9				
Endosulfan Sulfate	UG/L	ND	1031-07-8				
Endrin	UG/L	ND	72-20-8				
Endrin aldehyde	UG/L	5	7421-93-4				
Famphur	UG/L	NA	52-85-7				
Heptachlor	UG/L	0.04	76-44-8				
Heptachlor epoxide	UG/L	0.03	1024-57-3				
Kepone	UG/L	ND	143-50-0				
Methoxychlor	UG/L	35	72-43-5				
Toxaphene	UG/L	0.06	8001-35-2				
Aroclor 1016	UG/L	0.1	12674-11-2				
Aroclor 1221	UG/L	0.1	11104-28-2				
Aroclor 1232	UG/L	0.1	11141-16-5				
Aroclor 1242	UG/L	0.1	53469-21-9				
Aroclor 1248	UG/L	0.1	12672-29-6				
Aroclor 1254	UG/L	0.1	11097-69-1				
Aroclor 1260	UG/L	0.1	11096-82-5				
Aroclor 1262	UG/L	0.1	37324-23-5				
Aroclor 1268	UG/L	0.1	11100-14-4				

Detectable concentrations only

J = Estimated Value

S.U. = standard units

ms/cm = millisiemens per centimeter

deg. C = degrees in Celsius

N.T.U. = nephelometric turbidity units

MG/L = milligrams per liter

UG/L = micrograms per liter

C.U. = color units

MG/L-N = nitrogen/nitrate

Bold =Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill				2022			
Location: Landfill #2 Leachate			Lab Sample	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Parameter	Units	Standards	ID CAS #				
Specific Conductance	umhos/cm	NA	(FSPECON)		17.3		7.68
Temperature	deg. C	NA	(TEMP)		18.26		14.01
pH	S.U.	6.5-8.5	(FPHSU)		6.07		6.99
Turbidity	NTU	5	(TURB)		62.1		**52.1**
Aluminum - Total	MG/L	NA	T7429-90-5		0.05 J		
Antimony - Total	MG/L	0.003	T7440-36-0				
Arsenic - Total	MG/L	0.025	T7440-38-2				
Barium - Total	MG/L	1	T7440-39-3		1.01		0.637
Beryllium - Total	MG/L	0.003	T7440-41-7				
Boron - Total	MG/L	1	T7440-42-8		5.84		**3.41**
Cadmium - Total	MG/L	0.01	T7440-43-9				
Calcium - Total	MG/L	NA	T7440-70-2		178		148
Chromium - Total	MG/L	0.05	T7440-47-3		0.026		0.01
Cobalt - Total	MG/L	NA	T7440-48-4		0.019 J		0.013 J
Copper - Total	MG/L	0.2	T7440-50-8				
Iron - Total	MG/L	0.3	T7439-89-6		4.19		**3.33**
Lead - Total	MG/L	0.025	T7439-92-1				
Magnesium - Total	MG/L	35	T7439-95-4		311		**174**
Manganese - Total	MG/L	0.3	T7439-96-5		0.179		0.208
Mercury - Total	MG/L	0.0007	T7439-97-6				
Molybdenum - Total	MG/L		T7439-98-7				
Nickel - Total	MG/L	0.1	T7440-02-0		0.088		0.069
Potassium - Total	MG/L	NA	T7440-09-7		375		225
Selenium - Total	MG/L	0.01	T7782-49-2				
Silver - Total	MG/L	0.05	T7440-22-4				
Sodium - Total	MG/L	20	T7440-23-5		1010		**602**
Thallium - Total	MG/L	0.0005	T7440-28-0		0.012		
Tin - Total	MG/L	NA	T7440-31-5				
Vanadium - Total	MG/L	NA	T7440-62-2		0.005 J		0.004 J
Zinc - Total	MG/L	2	T7440-66-6		0.009 J		0.016 J
Ammonia	MG/L-N	2	7664-41-7		616		**245**
Biochemical Oxygen Demand	MG/L	NA	BOD		81.6		28.1
Color	C.U.	15	COLOR		170		**500**
Hexavalent Chromium - Total	MG/L	0.05	T18540-29-9				
Nitrate	MG/L-N	10	NITRATE				2.3
Total Alkalinity	MG/L	NA	TALK		3570		2,020
Chloride	MG/L	250	CL		1870		**1,190**
Chemical Oxygen Demand	MG/L	NA	COD		1290		833
Sulfide	MG/L	NA	18496-25-8				
Sulfate	MG/L	250	SULFATE		52		134
Cyanide - Total	MG/L	0.0002	T57-12-5				**0.0107**
Total Dissolved Solids	MG/L	500	TDS		5420		**3,420**
Total Kjeldahl Nitrogen	MG/L-N	NA	TKN		463		260
Total Organic Carbon	MG/L	NA	TOC		236		145
Total Recoverable Phenolics	MG/L	0.001	TPHENOLS		0.0216		**0.0119**
Total Hardness	MG/L	NA	THARD		2100		1,250
Bromide	MG/L	2	BROMIDE		103		**54.1**
Acetone	UG/L	50	67-64-1				
Acetonitrile	UG/L	NA	75-05-8				
Acrolein	UG/L	5	107-02-8				
Acrylonitrile	UG/L	5	107-13-1				
3-Chloropropene (Allyl Chlor.)	UG/L	5	107-05-1				
Benzene	UG/L	1	71-43-2		4.8 **J**		**2.9** **J**
Bromochloromethane	UG/L	5	74-97-5				
Bromodichloromethane	UG/L	50	75-27-4				
Bromoform	UG/L	5	75-25-2				
Carbon Disulfide	UG/L	60	75-15-0				
Carbon Tetrachloride	UG/L	5	56-23-5				
Chlorobenzene	UG/L	5	108-90-7		2.5 J		
Chloroethane	UG/L	5	75-00-3				
Chloroform	UG/L	7	67-66-3				
2-Chloro-1,3-butadiene	UG/L	5	126-99-8				
Dibromochloromethane	UG/L	50	124-48-1				
4-Bromofluorobenzene	UG/L		460-00-4				
Dibromofluoromethane	UG/L		1868-53-7				
1,2-Dibromo-3-chloropropane	UG/L	0.04	96-12-8				
1,2-Dibromoethane	UG/L	5	106-93-4				
1,2-Dichlorobenzene	UG/L	3	95-50-1				
1,3-Dichlorobenzene	UG/L	3	541-73-1				
1,4-Dichlorobenzene	UG/L	3	106-46-7		3.2 **J**		
trans-1,4-Dichloro-2-butene	UG/L	5	110-57-6				
Dichlorodifluoromethane	UG/L						
1,1-Dichloroethane	UG/L	5	75-34-3				
1,2-Dichloroethane	UG/L	0.6	107-06-2				
1,1-Dichloroethene	UG/L	5	75-35-4				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill				**2022**			
Location: Landfill #2 Leachate			Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	ID CAS #				
cis-1,2-Dichloroethene	UG/L	5	156-59-2				
trans-1,2-Dichloroethene	UG/L	5	156-60-5				
1,2-Dichloropropane	UG/L	1	78-87-5				
1,3-Dichloropropane	UG/L						
2,2-Dichloropropane	UG/L	5	594-20-7				
1,1-Dichloropropene	UG/L	5	563-58-6				
cis-1,3-Dichloropropene	UG/L	0.4	10061-01-5				
trans-1,3-Dichloropropene	UG/L	0.4	10061-02-6				
Ethylbenzene	UG/L	5	100-41-4				
Ethyl methacrylate	UG/L	NA	97-63-2				
2-Hexanone	UG/L	50	591-78-6				
Isobutanol	UG/L	NA	78-83-1				
Methacrylonitrile	UG/L	5	126-98-7				
Bromomethane	UG/L	50	74-83-9				
Chloromethane	UG/L	5	74-87-3				
2-Butanone	UG/L	50	78-93-3				
Iodomethane	UG/L	5	74-88-4				
4-Methyl-2-pentanone	UG/L	NA	108-10-1				
Methyl methacrylate	UG/L	50	80-62-6				
Dibromomethane	UG/L	NA	74-95-3				
Methylene chloride	UG/L	5	75-09-2				
Propionitrile	UG/L	NA	107-12-0				
Styrene	UG/L	5	100-42-5				
1,1,1,2-Tetrachloroethane	UG/L	5	630-20-6				
1,1,2,2-Tetrachloroethane	UG/L	5	79-34-5				
Tetrachloroethene	UG/L	5	127-18-4				
Toluene	UG/L	5	108-88-3				
1,1,1-Trichloroethane	UG/L	5	71-55-6				
1,1,2-Trichloroethane	UG/L	1	79-00-5				
Trichloroethene	UG/L	5	79-01-6				
Trichlorofluoromethane	UG/L	5	75-69-4				
1,2,3-Trichloropropane	UG/L	0.04	96-18-4				
Vinyl acetate	UG/L	NA	108-05-4				
Vinyl chloride	UG/L	2	75-01-4				
m,p- Xylenes	UG/L	5	1330-20-7		8.5 **J**		3 J
o-Xylene	UG/L	5			2.8 J		
Acenaphthene	UG/L	20	83-32-9				
Acenaphthylene	UG/L	NA	208-96-8				
Acetophenone	UG/L	NA	98-86-2				
2-Acetylaminofluorene	UG/L	NA	53-96-3				
4-Aminobiphenyl	UG/L	5	92-67-1				
Anthracene	UG/L	50	120-12-7		2.1 J		
Benzo(a)anthracene	UG/L	0.002	56-55-3				
Benzo(b)fluoranthene	UG/L	0.002	205-99-2				
Benzo(k)fluoranthene	UG/L	0.002	207-08-9				
Benzo(ghi)perylene	UG/L	NA	191-24-2				
Benzo(a)pyrene	UG/L	ND	50-32-8				
Benzyl alcohol	UG/L	NA	100-51-6				
Bis(2-chloroethoxy) methane	UG/L	5	111-91-1				
Bis(2-chloroethyl) ether	UG/L	1	111-44-4				
Bis(2-ethylhexyl) phthalate	UG/L	5	117-81-7				
4-Bromophenyl phenyl ether	UG/L	NA	101-55-3				
Butyl benzyl phthalate	UG/L	50	85-68-7				
4-Chloroaniline	UG/L	5	106-47-8				
Chlorobenzilate	UG/L	10	510-15-6				
4-Chloro-3-methylphenol	UG/L	5	59-50-7				
2-Chloronaphthalene	UG/L	10	91-58-7				
2-Chlorophenol	UG/L	NA	95-57-8				
4-Chlorophenyl phenyl ether	UG/L	NA	7005-72-3				
Chrysene	UG/L	0.002	218-01-9				
2-Methylphenol	UG/L	NA	95-48-7				
(3+4)-Methylphenol	UG/L	NA	106-44-5				
Diallate	UG/L	NA	2303-16-4				
Dibenzo(a,h)anthracene	UG/L	NA	53-70-3				
Dibenzofuran	UG/L	NA	132-64-9				
Di-n-butyl phthalate	UG/L	50	84-74-2				
3,3'-Dichlorobenzidine	UG/L	5	91-94-1				
2,4-Dichlorophenol	UG/L	5	120-83-2				
2,6-Dichlorophenol	UG/L	NA	87-65-0				
Diethyl phthalate	UG/L	50	84-66-2				
Dimethoate	UG/L	NA	60-51-5				
p-Dimethylaminoazobenzene	UG/L	NA	60-11-7				
7,12-Dimethylbenz(a)anthracen	UG/L	NA	57-97-6				
3,3'-Dimethylbenzidine	UG/L	5	119-93-7				
2,4-Dimethylphenol	UG/L	50	105-67-9				

TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill				**2022**			
Location: Landfill #2 Leachate			Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	ID CAS #				
Dimethyl phthalate	UG/L	50	131-11-3				
m-Dinitrobenzene	UG/L	5	99-65-0				
4,6-Dinitro-2-methylphenol	UG/L	1	534-52-1				
2,4-Dinitrophenol	UG/L	10	51-28-5				
2,4-Dinitrotoluene	UG/L	5	121-14-2				
2,6-Dinitrotoluene	UG/L	5	606-20-2				
Di-n-octyl phthalate	UG/L	50	117-84-0				
Dinoseb	UG/L	NA	88-85-7A				
Diphenylamine	UG/L	5	122-39-4				
Disulfoton	UG/L	ND	298-04-4				
Ethyl methane sulfonate	UG/L	NA	62-50-0				
Fluoranthene	UG/L	50	206-44-0				
Fluorene	UG/L	50	86-73-7				
Hexachlorobenzene	UG/L	0.04	118-74-1				
Hexachlorobutadiene	UG/L	0.5	87-68-3				
Hexachlorocyclopentadiene	UG/L	5	77-47-4				
Hexachloroethane	UG/L	5	67-72-1				
Hexachloropropene	UG/L	5	1888-71-7				
Indeno(1,2,3-cd)pyrene	UG/L	0.002	193-39-5				
Isodrin	UG/L	5	465-73-6				
Isophorone	UG/L	50	78-59-1				
Isosafrole	UG/L	NA	120-58-1				
Methapyrilene	UG/L	NA	91-80-5				
3-Methylcholanthrene	UG/L	NA	56-49-5				
Methyl methanesulfonate	UG/L	NA	66-27-3				
2-Methylnaphthalene	UG/L	NA	91-57-6				
Methyl parathion	UG/L	1.5	298-00-0				
Naphthalene	UG/L	10	91-20-3		6.9 J		
1-Naphthylamine	UG/L	NA	134-32-7				
2-Naphthylamine	UG/L	NA	91-59-8				
2-Nitroaniline	UG/L	5	88-74-4				
3-Nitroaniline	UG/L	5	99-09-2				
4-Nitroaniline	UG/L	5	100-01-6				
Nitrobenzene	UG/L	0.4	98-95-3				
2-Nitrophenol	UG/L	NA	88-75-5				
4-Nitrophenol	UG/L	5	100-02-7				
N-Nitrosodi-n-butylamine	UG/L	NA	924-16-3				
N-Nitrosodiethylamine	UG/L	NA	55-18-5				
N-Nitrosodimethylamine	UG/L	NA	62-75-9				
N-nitrosodiphenylamine	UG/L	NA	86-30-6				
N-Nitroso-Di-n-propylamine	UG/L	NA	621-64-7				
N-Nitrosomethylethylamine	UG/L	NA	10595-95-6				
N-Nitrosopiperidine	UG/L	NA	100-75-4				
N-Nitrosopyrrolidine	UG/L	NA	930-55-2				
5-Nitro-o-toluidine	UG/L	5	99-55-8				
2,2'-Oxybis(1-Chloropropane)	UG/L	NA	108-60-1				
Parathion	UG/L	1.5	56-38-2				
Pentachlorobenzene	UG/L	5	608-93-5				
Pentachloronitrobenzene	UG/L	ND	82-68-8				
Pentachlorophenol	UG/L	1	87-86-5				
Phenacetin	UG/L	NA	62-44-2				
Phenanthrene	UG/L	50	85-01-8				
Phenol	UG/L	1	108-95-2				
p-Phenylenediamine	UG/L	5	106-50-3				
Phorate	UG/L	ND	298-02-2				
Pronamide	UG/L	ND	23950-58-5				
Pyrene	UG/L	50	129-00-0				
Safrole	UG/L	ND	94-59-7				
1,2,4,5-Tetrachlorobenzene	UG/L	5	95-94-3				
2,3,4,6-Tetrachlorophenol	UG/L	NA	58-90-2				
Thionazin	UG/L	ND	297-97-2				
o-Toluidine	UG/L	5	95-53-4		2.4 J		
1,2,4-Trichlorobenzene	UG/L	5	120-82-1				
2,4,5-Trichlorophenol	UG/L	5	95-95-4				
2,4,6-Trichlorophenol	UG/L	5	88-06-2				
0,0,0-Triethylphosphorothioate	UG/L	NA	126-68-1				
sym-Trinitrobenzene	UG/L	5	99-35-4				
2,4-D	UG/L	50	94-75-7				
2,4,5-T	UG/L	35	93-76-5				
4,4'-DDT	UG/L	0.2	50-29-3				
4,4'-DDE	UG/L	0.2	72-55-9				
4,4'-DDD	UG/L	0.3	72-54-8				
2,4,5-TP (Silvex)	UG/L	0.26	93-72-1				
Aldrin	UG/L	ND	309-00-2				
alpha-BHC	UG/L	0.01	319-84-6				

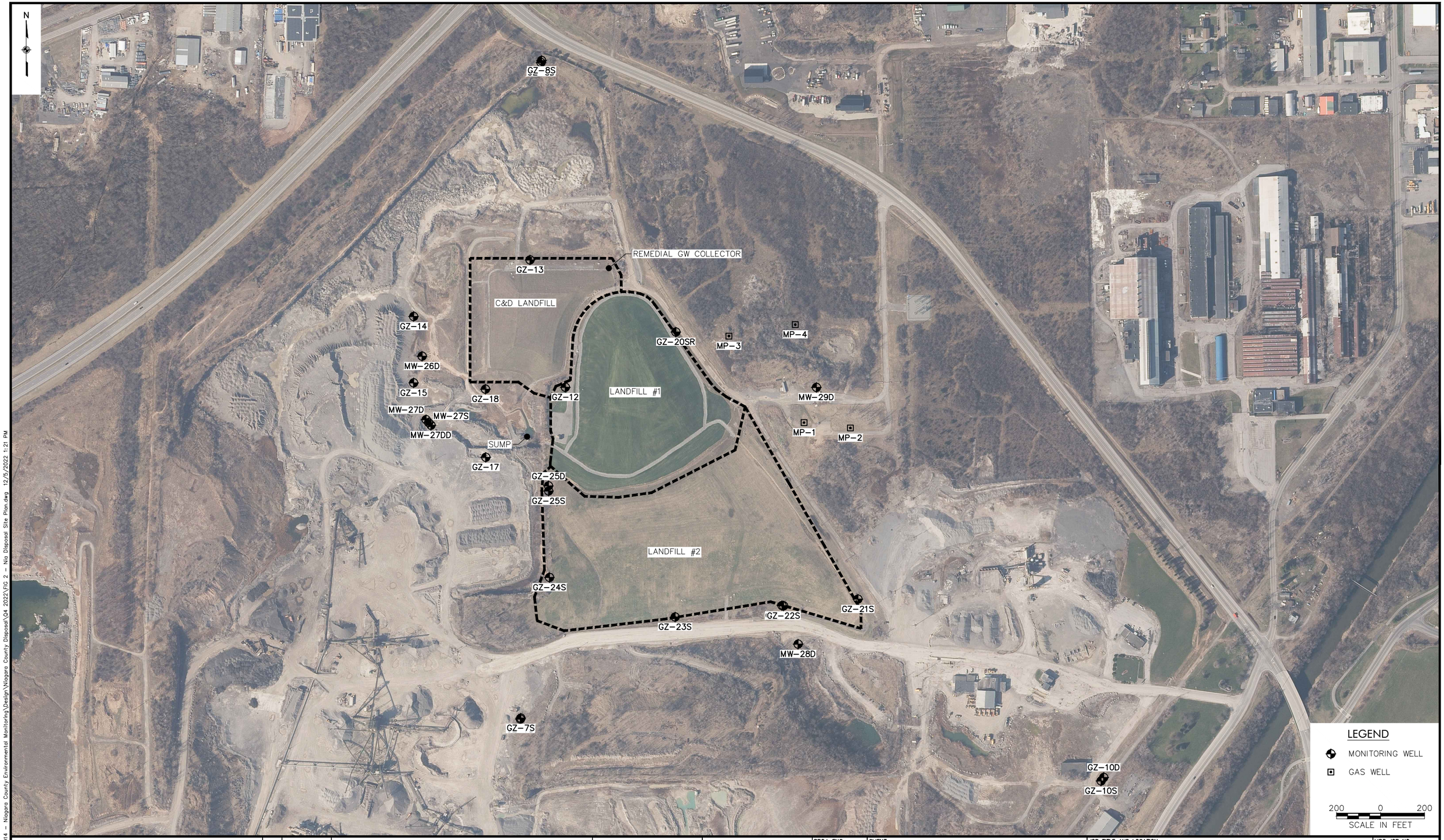
TABLE 5
SUMMARY OF WATER SAMPLE RESULTS: 2022 Q1 to Q4

NCRDD Landfill Location: Landfill #2 Leachate				2022			
			Lab Sample	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Parameter	Units	Standards	ID CAS #				
beta-BHC	UG/L	0.04	319-85-7				
gamma-BHC (Lindane)	UG/L	0.05	58-89-9				
delta-BHC	UG/L	0.04	319-86-8				
Chlordane	UG/L	0.1	57-74-9				
Dieldrin	UG/L	ND	60-57-1				
Endosulfan I	UG/L	ND	959-98-8				0.022 J
Endosulfan II	UG/L	ND	33213-65-9				
Endosulfan Sulfate	UG/L	ND	1031-07-8				
Endrin	UG/L	ND	72-20-8				
Endrin aldehyde	UG/L	5	7421-93-4				
Famphur	UG/L	NA	52-85-7				
Heptachlor	UG/L	0.04	76-44-8				
Heptachlor epoxide	UG/L	0.03	1024-57-3				
Kepone	UG/L	ND	143-50-0				
Methoxychlor	UG/L	35	72-43-5				
Toxaphene	UG/L	0.06	8001-35-2				
Aroclor 1016	UG/L	0.1	12674-11-2				
Aroclor 1221	UG/L	0.1	11104-28-2				
Aroclor 1232	UG/L	0.1	11141-16-5				
Aroclor 1242	UG/L	0.1	53469-21-9				
Aroclor 1248	UG/L	0.1	12672-29-6				
Aroclor 1254	UG/L	0.1	11097-69-1				
Aroclor 1260	UG/L	0.1	11096-82-5				
Aroclor 1262	UG/L	0.1	37324-23-5				
Aroclor 1268	UG/L	0.1	11100-14-4				

Detectable concentrations only
J = Estimated Value
P = The concentration between the two GC columns was greater than 40%; the lower result has been reported.
S.U. = standard units
ms/cm = millisiemens per centimeter
deg. C = degrees in Celsius
N.T.U. = nephelometric turbidity units
MG/L = milligrams per liter
UG/L = micrograms per liter
C.U. = color units
MG/L-N = nitrogen/nitrate
Bold =Analyte exceeds NYSDEC Division of Technical and Operations Guidance Series (TOGS) (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998)

FIGURES

V:\Niagara County\22-033-2914 - Niagara County Environmental Monitoring\Design\Niagara County Disposal\Q4 2022\FIG 1- Nia Disposal Sitemap.ai



V:\Niagara County\22-033-2914 - Niagara County Environmental Monitoring\Design\Niagara County Disposal\04 2022\Fig 2 - Nia Disposal Site Plan.dwg 12/5/2022 1:21 PM

WARNING

IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION

REVISIONS

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:	
DESIGNED BY:	
CHECKED BY:	
DRAWN BY:	

CLIENT: NIAGARA COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: APRIL 2023

SCALE: AS SHOWN

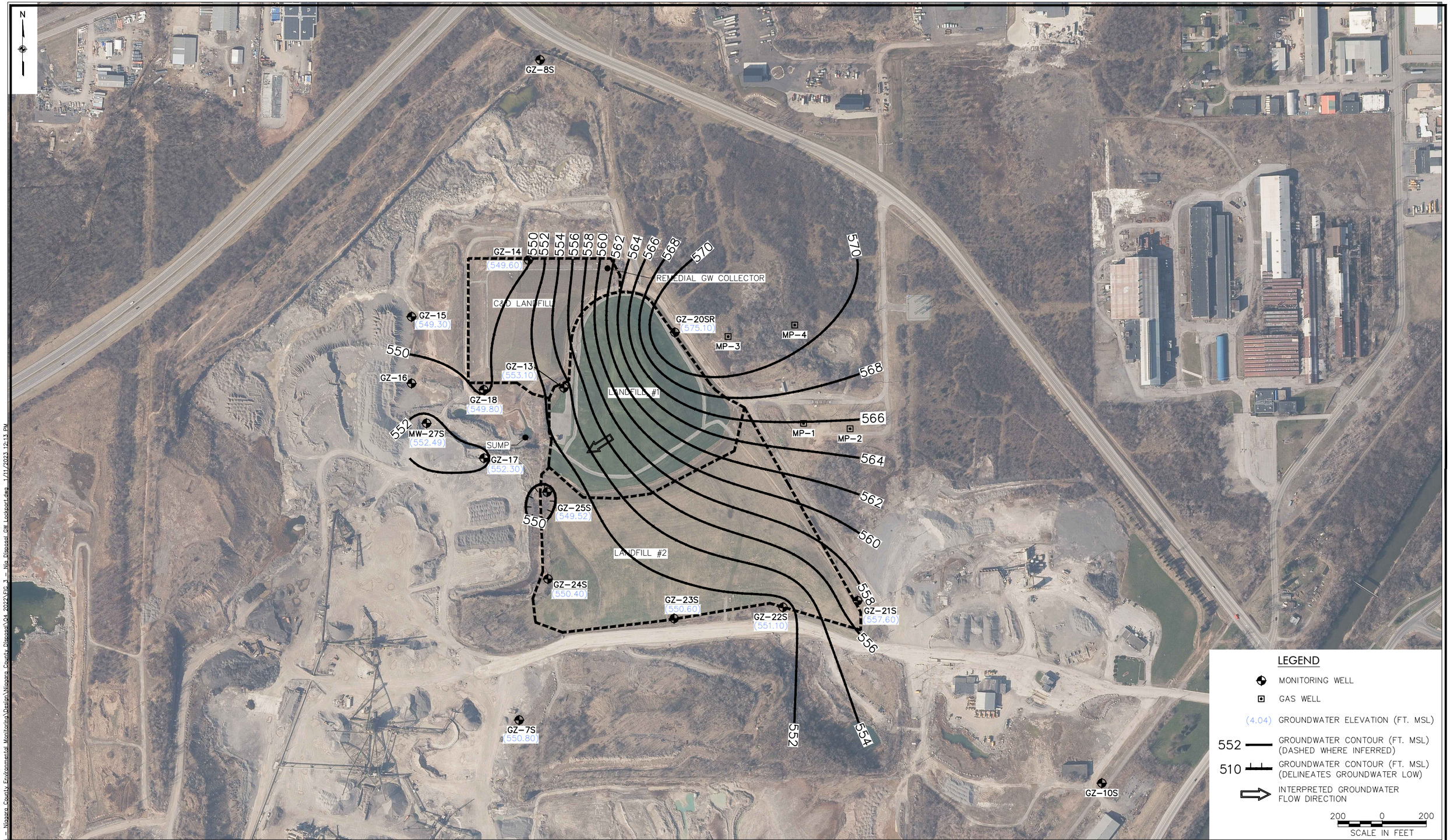
JOB TITLE AND LOCATION:
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT, NY

DRAWING TITLE:
SITE PLAN

LIRO JOB NO.: 22-033-2914

SHEET 2 OF 4

FIGURE NO. 2



V:\Niagara County\22-033-2914 - Niagara County Environmental Monitoring\Design\Niagara County Disposal\Q4 2022\FIG 3 - Nia Disposal GW Lockport.dwg 1/11/2023 12:13 PM

NO.	DATE	DESCRIPTION

REVISIONS

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:
DESIGNED BY:
CHECKED BY:
DRAWN BY:

CLIENT: NIAGARA COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: APRIL 2023

SCALE: AS SHOWN

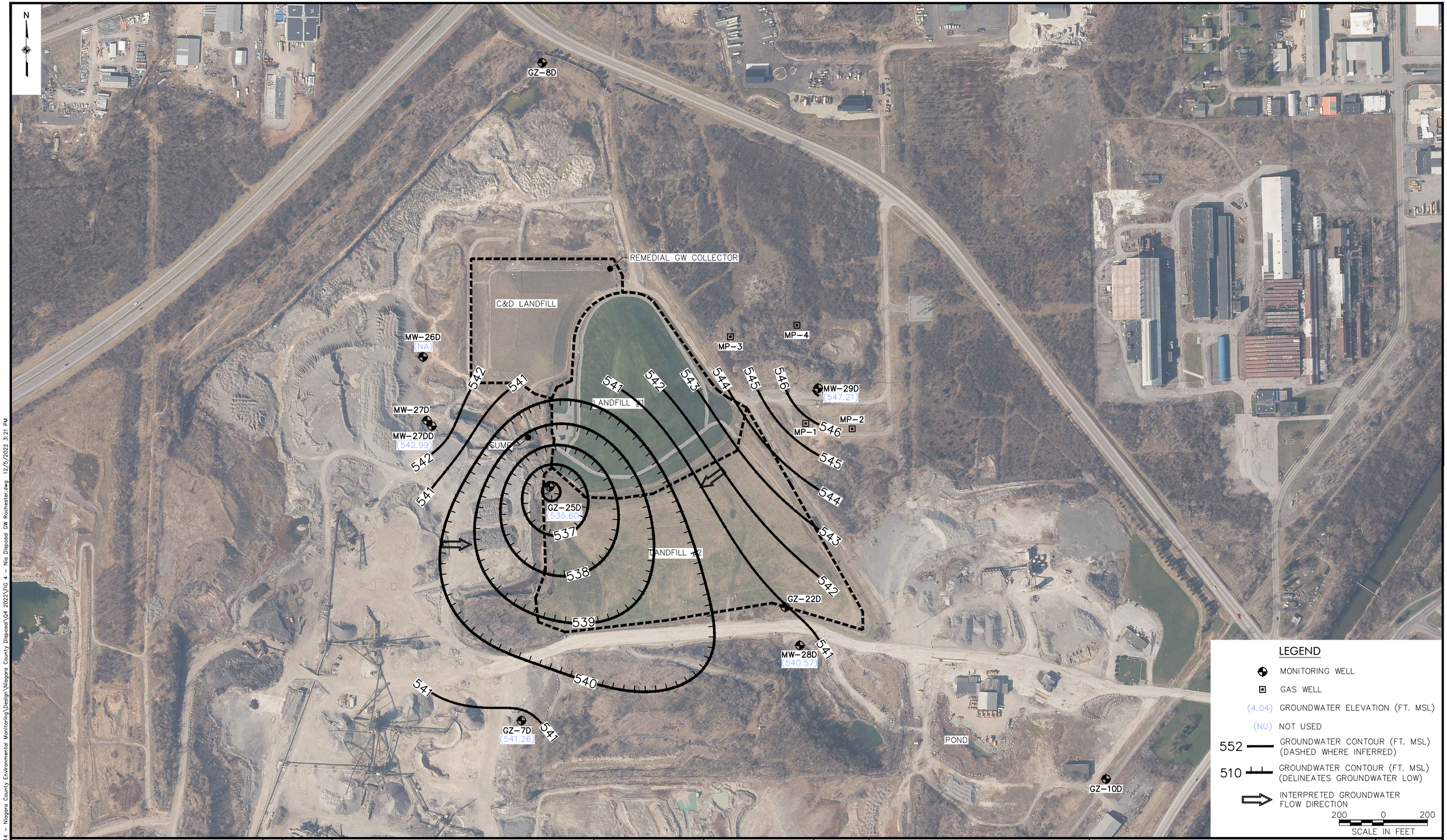
JOB TITLE AND LOCATION:
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT, NY

LIRO JOB NO.: 22-033-2914

SHEET 3 OF 4

DRAWING TITLE:
GROUNDWATER CONTOUR MAP
LOCKPORT FORMATION - 2022-Q4

FIGURE NO. 3



V:\Niagara County\22-033-2914 - Niagara County Environmental Monitoring\Design\Niagara County Disposal\Q4 2022\FIG 4 - Nia Disposal GW Rochester.dwg 12/5/2022 3:21 PM

WARNING

IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		

LiRo Engineers, Inc.
690 Delaware Avenue
Buffalo, New York

PROJ. ENG.:
DESIGNED BY:
CHECKED BY:
DRAWN BY:

CLIENT: NIAGARA COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: APRIL 2023
SCALE: AS SHOWN

JOB TITLE AND LOCATION:
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
STATE ROUTE 93, LOCKPORT, NY

LIRO JOB NO.: 22-033-2914
SHEET 4 OF 4

DRAWING TITLE:
GROUNDWATER CONTOUR MAP
ROCHESTER FORMATION - 2022-Q4

FIGURE NO. 4

ATTACHMENT A
Well Purge Logs

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-7S

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): 561.5
Initial Depth to Water (below MP): 10.7
Depth to Well Bottom (below MP): 24.35
Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: 1.5 in
Casing Type: PVC
Screen Length: 16.6-21.6
Volume in 1 Well Casing (Gallons): 2
Estimated Purge Volume (Gallons): 6

Purge Device: [redacted] Bailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: waterra
Sample Device: [redacted] Bailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: waterra

Sample ID: GZ-7S **Sample Time:** 1005

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides x□ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides □ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
□ MS/MSD: □ All ______
(List Parameters if not All)
□ Duplicate: □ All ______
(List Parameters if not All)

Other Information ______

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
958	13.88	2	0.5	6.94	10.14	3.69	11.90	137	-264
1000	17.14	4	0.5	6.91	10.58	1.89	12.07	125	-246
1002	20.95	6	0.5	6.85	11.07	1.28	12.04	176	-226

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-20S[R]

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): _____ Initial Depth to Water (below MP): 20.9 Depth to Well Bottom (below MP): 44.3 Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: 2 in Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): 3.5 Estimated Purge Volume (Gallons): 10.5

Purge Device: ■ Bailer ■ eristaltic ■ /hale ■ Grundfos ■ ther: wattera
Sample Device: Bailer eristaltic /hale Grundfos ther: waterra

Sample ID: GZ-20SR **Sample Time:** 847

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	x□ Routine	**QA/QC:**
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	□ Baseline	□ MS/MSD: □ All (List Parameters if not All)
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□ Duplicate: □ All (List Parameters if not All)

Other Information _____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
840	29.76	3.5	1	7.02	10.32	5.32	15.34	195	-101
842	36.93	7	1	7.02	11.01	4.79	14.14	137	-105
844	40.72	10.5	1	7.02	11.1	3.73	13.91	193	-102

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-21S

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): _____ Initial Depth to Water (below MP): 40.4 Depth to Well Bottom (below MP): 58.8 Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: 2 in Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): 2.5 Estimated Purge Volume (Gallons): 7.5

Purge Device: ☐ Bailer ☐ eristaltic ☐ /hale ☑ Grundfos ☐ Other: _____
Sample Device: ☐ Bailer ☐ eristaltic ☐ /hale ☑ Grundfos ☐ Other: _____

Sample ID: GZ-21S **Sample Time:** 1220

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	x□ Routine	**QA/QC:**
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	□ Baseline	□ MS/MSD: □ All (List Parameters if not All)
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□ Duplicate: □ All (List Parameters if not All)

Other Information _____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1212	44.52	2.5	0.5/1	7.01	9.33	10.20	11.38	46.4	-251
1214	49.97	5	0.5/1	6.99	9.26	2.55	11.50	42.7	-179
1216	52.17	7.5	0.5/1	6.96	9.94	2.39	11.56	74.2	-163

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-22S

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 9.4 Depth to Well Bottom (below MP): 22.1 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 2 Estimated Purge Volume (Gallons): 6

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-22S **Sample Time:** 1105

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides ☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides x☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1100	11.26	2	0.5/1	6.91	11.48	1.54	10.95	52.7	-126
1102	14.83	4	0.5/1	6.68	10.48	0.616	11.74	104	-66
1104	18.32	6	0.5/1	6.93	11.36	1.12	11.55	64.4	-72

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-23S

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 6.5 Depth to Well Bottom (below MP): 20.3 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 2 Estimated Purge Volume (Gallons): 6.3

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-23S **Sample Time:** 1045

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides x☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides ☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

x☐ Duplicate: x☐ All (List Parameters if not All)

Other Information DUP-01 at 1050

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1040	8.49	2	0.5/1	7.05	9.90	2.13	10.65	42.6	-88
1042	12.25	4	0.5/1	6.99	12.27	2.22	9.93	56.9	-135
1044	16.03	6	0.5/1	6.95	13.17	2.18	10.28	90.2	-102

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-24S

Sampling Personnel: M. Kolpinski/ N.Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): _____ Initial Depth to Water (below MP): 73.6 Depth to Well Bottom (below MP): 85.1 Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: 2 in Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): 1.5 Estimated Purge Volume (Gallons): 4.5

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____
Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____

Sample ID: GZ-24S **Sample Time:** 1000

Sampling Parameter(s)
(Check All That Apply)

☐ TCL VOCs	☐ TCL SVOCs	☐ Pesticides	☐ Routine	
☐ 1,4-Dioxane	☐ Metals-Filter	☐ Herbicides	x☐ Baseline	
☐ PCBs	☐ Metals-UnF	☐ PFAS	☐ Expanded	

QA/QC:
☐ MS/MSD: ☐ All _____ (List Parameters if not All)
☐ Duplicate: ☐ All _____ (List Parameters if not All)

Other Information _____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
948	76.38	1.5	1	6.92	9.49	35.2	10.58	73.2	-278
950	78.15	3	1	6.92	9.93	24.8	11.19	49.9	-284
952	79.98	4.5	1	6.94	9.90	27.2	11.13	49.4	-280

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-25S

Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ______ Initial Depth to Water (below MP): 72.48 Depth to Well Bottom (below MP): 83.7 Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: 2 in Casing Type: ______ Screen Length: ______ Volume in 1 Well Casing (Gallons): 1.5 Estimated Purge Volume (Gallons): 4.5

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______

Sample ID: GZ-25S **Sample Time:** 922

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides x□ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
□ MS/MSD: □ All ______ (List Parameters if not All)
□ Duplicate: □ All ______ (List Parameters if not All)

Other Information ______

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
915	75.66	1.5	1	6.91	8.84	95.8	8.26	132.0	-157.0
917	77.10	3	1	6.89	9.47	92.1	8.39	201.0	-226.0
919	79.93	4.5	1	6.89	10.10	91.9	8.39	240.0	-236.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal District **Well I.D.:** MW-27S

Sampling Personnel: J. Williams/N. Yu **Date:** 11/30/22 **Conditions:** 28 windy and rain

Measuring Point (MP): | Initial Depth to Water (below MP): 13.2 | Depth to Well Bottom (below MP): 32.6 | Screen Setting/ Open Hole (feet below MP) from: | to:

Well Diameter: 2 in | Casing Type: | Screen Length: | Volume in 1 Well Casing (Gallons): 3.5 | Estimated Purge Volume (Gallons): 10.5

Purge Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other:
Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other:

Sample ID: MW-27S **Sample Time:** 840

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides ☐ Routine
☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides ■ Baseline
☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:
☐ MS/MSD: ☐ All (List Parameters if not All)
Duplicate: All (List Parameters if not All)

Other Information

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Volume Removed (Gallons)	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
832	17.23	3.5	1	7.14	10.13	3.43	14.88	81.8	23.0
834	19.98	7	1	7.11	11.95	4.19	12.94	88.7	16.0
836	22.11	10.5	1	7.05	11.95	4.09	13.39	92.8	-16.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-12

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): 603.2 Initial Depth to Water (below MP): 51.75 Depth to Well Bottom (below MP): 82 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: PVC Screen Length: 75-85 Volume in 1 Well Casing (Gallons): 4.5 Estimated Purge Volume (Gallons): 13.5

Purge Device: ☑ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample Device: ☑ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample ID: GZ-12 **Sample Time:** 1320

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs	☐ TCL SVOCs	☐ Pesticides	☐ Routine	**QA/QC:** ☐ MS/MSD: ☐ All (List Parameters if not All)
☐ 1,4-Dioxane	☐ Metals-Filter	☐ Herbicides	x☐ Baseline	
☐ PCBs	☐ Metals-UnF	☐ PFAS	☐ Expanded	☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1308	56.89	4.5	1	7.04	8.74	14.5	10.79	63.6	-127.0
1311	62.46	9	1	7.16	10.23	22.9	9.95	52.6	-228.0
1314	67.89	13.5	1	7.12	10.5	22.6	10.47	79.1	-248.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-13

Sampling Personnel: <. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): 564.3 Initial Depth to Water (below MP): 11.2 Depth to Well Bottom (below MP): 29.7 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: PVC Screen Length: ____ Volume in 1 Well Casing (Gallons): 2.5 Estimated Purge Volume (Gallons): 7.5

Purge Device: ☐ ailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample Device: ☐ ailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-13 **Sample Time:** 1145

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides ☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides x☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1138	14.21	2.5	1	6.96	10.55	2.53	10.72	121.0	-178.0
1140	17.98	5	1	6.90	11.04	2.14	10.77	101.0	-179.0
1142	21.16	7.5	1	6.88	11.62	2.04	10.77	83.0	-173.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-14

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): 554 Initial Depth to Water (below MP): 4.4 Depth to Well Bottom (below MP): 18.5 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: PVC Screen Length: ____ Volume in 1 Well Casing (Gallons): 2.5 Estimated Purge Volume (Gallons): 7.5

Purge Device:	■ Bailer	■ eristaltic	■ /hale	■ Grundfos	■ ther:	waterra
Sample Device:	■ Bailer	■ eristaltic	■ /hale	■ Grundfos	☑ ther:	waterra

Sample ID: GZ-14 **Sample Time:** 1245

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	x□ Routine	**QA/QC:**
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	□ Baseline	□ MS/MSD: □ All (List Parameters if not All)
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□ Duplicate: □ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1236	7.54	2.5	1	6.99	11.99	4.89	9.76	219.0	-101.0
1239	9.86	5	1	7.02	12.46	5.84	9.64	273.0	-110.0
1242	12.05	7.5	1	7.00	13.09	5.39	9.98	406.0	-129.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-15

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): 552.5 Initial Depth to Water (below MP): 3.2 Depth to Well Bottom (below MP): 10.1 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: PVC Screen Length: 9.5-19.5 Volume in 1 Well Casing (Gallons): 1 Estimated Purge Volume (Gallons): 3

Purge Device: ☐ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample Device: ☐ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-15 **Sample Time:** 1300

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs	☐ TCL SVOCs	☐ Pesticides	x☐ Routine	☐ MS/MSD: ☐ All (List Parameters if not All)
☐ 1,4-Dioxane	☐ Metals-Filter	☐ Herbicides	☐ Baseline	
☐ PCBs	☐ Metals-UnF	☐ PFAS	☐ Expanded	☐ Duplicate: ☐ All (List Parameters if not All)

QA/QC:

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1252	5.14	1	1	6.95	11.50	4.31	11.30	148.0	-109.0
1253	6.87	2	1	6.91	10.37	3.32	12.10	33.3	-90.0
1254	8.02	3	1	6.91	10.16	2.95	11.63	19.6	-75.0

LiRo Engineers, Inc.	LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-17

Sampling Personnel: J. Williams/N. Yu **Date:** 11/30/22 **Conditions:** 28 windy and rain

Measuring Point (MP): ____ Initial Depth to Water (below MP): 26.6 Depth to Well Bottom (below MP): 47.7 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 3 Estimated Purge Volume (Gallons): 9

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ____
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ____

Sample ID: GZ-17 **Sample Time:** 950

Sampling Parameter(s) (Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides x□ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
□ MS/MSD: □ All ____ (List Parameters if not All)
□ Duplicate: □ All ____ (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
842	30.02	3	1	7.03	10.21	5.9	11.26	81.5	-177.0
844	34.15	6	1	6.95	10.89	5.82	10.39	112.0	-177.0
846	39.64	9	1	6.93	10.96	6.20	11.57	137.0	-176.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-18

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 2.5 Depth to Well Bottom (below MP): 19.6 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 3 Estimated Purge Volume (Gallons): 9

Purge Device: ☐ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra
Sample Device: ☐ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-18 **Sample Time:** 1315

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	x□ Routine	x□ MS/MSD: x□ All
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	□ Baseline	(List Parameters if not All)
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□ Duplicate: □ All

(List Parameters if not All)

Other Information ____

QA/QC:

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1309	4.55	3	1	6.97	11.06	5.28	10.75	23.0	-97.0
1311	6.89	6	1	7.01	12.03	6.26	10.03	43.1	-138.0
1313	9.06	9	1	6.99	12.43	5.20	10.20	49.5	-145.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-7D

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): 561.6 Initial Depth to Water (below MP): 20.34 Depth to Well Bottom (below MP): 30 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 1.5 in Casing Type: PVC Screen Length: 57-62 Volume in 1 Well Casing (Gallons): 1 Estimated Purge Volume (Gallons): 3

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☑ Other: waterra

Sample ID: GZ-7D **Sample Time:** 945

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides ☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides x☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
938	24.13	1	0.5/1	7.09	8.94	29.8	11.24	268.0	-189.0
940	25.96	2	0.5/1	7.11	9.47	38.4	10.67	572.0	-248.0
942	27.24	3	0.5/1	7.10	9.80	38.8	10.89	883.0	-252.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-22D

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/30/22 **Conditions:** 28 windy and rain

Measuring Point (MP): _____ Initial Depth to Water (below MP): 62.1 Depth to Well Bottom (below MP): 63.35 Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: 2 in Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): 0.3 Estimated Purge Volume (Gallons): 0.9

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____
Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____

Sample ID: GZ-22D **Sample Time:** 1030

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs	☐ TCL SVOCs	☐ Pesticides	☐ Routine	**QA/QC:** ☐ MS/MSD: ☐ All (List Parameters if not All)
☐ 1,4-Dioxane	☐ Metals-Filter	☐ Herbicides	x☐ Baseline	
☐ PCBs	☐ Metals-UnF	☐ PFAS	☐ Expanded	☐ Duplicate: ☐ All (List Parameters if not All)

Other Information purged dry 11-28. only got VOC, Metals, Metals-HG, Dissolved metals

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1117	63.23	0.3	0.5/1	7.04	10.08	17.90	11.21	64.0	-45.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** GZ-25D

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): _____ Initial Depth to Water (below MP): 85.2 Depth to Well Bottom (below MP): 110 Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: 2 in Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): 3.5 Estimated Purge Volume (Gallons): 10.5

Purge Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____
Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: _____

Sample ID: GZ-25D **Sample Time:** 845

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	□ Routine	**QA/QC:** □ MS/MSD: □ All (List Parameters if not All)
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	x□ Baseline	
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□x Duplicate: □ All (List Parameters if not All)

Other Information Dup-02 at 855

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
835	91.56	3.5	1	7.09	7.97	93.9	17.99	115.0	19.0
837	96.33	7	1	6.94	8.58	>100	8.86	81.2	-25.0
839	103.14	10.5	1	6.91	9.10	>100	8.93	70.6	-60.0

LiRo Engineers, Inc.	LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** MW-26D

Sampling Personnel: J. Williams/N. Yu **Date:** 3/30/22 **Conditions:** ______

Measuring Point (MP): ______ Initial Depth to Water (below MP): ______ Depth to Well Bottom (below MP): 40 Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: ______ Casing Type: ______ Screen Length: ______ Volume in 1 Well Casing (Gallons): ______ Estimated Purge Volume (Gallons): ______

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______

Sample ID: ______ **Sample Time:** ______

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides □ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
□ MS/MSD: □ All ______
(List Parameters if not All)
□ Duplicate: □ All ______
(List Parameters if not All)

Other Information Well was Dry - No Sample Collected

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** MW-27DD

Personnel:M. Kolpinski/N. Yu **Date:** 11/30/22 **Conditions:** 28 widy and rain

Measuring Point (MP): ______ Initial Depth to Water (below MP): 22.1 Depth to Well Bottom (below MP): 74.4 Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: 2 in Casing Type: ______ Screen Length: ______ Volume in 1 Well Casing (Gallons): 8.4 Estimated Purge Volume (Gallons): 25.2

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]/hale [redacted]rundfos [redacted]ther: ______
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]/hale [redacted]rundfos [redacted]ther: ______

Sample ID: MW-27DD **Sample Time:** 930

Sampling Parameter(s) (Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides x□ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
□ MS/MSD: □ All ______ (List Parameters if not All)
□ Duplicate: □ All ______ (List Parameters if not All)

Other Information ______

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
855	25.88	8.4	1	7.24	11.01	>100	12.87	79.2	-57.0
910	30.24	16.8	1	7.14	10.46	>100	7.71	71.2	-157.0
925	36.13	25.2	1	7.08	10.79	>100	7.78	75.5	-185.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** MW-28D

Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 19.4 Depth to Well Bottom (below MP): 76.3 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 9 Estimated Purge Volume (Gallons): 27

Purge Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample ID: MW-28D **Sample Time:** 1220

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides x☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides ☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1130	24.78	9	2	7.09	9.3	31.0	10.37	73.5	-142.0
1134	29.63	18	2	7.02	10.08	18.5	10.97	108.0	-273.0
1138	34.16	27	2	7.02	9.8	17.9	11.22	71.2	-274.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** MW-29D

Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 51.5 Depth to Well Bottom (below MP): 113 Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: 2 in Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): 9.8 Estimated Purge Volume (Gallons): 29.4

Purge Device: ☐ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample ID: MW-29D **Sample Time:** 1245

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides x☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides ☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS ☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information ____

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1233	55.84	9.8	2	6.96	9.88	2.89	11.77	48.8	-148.0
1237	64.35	19.6	2	6.83	9.66	1.22	12.11	103.0	-137.0
1241	67.84	29.4	2	6.98	9.98	3.37	11.91	32.5	-168.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** Pond

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/28/22 **Conditions:** 37 cloudy

Measuring Point (MP): _____ Initial Depth to Water (below MP): 19.63 Depth to Well Bottom (below MP): _____ Screen Setting/ Open Hole (feet below MP) from: _____ to: _____

Well Diameter: _____ Casing Type: _____ Screen Length: _____ Volume in 1 Well Casing (Gallons): _____ Estimated Purge Volume (Gallons): _____

Purge Device: ☐ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☐ Other: _____
Sample Device: ☑ Bailer ☐ eristaltic ☐ Whale ☐ Grundfos ☐ Other: _____

Sample ID: Pond **Sample Time:** 1345

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs	☐ TCL SVOCs	☐ Pesticides	☐ Routine	**QA/QC:**
☐ 1,4-Dioxane	☐ Metals-Filter	☐ Herbicides	x☐ Baseline	☐ MS/MSD: ☐ All (List Parameters if not All)
☐ PCBs	☐ Metals-UnF	☐ PFAS	☐ Expanded	☐ Duplicate: ☐ All (List Parameters if not All)

Other Information: No Purge.

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1344		0		7.03	5.20	5.37	14.74	17.8	-147.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** Remedial GW collector manhole

Sampling Personnel: M. Kolpinski/N. Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 20.5 Depth to Well Bottom (below MP): ____ Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: ____ Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): ____ Estimated Purge Volume (Gallons): ____

Purge Device: [redacted] Bailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ____
Sample Device: [redacted] Bailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ____

Sample ID: RGWM **Sample Time:** 1025

Sampling Parameter(s) (Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides x□ Baseline
□ PCBs □ Metals-UnF □ PFAS □ Expanded

QA/QC:
x□ MS/MSD: x□ All (List Parameters if not All)
□ Duplicate: □ All (List Parameters if not All)

Other Information No Purge. RGWM-MS at 1035, RGWM-MSD at 1045

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1022		0		6.94	9.69	14.1	11.24	26.6	-253.0

LiRo Engineers, Inc.	**LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG**

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** Sump

Sampling Personnel: M. Kolpinski/N.Yu **Date:** 11/30/22 **Conditions:** 28 windy and rain

Measuring Point (MP): ________ Initial Depth to Water (below MP): ________ Depth to Well Bottom (below MP): ________ Screen Setting/ Open Hole (feet below MP) from: ________ to: ________

Well Diameter: ________ Casing Type: ________ Screen Length: ________ Volume in 1 Well Casing (Gallons): ________ Estimated Purge Volume (Gallons): ________

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ________
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ________

Sample ID: sump **Sample Time:** 940

QA/QC:

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs	□ TCL SVOCs	□ Pesticides	□ Routine	□ MS/MSD: □ All ________ (List Parameters if not All)
□ 1,4-Dioxane	□ Metals-Filter	□ Herbicides	x□ Baseline	
□ PCBs	□ Metals-UnF	□ PFAS	□ Expanded	□ Duplicate: □ All ________ (List Parameters if not All)

Other Information: no purge

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
939				7.00	8.93	72	10.02	55.3	-144.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** C&D primary leachate

Sampling Personnel: M. Kolpinski/N.Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ____ Initial Depth to Water (below MP): 11.9 Depth to Well Bottom (below MP): ____ Screen Setting/ Open Hole (feet below MP) from: ____ to: ____

Well Diameter: ____ Casing Type: ____ Screen Length: ____ Volume in 1 Well Casing (Gallons): ____ Estimated Purge Volume (Gallons): ____

Purge Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample Device: ☑ Bailer ☐ Peristaltic ☐ Whale ☐ Grundfos ☐ Other: ____

Sample ID: CDPL **Sample Time:** 1200

Sampling Parameter(s) (Check All That Apply)

☐ TCL VOCs ☐ TCL SVOCs ☐ Pesticides ☐ Routine

☐ 1,4-Dioxane ☐ Metals-Filter ☐ Herbicides ☐ Baseline

☐ PCBs ☐ Metals-UnF ☐ PFAS x☐ Expanded

QA/QC:

☐ MS/MSD: ☐ All (List Parameters if not All)

☐ Duplicate: ☐ All (List Parameters if not All)

Other Information no purge

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1159				6.90	12.17	2.62	10.51	113.0	-136.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** C&D secondary leachate

Sampling Personnel: M. Kolpinski/N.Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ______ Initial Depth to Water (below MP): 12.8 Depth to Well Bottom (below MP): ______ Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: ______ Casing Type: ______ Screen Length: ______ Volume in 1 Well Casing (Gallons): ______ Estimated Purge Volume (Gallons): ______

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______

Sample ID: CDSL **Sample Time:** 1110

Sampling Parameter(s)
(Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides □ Baseline
□ PCBs □ Metals-UnF □ PFAS x□ Expanded

QA/QC:
□ MS/MSD: □ All ______
(List Parameters if not All)
□ Duplicate: □ All ______
(List Parameters if not All)

Other Information no purge

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1107				7.01	10.35	2.78	10.69	160.0	-179.0

LiRo Engineers, Inc.

LOW FLOW / LOW STRESS
GROUNDWATER PURGE AND SAMPLING LOG

Project: Niagara County **Site:** NC Refuse Disposal **Well I.D.:** Landfill 2 Leachate Storage

Sampling Personnel: M. Kolpinski/N.Yu **Date:** 11/29/22 **Conditions:** 40 cloudy

Measuring Point (MP): ______ Initial Depth to Water (below MP): 18.5 Depth to Well Bottom (below MP): ______ Screen Setting/ Open Hole (feet below MP) from: ______ to: ______

Well Diameter: ______ Casing Type: ______ Screen Length: ______ Volume in 1 Well Casing (Gallons): ______ Estimated Purge Volume (Gallons): ______

Purge Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______
Sample Device: [redacted]ailer [redacted]eristaltic [redacted]hale [redacted]rundfos [redacted]ther: ______

Sample ID: L2LS **Sample Time:** 1350

Sampling Parameter(s) (Check All That Apply)

□ TCL VOCs □ TCL SVOCs □ Pesticides □ Routine
□ 1,4-Dioxane □ Metals-Filter □ Herbicides □ Baseline
□ PCBs □ Metals-UnF □ PFAS x□ Expanded

QA/QC:
□ MS/MSD: □ All ______ (List Parameters if not All)
□ Duplicate: □ All ______ (List Parameters if not All)

Other Information no purge

PURGE PARAMETER LOG

TIME	Depth to Water (below MP)	Cumulative Volume Removed	Flow Rate (gal/minute)	pH	TEMP (^{0}C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/liter)	Turbidity (NTU)	ORP/Eh (mV)
1348				6.99	14.01	7.68	8.50	52.1	-60.0

ATTACHMENT B
Data Usability Summary Report

Data Usability Summary Report

Vali-Data of WNY, LLC
20 Hickory Grove Spur
Fulton, NY 13069

Niagara Co. Landfill (NCRDD)
ALS Environmental SDG#R2211441
April 14, 2023
Sampling date: 11/30/2022

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DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for The LiRo Group, project located at Niagara Co. Landfill (NCRDD), ALS Environmental SDG #R2211441 submitted to Vali-Data of WNY, LLC on February 3, 2023. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines(NFG) and NYSDEC Analytical Services Protocols. The laboratory performed the analyses using USEPA methods: Volatile Organic Compounds (8260C), Inorganics (6010C), Mercury (7470A) and in accordance with wet chemistry methods.

ID	Sample ID	Laboratory ID
1	MW-27S	R2211441-001
2	MW-27S Diss	R2211441-002
3	MW-27DD	R2211441-003
4	MW-27DD Diss	R2211441-004
5	SUMP	R2211441-005
6	SUMP Diss	R2211441-006
7	GZ-17	R2211441-007
8	G-17 Diss	R2211441-008
9	GZ-22	R2211441-009
10	GZ-22 Diss	R2211441-010

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the

procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Laboratory Control Samples and Continuing Calibration.

Sample: DUSR ID#3 was diluted.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.
Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
No field duplicate was acquired.

LABORATORY CONTROL SAMPLES
All criteria were met except the %Rec of Chloromethane was outside QC limits, high in RQ2215257 and RQ2215392 and should be qualified as estimated. This target analyte was not detected in the samples, so no further action is required.

MS/MSD
No MS/MSD was acquired.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were performed on target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except a couple of target analytes were outside QC limits in the continuing calibration. These target analytes should be qualified as estimated in the associated sample, blank and spike.

CCal File#	Target Analyte	%D, RRF	Qualifier	Associated Sample
V9228.D	Chloromethane	34.8	UJ/J	RQ2215257, 1, 3, 5, 7
V9261.D	Bromomethane	-39.6	UJ/J	RQ2215392, 9
V9261.D	Styrene	26.0	UJ/J	RQ2215392, 9

Some target analytes were outside laboratory QC limits but within NFG limits, so no further action is required.

GC/MS PERFORMANCE CHECK
All criteria were met.

METALS

The following items/criteria were reviewed for this analytical suite:

-Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Blanks
-Laboratory Control Sample
-MS/MSD/Duplicate
-Field Duplicate
-Serial Dilution
-Compound Quantitation
-Calibration

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Blanks and Calibration.

Samples: DUSR ID #1-4 and #7-10 were diluted due to high target analyte concentrations.

The target analytes were recorded to the reporting limit in DUSR ID#2, #4, #6, #8 and #10.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

BLANKS
All criteria were met except several target analytes were outside QC limits in the blanks and should be qualified in the associated samples in which they were detected.

Blank ID	Target Analyte	Concentration(ug/L)	Qualifier	Associated Sample
CCB 12/9/22 18:21	V	50	U at RL	5
CCB 12/9/22 19:38	V	50	U at RL	9
CCB 12/9/22 20:06	K	2000	JH	3, 4

LABORATORY CONTROL SAMPLE
All criteria were met.

MS/MSD/DUPLICATE
No MS/MSD was acquired.

FIELD DUPLICATE
No field duplicate was acquired.

SERIAL DILUTION
No serial dilution was acquired.

COMPOUND QUANTITATION
All criteria were met.

CALIBRATION
All criteria were met except several target analytes were outside QC limits in the calibrations and should be qualified in the associated samples, blanks and spikes.

Calibration ID	Target Analyte	%Rec	Qualifier	Associated Sample
LLCCV 12/9/22 17:59	As	111	JH	788199LCS/LCSD, 3
LLCCV 12/9/22 17:59	Pb	117	JH	788199LCS/LCSD, 3, 7, 9
LLCCV 12/9/22 17:59	Se	117	JH	788199LCS/LCSD
LLCCV 12/9/22 20:38	Pb	115	JH	788199LCS/LCSD, 3, 7, 9
LLCCV 12/9/22 20:38	Tl	112	JH	788199LCS/LCSD, 3, 4
LLCCV 12/12/22 17:59	Tl	82	UJ/J	9, 10
LLCCV 12/12/22 19:56	K	89	UJ/J	9, 10

GENERAL CHEMISTRY

The following items/criteria were reviewed for this analytical suite:

- Alkalinity
- BOD
- Bromide
- COD
- Color
- Chloride
- Cyanide
- Hexavalent Chromium
- Hardness
- Ammonia-Nitrogen
- Nitrogen-Nitrate
- Phenol
- Sulfate
- TDS
- TKN
- TOC

The items listed above were technically in compliance with the method and SOP criteria with any exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below.

ALKALINITY
All criteria were met.

BOD
All criteria were met.

BROMIDE
All criteria were met.
Samples: DUSR ID#1, #3 and #7 were diluted due to high target analyte concentrations.
Sample: DUSR ID#5 was diluted.

COD
All criteria were met.
Sample: DUSR ID#3 was diluted due to high target analyte concentration.

COLOR/pH
All criteria were met except there was a detection in the Method Blank. Color should be qualified as estimated in all of the samples.
Samples: DUSR ID#1, #3, #5 and #7 were diluted due to high target analyte concentrations.

CHLORIDE
All criteria were met except Chloride was detected in the blank, RQ2215108-08. Chloride in samples; DUSR ID#1, #5 and #7 should be qualified as estimated high.
Samples: DUSR ID#1, #3, #5 and #7 were diluted due to high target analyte concentrations.

CYANIDE
All criteria were met.
Sample: DUSR ID#3 was diluted.

HEXAVALENT CHROMIUM
All criteria were met.

HARDNESS
All criteria were met.

AMMONIA-NITROGEN
All criteria were met except the %Rec of Ammonia was outside QC limit low in DUSR ID#1MS/MSD and should be qualified as estimated in DUSR ID#1 and 1MS/MSD.
Samples: DUSR ID#3 and #7 were diluted due to high target analyte concentrations.

NITROGEN-NITRATE
All criteria were met.
Samples: DUSR ID#1, #3, #5 and #7 were diluted due to salinity.

PHENOL
All criteria were met.
Sample: DUSR ID#3 was diluted due to salinity.

SULFATE
All criteria were met.

Samples: DUSR ID#1, #3, #5 and #7 were diluted due to high target analyte concentrations.

TDS
All criteria were met.

TKN
All criteria were met.
Sample: DUSR ID#3 was diluted due to high target analyte concentrations.

TOC
All criteria were met.

Client: LiRo Group
Project: Niagara County Refuse Disposal District
Sample Matrix: Water

Service Request: R2211441
Date Received: 11/30/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Ten water samples were received for analysis at ALS Environmental on 11/30/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method 300.0 Nitrate, R2211441-005: The Method Reporting Limit (MRL) was elevated due to salinity of sample.
Method 420.4, R2211441-003: The Method Reporting Limit (MRL) was elevated due to salinity of the sample.

Volatiles by GC/MS:

Method 8260C, 12/08/2022: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 12/08/2022: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) above the MRL in the associated field samples, the quantitation is not affected. The data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 12/08/2022: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Method 8260C, 12/07/2022: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Method 8260C, 12/07/2022: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Approved by Meghan Pedro Date 12/28/2022

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27S	**Units:**	ug/L
Lab Code:	R2211441-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,2,3-Trichloropropane	0.26 U	5.0	0.26	1	12/07/22 12:38	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	12/07/22 12:38	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
2-Butanone (MEK)	0.78 U	10	0.78	1	12/07/22 12:38	
2-Hexanone	0.20 U	10	0.20	1	12/07/22 12:38	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	12/07/22 12:38	
Acetone	5.0 U	10	5.0	1	12/07/22 12:38	
Benzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
Bromochloromethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
Bromodichloromethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
Bromoform	0.25 U	5.0	0.25	1	12/07/22 12:38	
Bromomethane	0.70 U	5.0	0.70	1	12/07/22 12:38	
Carbon Disulfide	0.42 U	10	0.42	1	12/07/22 12:38	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	12/07/22 12:38	
Chlorobenzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
Chloroethane	0.23 U	5.0	0.23	1	12/07/22 12:38	
Chloroform	0.24 U	5.0	0.24	1	12/07/22 12:38	
Chloromethane	0.28 U	5.0	0.28	1	12/07/22 12:38	
Dibromochloromethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
Dibromomethane	0.20 U	5.0	0.20	1	12/07/22 12:38	
Dichloromethane	0.65 U	5.0	0.65	1	12/07/22 12:38	
Ethylbenzene	0.20 U	5.0	0.20	1	12/07/22 12:38	
Iodomethane	4.3 U	10	4.3	1	12/07/22 12:38	
Styrene	0.20 U	5.0	0.20	1	12/07/22 12:38	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	12/07/22 12:38	
Toluene	0.20 U	5.0	0.20	1	12/07/22 12:38	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	12/07/22 12:38	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	12/07/22 12:38	
Vinyl Chloride	0.20 U	5.0	0.20	1	12/07/22 12:38	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	12/07/22 12:38	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	12/07/22 12:38	
m,p-Xylenes	0.20 U	5.0	0.20	1	12/07/22 12:38	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27S	**Units:**	ug/L
Lab Code:	R2211441-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
o-Xylene	0.20 U	5.0	0.20	1	12/07/22 12:38	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	12/07/22 12:38	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	12/07/22 12:38	
trans-1,4-Dichloro-2-butene	0.78 U	5.0	0.78	1	12/07/22 12:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	12/07/22 12:38	
Dibromofluoromethane	101	80 - 116	12/07/22 12:38	
Toluene-d8	102	87 - 121	12/07/22 12:38	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:30
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27DD	**Units:**	ug/L
Lab Code:	R2211441-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	1.0 U	25	1.0	5	12/07/22 13:00	
1,1,1-Trichloroethane (TCA)	1.0 U	25	1.0	5	12/07/22 13:00	
1,1,2,2-Tetrachloroethane	1.0 U	25	1.0	5	12/07/22 13:00	
1,1,2-Trichloroethane	1.0 U	25	1.0	5	12/07/22 13:00	
1,1-Dichloroethane (1,1-DCA)	1.0 U	25	1.0	5	12/07/22 13:00	
1,1-Dichloroethene (1,1-DCE)	1.0 U	25	1.0	5	12/07/22 13:00	
1,2,3-Trichloropropane	1.3 U	25	1.3	5	12/07/22 13:00	
1,2-Dibromo-3-chloropropane (DBCP)	2.3 U	25	2.3	5	12/07/22 13:00	
1,2-Dibromoethane	1.0 U	25	1.0	5	12/07/22 13:00	
1,2-Dichlorobenzene	1.0 U	25	1.0	5	12/07/22 13:00	
1,2-Dichloroethane	1.0 U	25	1.0	5	12/07/22 13:00	
1,2-Dichloropropane	1.0 U	25	1.0	5	12/07/22 13:00	
1,3-Dichlorobenzene	1.0 U	25	1.0	5	12/07/22 13:00	
1,4-Dichlorobenzene	1.0 U	25	1.0	5	12/07/22 13:00	
2-Butanone (MEK)	**8.8 J**	50	3.9	5	12/07/22 13:00	
2-Hexanone	1.0 U	50	1.0	5	12/07/22 13:00	
4-Methyl-2-pentanone	1.0 U	50	1.0	5	12/07/22 13:00	
Acetone	25 U	50	25	5	12/07/22 13:00	
Benzene	**14 J**	25	1.0	5	12/07/22 13:00	
Bromochloromethane	1.0 U	25	1.0	5	12/07/22 13:00	
Bromodichloromethane	1.0 U	25	1.0	5	12/07/22 13:00	
Bromoform	1.3 U	25	1.3	5	12/07/22 13:00	
Bromomethane	3.5 U	25	3.5	5	12/07/22 13:00	
Carbon Disulfide	**13 J**	50	2.1	5	12/07/22 13:00	
Carbon Tetrachloride	1.7 U	25	1.7	5	12/07/22 13:00	
Chlorobenzene	1.0 U	25	1.0	5	12/07/22 13:00	
Chloroethane	1.2 U	25	1.2	5	12/07/22 13:00	
Chloroform	1.2 U	25	1.2	5	12/07/22 13:00	
Chloromethane	1.4 U	25	1.4	5	12/07/22 13:00	
Dibromochloromethane	1.0 U	25	1.0	5	12/07/22 13:00	
Dibromomethane	1.0 U	25	1.0	5	12/07/22 13:00	
Dichloromethane	3.3 U	25	3.3	5	12/07/22 13:00	
Ethylbenzene	**1.3 J**	25	1.0	5	12/07/22 13:00	
Iodomethane	22 U	50	22	5	12/07/22 13:00	
Styrene	1.0 U	25	1.0	5	12/07/22 13:00	
Tetrachloroethene (PCE)	1.1 U	25	1.1	5	12/07/22 13:00	
Toluene	**23 J**	25	1.0	5	12/07/22 13:00	
Trichloroethene (TCE)	1.0 U	25	1.0	5	12/07/22 13:00	
Trichlorofluoromethane (CFC 11)	1.2 U	25	1.2	5	12/07/22 13:00	
Vinyl Chloride	1.0 U	25	1.0	5	12/07/22 13:00	
cis-1,2-Dichloroethene	1.2 U	25	1.2	5	12/07/22 13:00	
cis-1,3-Dichloropropene	1.0 U	25	1.0	5	12/07/22 13:00	
m,p-Xylenes	**6.3 J**	25	1.0	5	12/07/22 13:00	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:30
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27DD	**Units:**	ug/L
Lab Code:	R2211441-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
o-Xylene	**2.0 J**	25	1.0	5	12/07/22 13:00	
trans-1,2-Dichloroethene	1.0 U	25	1.0	5	12/07/22 13:00	
trans-1,3-Dichloropropene	1.2 U	25	1.2	5	12/07/22 13:00	
trans-1,4-Dichloro-2-butene	3.9 U	25	3.9	5	12/07/22 13:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	85 - 122	12/07/22 13:00	
Dibromofluoromethane	101	80 - 116	12/07/22 13:00	
Toluene-d8	101	87 - 121	12/07/22 13:00	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	SUMP	**Units:**	ug/L
Lab Code:	R2211441-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,2,3-Trichloropropane	0.26 U	5.0	0.26	1	12/07/22 13:23	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	12/07/22 13:23	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
2-Butanone (MEK)	0.78 U	10	0.78	1	12/07/22 13:23	
2-Hexanone	0.20 U	10	0.20	1	12/07/22 13:23	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	12/07/22 13:23	
Acetone	5.0 U	10	5.0	1	12/07/22 13:23	
Benzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
Bromochloromethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
Bromodichloromethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
Bromoform	0.25 U	5.0	0.25	1	12/07/22 13:23	
Bromomethane	0.70 U	5.0	0.70	1	12/07/22 13:23	
Carbon Disulfide	0.42 U	10	0.42	1	12/07/22 13:23	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	12/07/22 13:23	
Chlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
Chloroethane	0.23 U	5.0	0.23	1	12/07/22 13:23	
Chloroform	0.24 U	5.0	0.24	1	12/07/22 13:23	
Chloromethane	0.28 U	5.0	0.28	1	12/07/22 13:23	
Dibromochloromethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
Dibromomethane	0.20 U	5.0	0.20	1	12/07/22 13:23	
Dichloromethane	0.65 U	5.0	0.65	1	12/07/22 13:23	
Ethylbenzene	0.20 U	5.0	0.20	1	12/07/22 13:23	
Iodomethane	4.3 U	10	4.3	1	12/07/22 13:23	
Styrene	0.20 U	5.0	0.20	1	12/07/22 13:23	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	12/07/22 13:23	
Toluene	0.20 U	5.0	0.20	1	12/07/22 13:23	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	12/07/22 13:23	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	12/07/22 13:23	
Vinyl Chloride	0.20 U	5.0	0.20	1	12/07/22 13:23	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	12/07/22 13:23	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	12/07/22 13:23	
m,p-Xylenes	0.20 U	5.0	0.20	1	12/07/22 13:23	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	SUMP	**Units:**	ug/L
Lab Code:	R2211441-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
o-Xylene	0.20 U	5.0	0.20	1	12/07/22 13:23	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	12/07/22 13:23	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	12/07/22 13:23	
trans-1,4-Dichloro-2-butene	0.78 U	5.0	0.78	1	12/07/22 13:23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	85 - 122	12/07/22 13:23	
Dibromofluoromethane	101	80 - 116	12/07/22 13:23	
Toluene-d8	101	87 - 121	12/07/22 13:23	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:50
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	GZ-17	**Units:**	ug/L
Lab Code:	R2211441-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,2,3-Trichloropropane	0.26 U	5.0	0.26	1	12/07/22 13:45	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	12/07/22 13:45	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
2-Butanone (MEK)	0.78 U	10	0.78	1	12/07/22 13:45	
2-Hexanone	0.20 U	10	0.20	1	12/07/22 13:45	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	12/07/22 13:45	
Acetone	5.0 U	10	5.0	1	12/07/22 13:45	
Benzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
Bromochloromethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
Bromodichloromethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
Bromoform	0.25 U	5.0	0.25	1	12/07/22 13:45	
Bromomethane	0.70 U	5.0	0.70	1	12/07/22 13:45	
Carbon Disulfide	0.42 U	10	0.42	1	12/07/22 13:45	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	12/07/22 13:45	
Chlorobenzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
Chloroethane	0.23 U	5.0	0.23	1	12/07/22 13:45	
Chloroform	0.24 U	5.0	0.24	1	12/07/22 13:45	
Chloromethane	0.28 U	5.0	0.28	1	12/07/22 13:45	
Dibromochloromethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
Dibromomethane	0.20 U	5.0	0.20	1	12/07/22 13:45	
Dichloromethane	0.65 U	5.0	0.65	1	12/07/22 13:45	
Ethylbenzene	0.20 U	5.0	0.20	1	12/07/22 13:45	
Iodomethane	4.3 U	10	4.3	1	12/07/22 13:45	
Styrene	0.20 U	5.0	0.20	1	12/07/22 13:45	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	12/07/22 13:45	
Toluene	0.20 U	5.0	0.20	1	12/07/22 13:45	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	12/07/22 13:45	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	12/07/22 13:45	
Vinyl Chloride	0.20 U	5.0	0.20	1	12/07/22 13:45	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	12/07/22 13:45	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	12/07/22 13:45	
m,p-Xylenes	0.20 U	5.0	0.20	1	12/07/22 13:45	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:50
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	GZ-17	**Units:**	ug/L
Lab Code:	R2211441-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
o-Xylene	0.20 U	5.0	0.20	1	12/07/22 13:45	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	12/07/22 13:45	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	12/07/22 13:45	
trans-1,4-Dichloro-2-butene	0.78 U	5.0	0.78	1	12/07/22 13:45	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	85 - 122	12/07/22 13:45	
Dibromofluoromethane	100	80 - 116	12/07/22 13:45	
Toluene-d8	100	87 - 121	12/07/22 13:45	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 10:30
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	GZ-22D	**Units:**	ug/L
Lab Code:	R2211441-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,1,1-Trichloroethane (TCA)	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,1,2,2-Tetrachloroethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,1,2-Trichloroethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,1-Dichloroethane (1,1-DCA)	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,1-Dichloroethene (1,1-DCE)	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,2,3-Trichloropropane	0.26 U	5.0	0.26	1	12/08/22 16:08	
1,2-Dibromo-3-chloropropane (DBCP)	0.45 U	5.0	0.45	1	12/08/22 16:08	
1,2-Dibromoethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,2-Dichlorobenzene	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,2-Dichloroethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,2-Dichloropropane	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,3-Dichlorobenzene	0.20 U	5.0	0.20	1	12/08/22 16:08	
1,4-Dichlorobenzene	0.20 U	5.0	0.20	1	12/08/22 16:08	
2-Butanone (MEK)	0.78 U	10	0.78	1	12/08/22 16:08	
2-Hexanone	0.20 U	10	0.20	1	12/08/22 16:08	
4-Methyl-2-pentanone	0.20 U	10	0.20	1	12/08/22 16:08	
Acetone	5.0 U	10	5.0	1	12/08/22 16:08	
Benzene	**1.5 J**	5.0	0.20	1	12/08/22 16:08	
Bromochloromethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
Bromodichloromethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
Bromoform	0.25 U	5.0	0.25	1	12/08/22 16:08	
Bromomethane	0.70 U	5.0	0.70	1	12/08/22 16:08	
Carbon Disulfide	0.42 U	10	0.42	1	12/08/22 16:08	
Carbon Tetrachloride	0.34 U	5.0	0.34	1	12/08/22 16:08	
Chlorobenzene	0.20 U	5.0	0.20	1	12/08/22 16:08	
Chloroethane	0.23 U	5.0	0.23	1	12/08/22 16:08	
Chloroform	0.24 U	5.0	0.24	1	12/08/22 16:08	
Chloromethane	0.28 U	5.0	0.28	1	12/08/22 16:08	
Dibromochloromethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
Dibromomethane	0.20 U	5.0	0.20	1	12/08/22 16:08	
Dichloromethane	0.65 U	5.0	0.65	1	12/08/22 16:08	
Ethylbenzene	**0.65 J**	5.0	0.20	1	12/08/22 16:08	
Iodomethane	4.3 U	10	4.3	1	12/08/22 16:08	
Styrene	0.20 U	5.0	0.20	1	12/08/22 16:08	
Tetrachloroethene (PCE)	0.21 U	5.0	0.21	1	12/08/22 16:08	
Toluene	**0.40 J**	5.0	0.20	1	12/08/22 16:08	
Trichloroethene (TCE)	0.20 U	5.0	0.20	1	12/08/22 16:08	
Trichlorofluoromethane (CFC 11)	0.24 U	5.0	0.24	1	12/08/22 16:08	
Vinyl Chloride	0.20 U	5.0	0.20	1	12/08/22 16:08	
cis-1,2-Dichloroethene	0.23 U	5.0	0.23	1	12/08/22 16:08	
cis-1,3-Dichloropropene	0.20 U	5.0	0.20	1	12/08/22 16:08	
m,p-Xylenes	**0.22 J**	5.0	0.20	1	12/08/22 16:08	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 10:30
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	GZ-22D	**Units:**	ug/L
Lab Code:	R2211441-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
o-Xylene	0.20 U	5.0	0.20	1	12/08/22 16:08	
trans-1,2-Dichloroethene	0.20 U	5.0	0.20	1	12/08/22 16:08	
trans-1,3-Dichloropropene	0.23 U	5.0	0.23	1	12/08/22 16:08	
trans-1,4-Dichloro-2-butene	0.78 U	5.0	0.78	1	12/08/22 16:08	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	12/08/22 16:08	
Dibromofluoromethane	98	80 - 116	12/08/22 16:08	
Toluene-d8	98	87 - 121	12/08/22 16:08	

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-001			Collected	Received	Matrix
MW-27S			11/30/22 0940	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Total	ug/L	P	80	J	30	100	1	12/09/22 18:37	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	U	7	60	1	12/09/22 18:37	RPAES06_788199	411234
Arsenic, Total	ug/L	P	6	U	6	10	1	12/09/22 18:37	RPAES06_788199	411234
Barium, Total	ug/L	P	11	J	3	20	1	12/09/22 18:37	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:37	RPAES06_788199	411234
Boron, Total	ug/L	P	780		20	200	1	12/09/22 18:37	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:37	RPAES06_788199	411234
Calcium, Total	ug/L	P	343000		3000	10000	10	12/12/22 18:27	RPAES06_788351	411234
Chromium, Total	ug/L	P	2	U	2	10	1	12/09/22 18:37	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:37	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 18:37	RPAES06_788199	411234
Iron, Total	ug/L	P	1230		70	100	1	12/09/22 18:37	RPAES06_788199	411234
Lead, Total	ug/L	P	3	U	3	50	1	12/09/22 18:37	RPAES06_788199	411234
Magnesium, Total	ug/L	P	196000		30	1000	1	12/09/22 18:37	RPAES06_788199	411234
Manganese, Total	ug/L	P	82		4	10	1	12/09/22 18:37	RPAES06_788199	411234
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 15:10	RCVAA02_787869	411152
Nickel, Total	ug/L	P	3	U	3	40	1	12/09/22 18:37	RPAES06_788199	411234
Potassium, Total	ug/L	P	27400		400	2000	1	12/09/22 18:37	RPAES06_788199	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:37	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:37	RPAES06_788199	411234
Sodium, Total	ug/L	P	192000		2000	10000	10	12/12/22 18:27	RPAES06_788351	411234
Thallium, Total	ug/L	P	70	U	70	100	10	12/12/22 18:27	RPAES06_788351	411234
Vanadium, Total	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:37	RPAES06_788199	411234
Zinc, Total	ug/L	P	5	J	3	20	1	12/09/22 18:37	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-002			Collected	Received	Matrix
MW-27S Diss			11/30/22 0940	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 18:40	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 18:40	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 18:40	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:40	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:40	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	800		20	200	1	12/09/22 18:40	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:40	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	346000		3000	10000	10	12/12/22 18:30	RPAES06_788351	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 18:40	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:40	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 18:40	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 18:40	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 18:40	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	202000		30	1000	1	12/09/22 18:40	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	74		4	10	1	12/09/22 18:40	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 13:18	RCVAA02_788497	411469
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 18:40	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	28200		400	2000	1	12/09/22 18:40	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:40	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:40	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	195000		2000	10000	10	12/12/22 18:30	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:40	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:40	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:40	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-003			Collected	Received	Matrix
MW-27DD			11/30/22 0930	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Total	ug/L	P	830		30	100	1	12/09/22 18:44	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	U	7	60	1	12/09/22 18:44	RPAES06_788199	411234
Arsenic, Total	ug/L	P	9	J	6	10	1	12/09/22 18:44	RPAES06_788199	411234
Barium, Total	ug/L	P	115		3	20	1	12/09/22 18:44	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	J	0.2	3.0	1	12/09/22 18:44	RPAES06_788199	411234
Boron, Total	ug/L	P	3590		20	200	1	12/09/22 18:44	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:44	RPAES06_788199	411234
Calcium, Total	ug/L	P	6900000		50000	200000	200	12/12/22 18:33	RPAES06_788351	411234
Chromium, Total	ug/L	P	4	J	2	10	1	12/09/22 18:44	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:44	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 18:44	RPAES06_788199	411234
Iron, Total	ug/L	P	400		70	100	1	12/09/22 18:44	RPAES06_788199	411234
Lead, Total	ug/L	P	4	J	3	50	1	12/09/22 18:44	RPAES06_788199	411234
Magnesium, Total	ug/L	P	3870000		600	20000	20	12/09/22 20:09	RPAES06_788199	411234
Manganese, Total	ug/L	P	735		4	10	1	12/09/22 18:44	RPAES06_788199	411234
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 15:16	RCVAA02_787869	411152
Nickel, Total	ug/L	P	4	J	3	40	1	12/09/22 18:44	RPAES06_788199	411234
Potassium, Total	ug/L	P	496000		8000	40000	20	12/09/22 20:09	RPAES06_788199	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:44	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:44	RPAES06_788199	411234
Sodium, Total	ug/L	P	32400000		30000	200000	200	12/12/22 18:33	RPAES06_788351	411234
Thallium, Total	ug/L	P	139		7	10	1	12/09/22 18:44	RPAES06_788199	411234
Vanadium, Total	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:44	RPAES06_788199	411234
Zinc, Total	ug/L	P	12	J	3	20	1	12/09/22 18:44	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-004			Collected	Received	Matrix
MW-27DD Diss			11/30/22 0930	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 18:47	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 18:47	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 18:47	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	109		3	20	1	12/09/22 18:47	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:47	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	3640		20	200	1	12/09/22 18:47	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:47	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	6810000		50000	200000	200	12/12/22 18:36	RPAES06_788351	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 18:47	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:47	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 18:47	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 18:47	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 18:47	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	3950000		600	20000	20	12/09/22 20:12	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	722		4	10	1	12/09/22 18:47	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 13:20	RCVAA02_788497	411469
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 18:47	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	509000		8000	40000	20	12/09/22 20:12	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:47	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:47	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	32000000		30000	200000	200	12/12/22 18:36	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	131		7	10	1	12/09/22 18:47	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:47	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:47	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-005			Collected	Received	Matrix
SUMP			11/30/22 0940	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Total	ug/L	P	70	J	30	100	1	12/09/22 18:50	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	U	7	60	1	12/09/22 18:50	RPAES06_788199	411234
Arsenic, Total	ug/L	P	6	U	6	10	1	12/09/22 18:50	RPAES06_788199	411234
Barium, Total	ug/L	P	23		3	20	1	12/09/22 18:50	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:50	RPAES06_788199	411234
Boron, Total	ug/L	P	150	J	20	200	1	12/09/22 18:50	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:50	RPAES06_788199	411234
Calcium, Total	ug/L	P	129000		300	1000	1	12/09/22 18:50	RPAES06_788199	411234
Chromium, Total	ug/L	P	2	U	2	10	1	12/09/22 18:50	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:50	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 18:50	RPAES06_788199	411234
Iron, Total	ug/L	P	80	J	70	100	1	12/09/22 18:50	RPAES06_788199	411234
Lead, Total	ug/L	P	3	U	3	50	1	12/09/22 18:50	RPAES06_788199	411234
Magnesium, Total	ug/L	P	42900		30	1000	1	12/09/22 18:50	RPAES06_788199	411234
Manganese, Total	ug/L	P	12		4	10	1	12/09/22 18:50	RPAES06_788199	411234
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 15:18	RCVAA02_787869	411152
Nickel, Total	ug/L	P	3	U	3	40	1	12/09/22 18:50	RPAES06_788199	411234
Potassium, Total	ug/L	P	7800		400	2000	1	12/09/22 18:50	RPAES06_788199	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:50	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:50	RPAES06_788199	411234
Sodium, Total	ug/L	P	55100		200	1000	1	12/12/22 18:39	RPAES06_788351	411234
Thallium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:50	RPAES06_788199	411234
Vanadium, Total	ug/L	P	0.7	J	0.7	50	1	12/09/22 18:50	RPAES06_788199	411234
Zinc, Total	ug/L	P	4	J	3	20	1	12/09/22 18:50	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-006			Collected	Received	Matrix
SUMP Diss			11/30/22 0940	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 18:53	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 18:53	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 18:53	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	22		3	20	1	12/09/22 18:53	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:53	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	20	U	20	200	1	12/09/22 18:53	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:53	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	126000		300	1000	1	12/09/22 18:53	RPAES06_788199	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 18:53	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:53	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 18:53	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 18:53	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 18:53	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	42000		30	1000	1	12/09/22 18:53	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	4	U	4	10	1	12/09/22 18:53	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 13:22	RCVAA02_788497	411469
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 18:53	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	7500		400	2000	1	12/09/22 18:53	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:53	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:53	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	54300		200	1000	1	12/12/22 18:42	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:53	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:53	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:53	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-007			Collected	Received	Matrix
GZ-17			11/30/22 0950	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Total	ug/L	P	190		30	100	1	12/09/22 19:03	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	J	7	60	1	12/09/22 19:03	RPAES06_788199	411234
Arsenic, Total	ug/L	P	6	U	6	10	1	12/09/22 19:03	RPAES06_788199	411234
Barium, Total	ug/L	P	21		3	20	1	12/09/22 19:03	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 19:03	RPAES06_788199	411234
Boron, Total	ug/L	P	1180		20	200	1	12/09/22 19:03	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 19:03	RPAES06_788199	411234
Calcium, Total	ug/L	P	544000		3000	10000	10	12/12/22 18:51	RPAES06_788351	411234
Chromium, Total	ug/L	P	2	U	2	10	1	12/09/22 19:03	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 19:03	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 19:03	RPAES06_788199	411234
Iron, Total	ug/L	P	430		70	100	1	12/09/22 19:03	RPAES06_788199	411234
Lead, Total	ug/L	P	3	J	3	50	1	12/09/22 19:03	RPAES06_788199	411234
Magnesium, Total	ug/L	P	249000		30	1000	1	12/09/22 19:03	RPAES06_788199	411234
Manganese, Total	ug/L	P	86		4	10	1	12/09/22 19:03	RPAES06_788199	411234
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 15:20	RCVAA02_787869	411152
Nickel, Total	ug/L	P	3	U	3	40	1	12/09/22 19:03	RPAES06_788199	411234
Potassium, Total	ug/L	P	40400		400	2000	1	12/09/22 19:03	RPAES06_788199	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 19:03	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 19:03	RPAES06_788199	411234
Sodium, Total	ug/L	P	607000		2000	10000	10	12/12/22 18:51	RPAES06_788351	411234
Thallium, Total	ug/L	P	7	U	7	10	1	12/09/22 19:03	RPAES06_788199	411234
Vanadium, Total	ug/L	P	0.7	U	0.7	50	1	12/09/22 19:03	RPAES06_788199	411234
Zinc, Total	ug/L	P	14	J	3	20	1	12/09/22 19:03	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-008			Collected	Received	Matrix
GZ-17 Diss			11/30/22 0950	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 19:06	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 19:06	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 19:06	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 19:06	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 19:06	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	1170		20	200	1	12/09/22 19:06	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 19:06	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	540000		3000	10000	10	12/12/22 18:54	RPAES06_788351	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 19:06	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 19:06	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 19:06	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 19:06	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 19:06	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	236000		30	1000	1	12/09/22 19:06	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	43		4	10	1	12/09/22 19:06	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 13:24	RCVAA02_788497	411469
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 19:06	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	39700		400	2000	1	12/09/22 19:06	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 19:06	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 19:06	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	631000		2000	10000	10	12/12/22 18:54	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 19:06	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 19:06	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 19:06	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-009			Collected	Received	Matrix
GZ-22D			11/30/22 1030	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Total	ug/L	P	1060		30	100	1	12/09/22 19:09	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	U	7	60	1	12/09/22 19:09	RPAES06_788199	411234
Arsenic, Total	ug/L	P	6	U	6	10	1	12/09/22 19:09	RPAES06_788199	411234
Barium, Total	ug/L	P	37		3	20	1	12/09/22 19:09	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 19:09	RPAES06_788199	411234
Boron, Total	ug/L	P	5290		20	200	1	12/09/22 19:09	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 19:09	RPAES06_788199	411234
Calcium, Total	ug/L	P	1150000		3000	10000	10	12/12/22 18:58	RPAES06_788351	411234
Chromium, Total	ug/L	P	2	U	2	10	1	12/09/22 19:09	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 19:09	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 19:09	RPAES06_788199	411234
Iron, Total	ug/L	P	9100		70	100	1	12/09/22 19:09	RPAES06_788199	411234
Lead, Total	ug/L	P	40	J	3	50	1	12/09/22 19:09	RPAES06_788199	411234
Magnesium, Total	ug/L	P	759000		300	10000	10	12/12/22 18:58	RPAES06_788351	411234
Manganese, Total	ug/L	P	255		4	10	1	12/09/22 19:09	RPAES06_788199	411234
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 15:22	RCVAA02_787869	411152
Nickel, Total	ug/L	P	4	J	3	40	1	12/09/22 19:09	RPAES06_788199	411234
Potassium, Total	ug/L	P	165000		4000	20000	10	12/12/22 18:58	RPAES06_788351	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 19:09	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 19:09	RPAES06_788199	411234
Sodium, Total	ug/L	P	10100000		20000	100000	100	12/12/22 19:04	RPAES06_788351	411234
Thallium, Total	ug/L	P	70	U	70	100	10	12/12/22 18:58	RPAES06_788351	411234
Vanadium, Total	ug/L	P	2	J	0.7	50	1	12/09/22 19:09	RPAES06_788199	411234
Zinc, Total	ug/L	P	16	J	3	20	1	12/09/22 19:09	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

R2211441-010			Collected	Received	Matrix
GZ-22D Diss			11/30/22 1030	11/30/22 1430	Water

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 19:12	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 19:12	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 19:12	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	32		3	20	1	12/09/22 19:12	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 19:12	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	5210		20	200	1	12/09/22 19:12	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 19:12	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	1190000		3000	10000	10	12/12/22 19:01	RPAES06_788351	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 19:12	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 19:12	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 19:12	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	2920		70	100	1	12/09/22 19:12	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 19:12	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	787000		300	10000	10	12/12/22 19:01	RPAES06_788351	411234
Manganese, Dissolved	ug/L	P	231		4	10	1	12/09/22 19:12	RPAES06_788199	411234
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 19:12	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	171000		4000	20000	10	12/12/22 19:01	RPAES06_788351	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 19:12	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 19:12	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	10400000		20000	100000	100	12/12/22 19:07	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	70	U	70	100	10	12/12/22 19:01	RPAES06_788351	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 19:12	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 19:12	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-MB1

Matrix
Water

Method Blank

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 18:25	RPAES06_788199	411234
Aluminum, Total	ug/L	P	30	U	30	100	1	12/09/22 18:25	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 18:25	RPAES06_788199	411234
Antimony, Total	ug/L	P	7	U	7	60	1	12/09/22 18:25	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 18:25	RPAES06_788199	411234
Arsenic, Total	ug/L	P	6	U	6	10	1	12/09/22 18:25	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:25	RPAES06_788199	411234
Barium, Total	ug/L	P	3	U	3	20	1	12/09/22 18:25	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:25	RPAES06_788199	411234
Beryllium, Total	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:25	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	20	U	20	200	1	12/09/22 18:25	RPAES06_788199	411234
Boron, Total	ug/L	P	20	U	20	200	1	12/09/22 18:25	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:25	RPAES06_788199	411234
Cadmium, Total	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:25	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	300	U	300	1000	1	12/09/22 18:25	RPAES06_788199	411234
Calcium, Total	ug/L	P	300	U	300	1000	1	12/09/22 18:25	RPAES06_788199	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 18:25	RPAES06_788199	411234
Chromium, Total	ug/L	P	2	U	2	10	1	12/09/22 18:25	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:25	RPAES06_788199	411234
Cobalt, Total	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:25	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 18:25	RPAES06_788199	411234
Copper, Total	ug/L	P	4	U	4	20	1	12/09/22 18:25	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 18:25	RPAES06_788199	411234
Iron, Total	ug/L	P	70	U	70	100	1	12/09/22 18:25	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 18:25	RPAES06_788199	411234
Lead, Total	ug/L	P	3	U	3	50	1	12/09/22 18:25	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	30	U	30	1000	1	12/09/22 18:25	RPAES06_788199	411234
Magnesium, Total	ug/L	P	30	U	30	1000	1	12/09/22 18:25	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	4	U	4	10	1	12/09/22 18:25	RPAES06_788199	411234
Manganese, Total	ug/L	P	4	U	4	10	1	12/09/22 18:25	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 12:35	RCVAA02_788497	411469
Mercury, Total	ug/L	CV	0.08	U	0.08	0.20	1	12/08/22 14:36	RCVAA02_787869	411152
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 18:25	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-MB1

Matrix
Water

Method Blank

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Nickel, Total	ug/L	P	3	U	3	40	1	12/09/22 18:25	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	400	U	400	2000	1	12/09/22 18:25	RPAES06_788199	411234
Potassium, Total	ug/L	P	400	U	400	2000	1	12/09/22 18:25	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:25	RPAES06_788199	411234
Selenium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:25	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:25	RPAES06_788199	411234
Silver, Total	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:25	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	200	U	200	1000	1	12/12/22 18:14	RPAES06_788351	411234
Sodium, Total	ug/L	P	200	U	200	1000	1	12/12/22 18:14	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:25	RPAES06_788199	411234
Thallium, Total	ug/L	P	7	U	7	10	1	12/09/22 18:25	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:25	RPAES06_788199	411234
Vanadium, Total	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:25	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:25	RPAES06_788199	411234
Zinc, Total	ug/L	P	3	U	3	20	1	12/09/22 18:25	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Form 1 - Inorganic Analysis Data Sheet

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C, EPA 7470A

R2211441-MB2

Matrix
Water

Method Blank

Analyte	Units	MC	Result	Q	DL	LOQ	DF	Analysis Date	Run ID	PrepBatch
Aluminum, Dissolved	ug/L	P	30	U	30	100	1	12/09/22 18:28	RPAES06_788199	411234
Antimony, Dissolved	ug/L	P	7	U	7	60	1	12/09/22 18:28	RPAES06_788199	411234
Arsenic, Dissolved	ug/L	P	6	U	6	10	1	12/09/22 18:28	RPAES06_788199	411234
Barium, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:28	RPAES06_788199	411234
Beryllium, Dissolved	ug/L	P	0.2	U	0.2	3.0	1	12/09/22 18:28	RPAES06_788199	411234
Boron, Dissolved	ug/L	P	20	U	20	200	1	12/09/22 18:28	RPAES06_788199	411234
Cadmium, Dissolved	ug/L	P	0.4	U	0.4	5.0	1	12/09/22 18:28	RPAES06_788199	411234
Calcium, Dissolved	ug/L	P	300	U	300	1000	1	12/09/22 18:28	RPAES06_788199	411234
Chromium, Dissolved	ug/L	P	2	U	2	10	1	12/09/22 18:28	RPAES06_788199	411234
Cobalt, Dissolved	ug/L	P	0.9	U	0.9	50	1	12/09/22 18:28	RPAES06_788199	411234
Copper, Dissolved	ug/L	P	4	U	4	20	1	12/09/22 18:28	RPAES06_788199	411234
Iron, Dissolved	ug/L	P	70	U	70	100	1	12/09/22 18:28	RPAES06_788199	411234
Lead, Dissolved	ug/L	P	3	U	3	50	1	12/09/22 18:28	RPAES06_788199	411234
Magnesium, Dissolved	ug/L	P	30	U	30	1000	1	12/09/22 18:28	RPAES06_788199	411234
Manganese, Dissolved	ug/L	P	4	U	4	10	1	12/09/22 18:28	RPAES06_788199	411234
Mercury, Dissolved	ug/L	CV	0.08	U	0.08	0.20	1	12/14/22 12:37	RCVAA02_788497	411469
Nickel, Dissolved	ug/L	P	3	U	3	40	1	12/09/22 18:28	RPAES06_788199	411234
Potassium, Dissolved	ug/L	P	400	U	400	2000	1	12/09/22 18:28	RPAES06_788199	411234
Selenium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:28	RPAES06_788199	411234
Silver, Dissolved	ug/L	P	0.6	U	0.6	10	1	12/09/22 18:28	RPAES06_788199	411234
Sodium, Dissolved	ug/L	P	200	U	200	1000	1	12/12/22 18:17	RPAES06_788351	411234
Thallium, Dissolved	ug/L	P	7	U	7	10	1	12/09/22 18:28	RPAES06_788199	411234
Vanadium, Dissolved	ug/L	P	0.7	U	0.7	50	1	12/09/22 18:28	RPAES06_788199	411234
Zinc, Dissolved	ug/L	P	3	U	3	20	1	12/09/22 18:28	RPAES06_788199	411234

MC - Method Class CV - Cold Vapor/AA P - ICP/AES MS - ICP/MS

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27S	**Basis:**	NA
Lab Code:	R2211441-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**326**		mg/L	2.0	1.8	1	12/10/22 16:30	NA	
Ammonia as Nitrogen, undistilled	350.1	**0.597**		mg/L	0.050	0.026	1	12/19/22 15:17	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	2.0	U	mg/L	2.0	-	1	12/01/22 08:14	NA	
Bromide	300.0	**1.8**		mg/L	1.0	0.4	10	12/01/22 08:23	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	**1.6**		mg/L	1.0	0.5	1	12/11/22 01:16	NA	
Chemical Oxygen Demand, Total	410.4	3.8	U	mg/L	5.0	3.8	1	12/20/22 17:10	NA	
Chloride	300.0	**158**		mg/L	20	5	100	12/01/22 08:29	NA	
Chromium, Hexavalent	7196A	0.003	U	mg/L	0.010	0.003	1	11/30/22 15:16	NA	
Color, Apparent	SM 2120 B-2001(2011)	**100**		ColorUnits	10	-	10	12/01/22 12:40	NA	
Cyanide, Total	Kelada-01	0.040	U	mg/L	0.050	0.040	10	12/08/22 04:45	NA	
Hardness, Total as CaCO3	SM 2340 C-1997(2011)	**1750**		mg/L	100	40	1	12/09/22 09:50	NA	
Nitrate as Nitrogen	300.0	0.2	U	mg/L	1.0	0.2	10	12/01/22 08:23	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.84**		mg/L	0.20	0.15	1	12/14/22 13:59	12/13/22	
pH of Color Analysis	SM 2120 B-2001(2011)	**6.81**		pH Units	-	-	10	12/01/22 12:11	NA	
Phenolics, Total Recoverable	420.4	0.0029	U	mg/L	0.0050	0.0029	1	12/12/22 17:15	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**2650**		mg/L	22	20	1	12/02/22 10:30	NA	
Sulfate	300.0	**1320**		mg/L	40	8	200	12/05/22 07:05	NA	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:30
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	MW-27DD	**Basis:**	NA
Lab Code:	R2211441-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**93.0**		mg/L	2.0	1.8	1	12/10/22 16:37	NA	
Ammonia as Nitrogen, undistilled	350.1	**37.1**		mg/L	5.0	2.6	100	12/19/22 16:25	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	**22.7**		mg/L	2.0	-	1	12/01/22 08:17	NA	
Bromide	300.0	**801**		mg/L	30	11	300	12/05/22 07:22	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	**3.3**		mg/L	1.0	0.5	1	12/11/22 01:27	NA	
Chemical Oxygen Demand, Total	410.4	**5310**		mg/L	50	38	10	12/20/22 17:10	NA	
Chloride	300.0	**72100**		mg/L	4000	900	20000	12/05/22 07:28	NA	
Chromium, Hexavalent	7196A	0.003	U	mg/L	0.010	0.003	1	11/30/22 15:17	NA	
Color, Apparent	SM 2120 B-2001(2011)	**150**		ColorUnits	10	-	10	12/01/22 12:40	NA	
Cyanide, Total	Kelada-01	0.040	U	mg/L	0.050	0.040	10	12/08/22 04:49	NA	
Hardness, Total as CaCO3	SM 2340 C-1997(2011)	**34400**		mg/L	800	260	1	12/09/22 09:50	NA	
Nitrate as Nitrogen	300.0	2	U	mg/L	10	2	100	12/01/22 08:40	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**9.59**		mg/L	0.80	0.60	4	12/14/22 13:59	12/13/22	
pH of Color Analysis	SM 2120 B-2001(2011)	**6.53**		pH Units	-	-	10	12/01/22 12:11	NA	
Phenolics, Total Recoverable	420.4	0.15	U	mg/L	0.25	0.15	50	12/12/22 14:27	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**132000**		mg/L	2000	1800	1	12/02/22 10:30	NA	
Sulfate	300.0	**1540**		mg/L	60	12	300	12/05/22 07:22	NA	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:40
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	SUMP	**Basis:**	NA
Lab Code:	R2211441-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**176**		mg/L	2.0	1.8	1	12/10/22 16:43	NA	
Ammonia as Nitrogen, undistilled	350.1	0.026	U	mg/L	0.050	0.026	1	12/19/22 15:22	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	2.0	U	mg/L	2.0	-	1	12/01/22 08:13	NA	
Bromide	300.0	0.4	U	mg/L	1.0	0.4	10	12/01/22 08:46	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	**2.8**		mg/L	1.0	0.5	1	12/11/22 01:38	NA	
Chemical Oxygen Demand, Total	410.4	**5.9**		mg/L	5.0	3.8	1	12/20/22 17:10	NA	
Chloride	300.0	**60.0**		mg/L	2.0	0.5	10	12/01/22 08:46	NA	
Chromium, Hexavalent	7196A	0.003	U	mg/L	0.010	0.003	1	11/30/22 15:17	NA	
Color, Apparent	SM 2120 B-2001(2011)	**80.0**		ColorUnits	5.0	-	5	12/01/22 12:40	NA	
Cyanide, Total	Kelada-01	0.0040	U	mg/L	0.0050	0.0040	1	12/08/22 04:53	NA	
Hardness, Total as CaCO3	SM 2340 C-1997(2011)	**625**		mg/L	50	16	1	12/09/22 09:50	NA	
Nitrate as Nitrogen	300.0	**0.2**	**J**	mg/L	1.0	0.2	10	12/01/22 08:46	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.35**		mg/L	0.20	0.15	1	12/14/22 14:02	12/13/22	
pH of Color Analysis	SM 2120 B-2001(2011)	**8.03**		pH Units	-	-	5	12/01/22 12:11	NA	
Phenolics, Total Recoverable	420.4	**0.0039**	**J**	mg/L	0.0050	0.0029	1	12/12/22 17:59	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**812**		mg/L	10	9	1	12/02/22 10:30	NA	
Sulfate	300.0	**323**		mg/L	20	4	100	12/05/22 07:34	NA	

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22 09:50
Sample Matrix:	Water	**Date Received:**	11/30/22 14:30
Sample Name:	GZ-17	**Basis:**	NA
Lab Code:	R2211441-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**299**		mg/L	2.0	1.8	1	12/10/22 16:50	NA	
Ammonia as Nitrogen, undistilled	350.1	**2.70**		mg/L	0.25	0.13	5	12/19/22 15:23	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	**10.4**		mg/L	2.0	-	1	12/01/22 08:16	NA	
Bromide	300.0	**8.7**		mg/L	1.0	0.4	10	12/01/22 09:26	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	**3.5**		mg/L	1.0	0.5	1	12/11/22 01:49	NA	
Chemical Oxygen Demand, Total	410.4	**30.4**		mg/L	5.0	3.8	1	12/20/22 17:10	NA	
Chloride	300.0	**931**		mg/L	20	5	100	12/01/22 09:03	NA	
Chromium, Hexavalent	7196A	0.003	U	mg/L	0.010	0.003	1	11/30/22 15:18	NA	
Color, Apparent	SM 2120 B-2001(2011)	**130**		ColorUnits	10	-	10	12/01/22 12:40	NA	
Cyanide, Total	Kelada-01	0.0040	U	mg/L	0.0050	0.0040	1	12/08/22 05:13	NA	
Hardness, Total as CaCO3	SM 2340 C-1997(2011)	**2600**		mg/L	200	70	1	12/09/22 09:50	NA	
Nitrate as Nitrogen	300.0	0.2	U	mg/L	1.0	0.2	10	12/01/22 09:26	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**3.71**		mg/L	0.20	0.15	1	12/14/22 14:03	12/13/22	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.07**		pH Units	-	-	10	12/01/22 12:11	NA	
Phenolics, Total Recoverable	420.4	0.0029	U	mg/L	0.0050	0.0029	1	12/12/22 18:11	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	**4550**		mg/L	29	26	1	12/02/22 10:30	NA	
Sulfate	300.0	**1870**		mg/L	80	16	400	12/05/22 07:39	NA	

ALS Group USA, Corp.
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QA/QC Report

Client: LiRo Group
Project: Niagara County Refuse Disposal District/22-033-2914
Sample Matrix: Water

Service Request: R2211441
Date Analyzed: 12/07/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2215257-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260C	19.5	20.0	98	76-129
1,1,1-Trichloroethane (TCA)	8260C	19.9	20.0	100	75-125
1,1,2,2-Tetrachloroethane	8260C	19.2	20.0	96	78-126
1,1,2-Trichloroethane	8260C	20.3	20.0	102	82-121
1,1-Dichloroethane (1,1-DCA)	8260C	21.9	20.0	109	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	21.0	20.0	105	71-118
1,2,3-Trichloropropane	8260C	19.0	20.0	95	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260C	16.9	20.0	85	55-136
1,2-Dibromoethane	8260C	19.9	20.0	99	82-127
1,2-Dichlorobenzene	8260C	19.8	20.0	99	80-119
1,2-Dichloroethane	8260C	20.9	20.0	104	71-127
1,2-Dichloropropane	8260C	21.1	20.0	105	80-119
1,3-Dichlorobenzene	8260C	20.6	20.0	103	83-121
1,4-Dichlorobenzene	8260C	20.5	20.0	103	79-119
2-Butanone (MEK)	8260C	18.8	20.0	94	61-137
2-Hexanone	8260C	18.6	20.0	93	63-124
4-Methyl-2-pentanone	8260C	19.8	20.0	99	66-124
Acetone	8260C	20.9	20.0	104	40-161
Benzene	8260C	21.1	20.0	106	79-119
Bromochloromethane	8260C	20.4	20.0	102	81-126
Bromodichloromethane	8260C	19.3	20.0	97	81-123
Bromoform	8260C	17.1	20.0	85	65-146
Bromomethane	8260C	19.7	20.0	98	42-166
Carbon Disulfide	8260C	18.4	20.0	92	66-128
Carbon Tetrachloride	8260C	19.6	20.0	98	70-127
Chlorobenzene	8260C	19.3	20.0	96	80-121
Chloroethane	8260C	19.3	20.0	97	62-131
Chloroform	8260C	20.8	20.0	104	79-120
Chloromethane	8260C	31.2	20.0	156 *	65-135
Dibromochloromethane	8260C	19.0	20.0	95	72-128
Dibromomethane	8260C	20.4	20.0	102	80-118
Dichloromethane	8260C	20.1	20.0	101	73-122
Ethylbenzene	8260C	20.8	20.0	104	76-120

Client: LiRo Group
Project: Niagara County Refuse Disposal District/22-033-2914
Sample Matrix: Water

Service Request: R2211441
Date Analyzed: 12/08/22

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ2215392-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	8260C	20.5	20.0	103	76-129
1,1,1-Trichloroethane (TCA)	8260C	21.2	20.0	106	75-125
1,1,2,2-Tetrachloroethane	8260C	20.8	20.0	104	78-126
1,1,2-Trichloroethane	8260C	21.6	20.0	108	82-121
1,1-Dichloroethane (1,1-DCA)	8260C	22.8	20.0	114	80-124
1,1-Dichloroethene (1,1-DCE)	8260C	22.3	20.0	112	71-118
1,2,3-Trichloropropane	8260C	19.7	20.0	98	75-118
1,2-Dibromo-3-chloropropane (DBCP)	8260C	17.5	20.0	87	55-136
1,2-Dibromoethane	8260C	20.5	20.0	102	82-127
1,2-Dichlorobenzene	8260C	20.7	20.0	103	80-119
1,2-Dichloroethane	8260C	22.0	20.0	110	71-127
1,2-Dichloropropane	8260C	22.1	20.0	110	80-119
1,3-Dichlorobenzene	8260C	21.4	20.0	107	83-121
1,4-Dichlorobenzene	8260C	21.2	20.0	106	79-119
2-Butanone (MEK)	8260C	19.3	20.0	96	61-137
2-Hexanone	8260C	19.6	20.0	98	63-124
4-Methyl-2-pentanone	8260C	20.9	20.0	105	66-124
Acetone	8260C	19.2	20.0	96	40-161
Benzene	8260C	22.7	20.0	113	79-119
Bromochloromethane	8260C	21.7	20.0	109	81-126
Bromodichloromethane	8260C	20.7	20.0	103	81-123
Bromoform	8260C	18.4	20.0	92	65-146
Bromomethane	8260C	14.6	20.0	73	42-166
Carbon Disulfide	8260C	20.5	20.0	102	66-128
Carbon Tetrachloride	8260C	21.4	20.0	107	70-127
Chlorobenzene	8260C	20.4	20.0	102	80-121
Chloroethane	8260C	20.6	20.0	103	62-131
Chloroform	8260C	21.7	20.0	108	79-120
Chloromethane	8260C	29.4	20.0	147 *	65-135
Dibromochloromethane	8260C	19.7	20.0	99	72-128
Dibromomethane	8260C	21.4	20.0	107	80-118
Dichloromethane	8260C	21.0	20.0	105	73-122
Ethylbenzene	8260C	21.5	20.0	108	76-120

Analytical Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R2211441-MB1		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	1.8	U	mg/L	2.0	1.8	1	12/10/22 14:55	NA	
Ammonia as Nitrogen, undistilled	350.1	0.026	U	mg/L	0.050	0.026	1	12/19/22 15:15	NA	
Biochemical Oxygen Demand (BOD)	SM 5210 B-2016	2.0	U	mg/L	2.0	-	1	12/01/22 14:09	NA	
Bromide	300.0	0.04	U	mg/L	0.10	0.04	1	12/01/22 08:11	NA	
Carbon, Total Organic (TOC)	SM 5310 B-2014	0.5	U	mg/L	1.0	0.5	1	12/10/22 19:32	NA	
Chemical Oxygen Demand, Total	410.4	3.8	U	mg/L	5.0	3.8	1	12/20/22 17:10	NA	
Chloride	300.0	0.05	U	mg/L	0.20	0.05	1	12/01/22 08:11	NA	
Chromium, Hexavalent	7196A	0.003	U	mg/L	0.010	0.003	1	11/30/22 14:37	NA	
Color, Apparent	SM 2120 B-2001(2011)	**1.0**		ColorUnits	1.0	-	1	12/01/22 12:40	NA	
Cyanide, Total	Kelada-01	0.0040	U	mg/L	0.0050	0.0040	1	12/08/22 03:09	NA	
Hardness, Total as CaCO3	SM 2340 C-1997(2011)	0.7	U	mg/L	2.0	0.7	1	12/09/22 09:50	NA	
Nitrate as Nitrogen	300.0	0.02	U	mg/L	0.10	0.02	1	12/01/22 08:11	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.15	U	mg/L	0.20	0.15	1	12/14/22 13:41	12/13/22	
Phenolics, Total Recoverable	420.4	0.0029	U	mg/L	0.0050	0.0029	1	12/12/22 12:43	NA	
Solids, Total Dissolved (TDS)	SM 2540 C-2015	10	U	mg/L	10	9	1	12/02/22 10:30	NA	
Sulfate	300.0	0.04	U	mg/L	0.20	0.04	1	12/05/22 04:23	NA	

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QA/QC Report

Client:	LiRo Group	**Service Request:**	R2211441
Project:	Niagara County Refuse Disposal District/22-033-2914	**Date Collected:**	11/30/22
Sample Matrix:	Water	**Date Received:**	11/30/22
		Date Analyzed:	12/19/22

Duplicate Matrix Spike Summary
Ammonia as Nitrogen, undistilled

Sample Name:	MW-27S	**Units:**	mg/L
Lab Code:	R2211441-001	**Basis:**	NA
Analysis Method:	350.1		

		Matrix Spike R2211441-001MS			Duplicate Matrix Spike R2211441-001DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ammonia as Nitrogen, undistilled	0.597	0.810	0.250	85 *	0.809	0.250	85 *	90-110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client: LiRo Group **Service Request:**R2211441
Project: Niagara County Refuse Disposal District/22-033-2914

Continuing Calibration Blank (CCB) Summary
Chloride

Analysis Method: 300.0 **Units:**mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	MDL	Result	Q
CCB1	787095	RQ2215108-02	12/01/22 08:11	0.20	0.05	0.05	U
CCB2	787095	RQ2215108-08	12/01/22 09:21	0.20	0.05	0.08	J
CCB3	787095	RQ2215108-12	12/01/22 10:30	0.20	0.05	0.05	U
CCB4	787389	RQ2215340-02	12/05/22 04:23	0.20	0.05	0.05	U
CCB5	787389	RQ2215340-10	12/05/22 07:16	0.20	0.05	0.05	U
CCB6	787389	RQ2215340-12	12/05/22 08:20	0.20	0.05	0.05	U

Client: LiRo Group
Project: Niagara County Refuse Disposal District/22-033-2914
Service Request: R2211441
Date Analyzed: 12/07/22 10:27

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\MSVOA14\Data\120722\V9228.D\
Signal ID: 1
Calibration Date: 9/26/2022
Calibration ID: RC2200105
Analysis Lot: 787440
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	46.4	0.3384	0.3137	-7.3	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	47.3	0.6465	0.6119	-5.4	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	45.6	1.0002	0.9113	-8.9	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	47.5	0.3053	0.2899	-5.1	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.3	0.7499	0.7397	-1.4	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	48.4	0.3939	0.3815	-3.1	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	44.1	0.3331	0.2935	-11.9	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	40.5	0.2818	0.2282	-19.0	NA	±20	Average RF
1,2-Dibromoethane	50.0	46.2	0.3666	0.3389	-7.6	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	47.0	1.4784	1.389	-6.0	NA	±20	Average RF
1,2-Dichloroethane	50.0	49.2	0.3862	0.3799	-1.7	NA	±20	Average RF
1,2-Dichloropropane	50.0	49.3	0.3022	0.2979	-1.4	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	48.0	1.4726	1.4122	-4.1	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	48.0	1.5033	1.4436	-4.0	NA	±20	Average RF
2-Butanone (MEK)	50.0	43.4	0.3192	0.2771	-13.2	NA	±20	Average RF
2-Hexanone	50.0	43.3	0.3332	0.2888	-13.3	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	45.5	0.3954	0.3598	-9.0	NA	±20	Average RF
Acetone	50.0	47.5	0.2241	0.2128	-5.1	NA	±20	Average RF
Benzene	50.0	49.2	1.1472	1.1285	-1.6	NA	±20	Average RF
Bromochloromethane	50.0	47.5	0.3369	0.3198	-5.1	NA	±20	Average RF
Bromodichloromethane	50.0	45.8	0.4001	0.3662	-8.5	NA	±20	Average RF
Bromoform	50.0	41.3	0.2788	0.2304	-17.3	NA	±20	Average RF
Bromomethane	50.0	46.0	0.2879	0.2329	NA	-8.0	±20	Quadratic
Carbon Disulfide	50.0	44.4	1.1659	1.0359	-11.1	NA	±20	Average RF
Carbon Tetrachloride	50.0	48.8	0.3602	0.3513	-2.5	NA	±20	Average RF
Chlorobenzene	50.0	47.8	0.9437	0.9024	-4.4	NA	±20	Average RF
Chloroethane	50.0	51.6	0.3177	0.328	3.2	NA	±20	Average RF
Chloroform	50.0	47.3	0.7759	0.7347	-5.3	NA	±20	Average RF
Chloromethane	50.0	67.4	0.4231	0.5072	NA	34.8*	±20	Quadratic
Dibromochloromethane	50.0	44.6	0.3757	0.3351	-10.8	NA	±20	Average RF
Dibromomethane	50.0	47.0	0.2111	0.1985	-6.0	NA	±20	Average RF
Dichloromethane	50.0	46.6	0.4816	0.4491	-6.8	NA	±20	Average RF
Ethylbenzene	50.0	48.1	0.4892	0.4709	-3.7	NA	±20	Average RF
Iodomethane	50.0	51.5	0.5422	0.5584	3.0	NA	±20	Average RF
Styrene	50.0	47.9	1.0259	0.9834	-4.1	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	49.2	0.2713	0.267	-1.6	NA	±20	Average RF
Toluene	50.0	49.3	1.2413	1.2239	-1.4	NA	±20	Average RF
Trichloroethene (TCE)	50.0	48.6	0.3222	0.3135	-2.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.1	0.5967	0.5973	0.1	NA	±20	Average RF

Client: LiRo Group
Project: Niagara County Refuse Disposal District/22-033-2914
Service Request: R2211441
Date Analyzed: 12/08/22 10:57

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: I:\ACQUDATA\MSVOA14\Data\120822\V9261.D\
Signal ID: 1
Calibration Date: 9/26/2022
Calibration ID: RC2200105
Analysis Lot: 787756
Units: ug/L

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	48.5	0.3384	0.3285	-2.9	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.4	0.6465	0.6259	-3.2	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	48.9	1.0002	0.979	-2.1	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	49.0	0.3053	0.2993	-2.0	NA	±20	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	50.4	0.7499	0.7562	0.8	NA	±20	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	49.1	0.3939	0.3871	-1.7	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	45.7	0.3331	0.3045	-8.6	NA	±20	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	44.3	0.2818	0.2495	-11.4	NA	±20	Average RF
1,2-Dibromoethane	50.0	48.6	0.3666	0.356	-2.9	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	48.5	1.4784	1.4355	-2.9	NA	±20	Average RF
1,2-Dichloroethane	50.0	50.7	0.3862	0.3915	1.4	NA	±20	Average RF
1,2-Dichloropropane	50.0	50.7	0.3022	0.3068	1.5	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	49.6	1.4726	1.4602	-0.8	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	49.2	1.5033	1.4788	-1.6	NA	±20	Average RF
2-Butanone (MEK)	50.0	49.5	0.3192	0.3157	-1.1	NA	±20	Average RF
2-Hexanone	50.0	48.7	0.3332	0.3247	-2.5	NA	±20	Average RF
4-Methyl-2-pentanone	50.0	51.2	0.3954	0.405	2.4	NA	±20	Average RF
Acetone	50.0	44.9	0.2241	0.2013	-10.2	NA	±20	Average RF
Benzene	50.0	50.4	1.1472	1.1553	0.7	NA	±20	Average RF
Bromochloromethane	50.0	48.7	0.3369	0.328	-2.6	NA	±20	Average RF
Bromodichloromethane	50.0	48.4	0.4001	0.3872	-3.2	NA	±20	Average RF
Bromoform	50.0	43.7	0.2788	0.2435	-12.7	NA	±20	Average RF
Bromomethane	50.0	30.2	0.2879	0.1643	NA	-39.6*	±20	Quadratic
Carbon Disulfide	50.0	50.6	1.1659	1.1808	1.3	NA	±20	Average RF
Carbon Tetrachloride	50.0	49.2	0.3602	0.3546	-1.6	NA	±20	Average RF
Chlorobenzene	50.0	49.0	0.9437	0.9243	-2.1	NA	±20	Average RF
Chloroethane	50.0	50.8	0.3177	0.3229	1.6	NA	±20	Average RF
Chloroform	50.0	48.1	0.7759	0.7465	-3.8	NA	±20	Average RF
Chloromethane	50.0	63.0	0.4231	0.4718	NA	26.0*	±20	Quadratic
Dibromochloromethane	50.0	47.0	0.3757	0.3529	-6.1	NA	±20	Average RF
Dibromomethane	50.0	49.6	0.2111	0.2093	-0.9	NA	±20	Average RF
Dichloromethane	50.0	47.3	0.4816	0.456	-5.3	NA	±20	Average RF
Ethylbenzene	50.0	49.2	0.4892	0.4817	-1.5	NA	±20	Average RF
Iodomethane	50.0	48.7	0.5422	0.5285	-2.5	NA	±20	Average RF
Styrene	50.0	49.8	1.0259	1.0225	-0.3	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	50.1	0.2713	0.2718	0.2	NA	±20	Average RF
Toluene	50.0	51.0	1.2413	1.2665	2.0	NA	±20	Average RF
Trichloroethene (TCE)	50.0	48.8	0.3222	0.3146	-2.4	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.3	0.5967	0.5999	0.5	NA	±20	Average RF

Form 2 - Calibration Verifications

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

RPAES06_788199		ICV			CCV			LLCCV			CCV			CCV			CCV		
	Run Date	12/09/22			12/09/22			12/09/22			12/09/22			12/09/22			12/09/22		
Units	Run Time	15:55:52			17:53:18			17:59:38			18:18:44			18:56:50			19:34:53		
ppm	Data File	6DEC09			6DEC09			6DEC09			6DEC09			6DEC09			6DEC09		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		10.1	101		10.3	103		0.185	93		10.3	103		10.4	104		10.3	103	
Antimony		4.9	98		4.92	98		0.064	107		4.94	99		4.96	99		4.95	99	
Arsenic		0.999	100		0.99	99		0.0222	111		0.987	99		1.01	101		0.982	98	
Barium		10.2	102		10	100		0.202	101		10.2	102		10.1	101		10.1	101	
Beryllium		0.239	96		0.235	94		0.0049	98		0.237	95		0.238	95		0.235	94	
Boron		2.52	101		2.47	99		0.19	95		2.48	99		2.49	100		2.47	99	
Cadmium		0.498	100		0.494	99		0.01	100		0.499	100		0.5	100		0.496	99	
Calcium		25.4	101		25.2	101		1.02	102		25.4	102		25.6	102		25.3	101	
Chromium		0.515	103		0.517	103		0.0104	104		0.519	104		0.524	105		0.52	104	
Cobalt		2.51	100		2.5	100		0.0492	98		2.52	101		2.53	101		2.51	100	
Copper		1.23	99		1.21	97		0.0233	93		1.23	98		1.23	98		1.22	97	
Iron		5	100		4.92	98		0.103	103		4.97	99		4.98	100		4.94	99	
Lead		0.504	101		0.5	100		0.0117	117		0.508	102		0.509	102		0.505	101	
Magnesium		25.1	101		25	100		1.03	103		25.2	101		25.3	101		25.1	100	
Manganese		0.756	101		0.751	100		0.0157	105		0.754	101		0.76	101		0.755	101	
Nickel		2.09	104		2.06	103		0.0406	102		2.08	104		2.08	104		2.06	103	
Potassium		25	100		24.5	98		1.01	101		24.9	100		24.9	100		24.6	98	
Selenium		0.49	98		0.475	95		0.0117	117		0.474	95		0.476	95		0.47	94	
Silver		0.492	98		0.491	98		0.0094	94		0.496	99		0.497	99		0.493	99	
Thallium		1.01	101		0.997	100		0.0218	109		1	100		1.01	101		0.983	98	
Vanadium		2.52	101		2.49	100		0.0495	99		2.51	101		2.52	101		2.5	100	
Zinc		1.01	101		1	100		0.0192	96		1.01	101		1.02	102		1	100	

Form 2 - Calibration Verifications

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

RPAES06_788199		CCV			CCV			LLCCV			CCV		
	Run Date	12/09/22			12/09/22			12/09/22			12/09/22		
Units	Run Time	20:03:28			20:32:05			20:38:26			20:47:57		
ppm	Data File	6DEC09			6DEC09			6DEC09			6DEC09		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Aluminum		10.2	102		10.1	101		0.186	93		10.1	101	
Antimony		4.9	98		4.86	97		0.0624	104		4.82	96	
Arsenic		0.967	97		0.968	97		0.0199	100		0.951	95	
Barium		9.97	100		9.92	99		0.201	101		9.87	99	
Beryllium		0.233	93		0.232	93		0.0048	96		0.23	92	
Boron		2.51	100		2.45	98		0.198	99		2.41	96	
Cadmium		0.492	98		0.488	98		0.0099	99		0.483	97	
Calcium		25.1	100		24.8	99		1.01	101		24.7	99	
Chromium		0.513	103		0.51	102		0.0103	103		0.505	101	
Cobalt		2.49	100		2.47	99		0.0496	99		2.44	98	
Copper		1.21	97		1.2	96		0.0225	90		1.19	95	
Iron		4.88	98		4.86	97		0.102	102		4.82	96	
Lead		0.498	100		0.496	99		0.0108	108		0.489	98	
Magnesium		24.9	100		24.6	98		1.02	102		24.3	97	
Manganese		0.746	99		0.742	99		0.0156	104		0.733	98	
Nickel		2.04	102		2.03	102		0.041	102		2.01	101	
Potassium		25.2	101		24.5	98		1.15	115		24.2	97	
Selenium		0.462	92		0.467	93		0.0106	106		0.461	92	
Silver		0.488	98		0.485	97		0.009	90		0.482	96	
Thallium		0.995	99		0.99	99		0.0223	112		0.982	98	
Vanadium		2.48	99		2.46	98		0.0487	97		2.44	98	
Zinc		0.995	100		0.991	99		0.019	95		0.98	98	

Form 2 - Calibration Verifications

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

RPAES06_788351		ICV			LLCCV			CCV			CCV			CCV			CCV		
	Run Date	12/12/22			12/12/22			12/12/22			12/12/22			12/12/22			12/12/22		
Units	Run Time	17:53:10			17:59:20			18:08:35			18:45:40			19:22:42			19:50:31		
ppm	Data File	6DEC12			6DEC12			6DEC12			6DEC12			6DEC12			6DEC12		
Analyte		Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q	Found	%R	Q
Calcium		25.3	101		1.03	103		25.2	101		25.4	102		25.3	101		25.1	100	
Magnesium		25	100		1.04	104		24.9	99		25	100		24.9	100		24.6	98	
Potassium		25	100		0.967	97		24.6	98		24.7	99		24.4	97		24.1	96	
Sodium		25.1	101		1.05	105		25	100		25	100		24.6	98		24.3	97	
Thallium		1	100		0.0163	82		1.01	101		1	100		0.989	99		0.978	98	

RPAES06_788351		LLCCV			CCV		
	Run Date	12/12/22			12/12/22		
Units	Run Time	19:56:42			20:15:19		
ppm	Data File	6DEC12			6DEC12		
Analyte		Found	%R	Q	Found	%R	Q
Calcium		1.02	102		25.3	101	
Magnesium		1.02	102		24.9	99	
Potassium		0.891	89		24.6	98	
Sodium		1.09	109		24.5	98	
Thallium		0.0218	109		0.99	99	

Form 3 - Blanks

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

RPAES06_788199			ICB		CCB		CCB		MB788199		MB788199		CCB	
Units		Run Date	12/09/22		12/09/22		12/09/22		12/09/22		12/09/22		12/09/22	
		Run Time	15:59		17:56		18:21		18:25		18:28		19:00	
		Data File	6DEC09		6DEC09		6DEC09		6DEC09		6DEC09		6DEC09	
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	30	100	100	U	100	U	100	U	100	U	100	U	100	U
Antimony	7	60	60	U	60	U	60	U	60	U	60	U	60	U
Arsenic	6	10	10	U	10	U	10	U	10	U	10	U	10	U
Barium	3	20	20	U	20	U	20	U	20	U	20	U	20	U
Beryllium	0.2	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Boron	20	200	200	U	200	U	200	U	200	U	200	U	200	U
Cadmium	0.4	5.0	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	300	1000	1000	U	1000	U	1000	U	1000	U	1000	U	1000	U
Chromium	2	10	10	U	10	U	10	U	10	U	10	U	10	U
Cobalt	0.9	50	50	U	50	U	50	U	50	U	50	U	50	U
Copper	4	20	20	U	20	U	20	U	20	U	20	U	20	U
Iron	70	100	100	U	100	U	100	U	100	U	100	U	100	U
Lead	3	50	50	U	50	U	50	U	50	U	50	U	50	U
Magnesium	30	1000	1000	U	1000	U	1000	U	1000	U	1000	U	1000	U
Manganese	4	10	10	U	10	U	10	U	10	U	10	U	10	U
Nickel	3	40	40	U	40	U	40	U	40	U	40	U	40	U
Potassium	400	2000	2000	U	2000	U	2000	U	2000	U	2000	U	2000	U
Selenium	7	10	10	U	10	U	10	U	10	U	10	U	10	U
Silver	0.6	10	10	U	10	U	10	U	10	U	10	J	10	U
Thallium	7	10	10	U	10	U	10	U	10	U	10	U	10	U
Vanadium	0.7	50	50	U	50	U	50	J	50	U	50	U	50	U
Zinc	3	20	20	U	20	U	20	U	20	U	20	U	20	U

Form 3 - Blanks

Client The LiRo Group

Project Niagara County Refuse Disposal District

Workorder
R2211441

Metals by EPA 6010C

RPAES06_788199			CCB		CCB		CCB		CCB	
Units		Run Date	12/09/22		12/09/22		12/09/22		12/09/22	
		Run Time	19:38		20:06		20:35		20:51	
		Data File	6DEC09		6DEC09		6DEC09		6DEC09	
Analyte	DL	LOQ	Result	Q	Result	Q	Result	Q	Result	Q
Aluminum	30	100	100	U	100	U	100	U	100	U
Antimony	7	60	60	U	60	U	60	U	60	U
Arsenic	6	10	10	U	10	U	10	U	10	U
Barium	3	20	20	U	20	U	20	U	20	U
Beryllium	0.2	3.0	3.0	U	3.0	U	3.0	U	3.0	U
Boron	20	200	200	U	200	J	200	U	200	U
Cadmium	0.4	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	300	1000	1000	U	1000	U	1000	U	1000	U
Chromium	2	10	10	U	10	U	10	U	10	U
Cobalt	0.9	50	50	U	50	U	50	U	50	U
Copper	4	20	20	U	20	U	20	U	20	U
Iron	70	100	100	U	100	U	100	U	100	U
Lead	3	50	50	U	50	U	50	U	50	U
Magnesium	30	1000	1000	U	1000	U	1000	U	1000	U
Manganese	4	10	10	U	10	U	10	U	10	U
Nickel	3	40	40	U	40	U	40	U	40	U
Potassium	400	2000	2000	U	2000	J	2000	U	2000	U
Selenium	7	10	10	U	10	U	10	U	10	U
Silver	0.6	10	10	U	10	U	10	U	10	U
Thallium	7	10	10	U	10	U	10	U	10	U
Vanadium	0.7	50	50	J	50	U	50	U	50	U
Zinc	3	20	20	U	20	U	20	U	20	U

ATTACHMENT C
Permitted Facility Annual Report

PERMITTED C&D DEBRIS HANDLING AND RECOVERY FACILITY ANNUAL REPORT

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

(If you need assistance filling out this form please email swmfannualreport@dec.ny.gov or call 518-402-8678.)

Complete and submit this form by March 1, 2023.

This annual report is for the year of operation from January 01, 2022 to December 31, 2022

SECTION 1 – GENERAL INFORMATION

FACILITY INFORMATION

FACILITY NAME: Niagara County Refuse Disposal District

FACILITY LOCATION ADDRESS:	FACILITY CITY:	STATE:	ZIP CODE:
Rt. 93 Bypass (btwn Hinman and Rt. 31)	Lockport	NY	14094

FACILITY TOWN:	FACILITY COUNTY:	FACILITY PHONE NUMBER:
Lockport	Niagara	(716) 439-7240

FACILITY NYS PLANNING UNIT: (A list of NYS Planning Units can be found at the end of this report).
Niagara County

NYSDEC REGION #: 9

360 PERMIT #: (Refer to DEC Permit)	DATE ISSUED:	DATE EXPIRES:	NYS DEC ACTIVITY CODE OR REGISTRATION NUMBER: (Refer to DEC Registration)
9-2926-00007/00002	4/10/2022	4/9/2023	32D10, 32M09

FACILITY CONTACT:		CONTACT PHONE NUMBER:	CONTACT FAX NUMBER:
Dawn M. Timm	☒ public ☐ private	(716) 439-7240	(416) 439-7245

CONTACT EMAIL ADDRESS:

OWNER INFORMATION

OWNER NAME:	OWNER PHONE NUMBER:	OWNER FAX NUMBER:
Niagara County Refuse Disposal District	(716) 439-7240	(716) 439-7245

OWNER ADDRESS:	OWNER CITY:	STATE:	ZIP CODE:
59 Park Ave.	Lockport	NY	14094

OWNER CONTACT:	OWNER CONTACT EMAIL ADDRESS:
Dawn M. Timm	dawn.timm@niagaracounty.com

OPERATOR INFORMATION

OPERATOR NAME: ☑ *same as owner* | ☒ public ☐ private

PREFERENCES

Preferred address to receive correspondence: ☐ *Facility location address* ☒ *Owner address* ☐ *Other (provide):*

Preferred email address: ☒ *Facility Contact* ☐ *Owner Contact* ☐ *Other (provide):*

Preferred individual to receive correspondence: ☒ *Facility Contact* ☐ *Owner Contact* ☐ *Other (provide):*

Did you operate in 2022? ☐ Yes; Complete this form.

☒ No; Complete and submit Sections 1 and 11. If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, also complete the "Inactive Solid Waste Management Facility or Activity Notification Form" located at: http://www.dec.ny.gov/chemical/52706.html .

SECTION 2 - SOLID WASTE RECEIVED

Please provide the tonnages of waste received. This includes all wastes received at your facility regardless of their destination after processing.
DO NOT REPORT IN CUBIC YARDS!

Specify the methods used to measure the quantities received and the percentages measured by each method:

_____% Scale Weight _____% Estimated

_____% Truck Count _____% Other (Specify: _____)

Type of Waste	January (tons)	February (tons)	March (tons)	April (tons)	May (tons)	June (tons)	July (tons)
Asphalt Millings							
Asphalt Pavement							
Asphalt Roofing Shingles							
Brick							
Concrete							
Construction & Demolition (C&D) Debris							
Gravel							
Gypsum Wallboard							
Limited-Use Fill							
Other Masonry Materials							
Restricted-Use Fill							
Rock							
Roofing Paper							
Sand							
Soil							
Unadulterated Wood							
Other (specify)							
Total Tons Received							

If the solid waste type is not listed, use one of the “Other” lines and fill in the name of the waste. If more “Other” lines are needed, cross out an unused type and fill in the other solid waste name. If still more “Other” lines are needed, attach another copy of this page, cross out an unused type, and fill in the other solid waste name.

SECTION 2 – SOLID WASTE RECEIVED (continued)

Type of Waste	Tip Fee ($/Ton)	August (tons)	September (tons)	October (tons)	November (tons)	December (tons)	Total Year (tons)	Daily Avg. (tons)
Asphalt Millings								
Asphalt Pavement								
Asphalt Roofing Shingles								
Brick								
Concrete								
Construction & Demolition (C&D) Debris								
Gravel								
Gypsum Wallboard								
Limited-Use Fill								
Other Masonry Materials								
Restricted-Use Fill								
Rock								
Roofing Paper								
Sand								
Soil								
Unadulterated Wood								
Other (specify)								
Total Tons Received								

If the solid waste type is not listed, use one of the “Other” lines and fill in the name of the waste. If more “Other” lines are needed, cross out an unused type and fill in the other solid waste name. If still more “Other” lines are needed, attach another copy of this page, cross out an unused type, and fill in the other solid waste name.

SECTION 3 – SERVICE AREA OF SOLID WASTE RECEIVED

Please identify where the material is coming from. The total tons received reported below should equal the total tons received in Section 2 (Solid Waste Received). DO NOT REPORT IN CUBIC YARDS!

- If the waste ***WAS*** received from another solid waste management facility, please write in the name *and* address of the facility along with the appropriate state, county and planning unit/municipality.
- If the waste ***WAS NOT*** received from another solid waste management facility, please write in "***Direct Haul***" along with the appropriate state, county, and planning unit/municipality where the waste was generated.

Specify transport method, list type of material(s) and percentages of total material transported by each:

_____% Road: Waste Type(s):_____ _____% Rail: Waste Type(s):_____

_____% Water: Waste Type(s): _____ _____% Other (specify: _____): Waste Type(s):_____

SERVICE AREA OF SOLID WASTE RECEIVED (where the waste is coming from)					
TYPE OF WASTE	**SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "*Direct Haul*"**	**SERVICE AREA STATE OR COUNTRY**	**SERVICE AREA COUNTY OR PROVINCE**	**NYS PLANNING UNIT (See Attached List of NYS Planning Units)**	**TONS RECEIVED**
Asphalt Millings					
Asphalt Pavement					
Asphalt Roofing Shingles					
Brick					

SERVICE AREA OF SOLID WASTE RECEIVED (where the waste is coming from)					
TYPE OF WASTE	**SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "*Direct Haul*"**	**SERVICE AREA STATE OR COUNTRY**	**SERVICE AREA COUNTY OR PROVINCE**	**NYS PLANNING UNIT (See Attached List of NYS Planning Units)**	**TONS RECEIVED**
Concrete					
Construction & Demolition (C&D) Debris					
Gravel					
Gypsum Wallboard					
Limited-Use Fill					
Other Masonry Materials					
Restricted-Use Fill					
Rock					

SERVICE AREA OF SOLID WASTE RECEIVED (where the waste is coming from)					
TYPE OF WASTE	**SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "*Direct Haul*"**	**SERVICE AREA STATE OR COUNTRY**	**SERVICE AREA COUNTY OR PROVINCE**	**NYS PLANNING UNIT (See Attached List of NYS Planning Units)**	**TONS RECEIVED**
Roofing Paper					
Sand					
Soil					
Unadulterated Wood					
Other (specify)					
TOTAL RECEIVED (tons): _____					

If the solid waste type is not listed, use one of the "Other" lines and fill in the name of the waste. If more "Other" lines are needed, cross out an unused type and fill in the other solid waste name. If still more "Other" lines are needed, attach another copy of this page, cross out an unused type, and fill in the other solid waste name.

SECTION 4 - TRANSFER OR DISPOSAL DESTINATION

Please identify destination of waste. Please only include waste sent off-site for disposal or further transfer prior to disposal. Exclude Recyclable Material amounts reported in Section 5. DO NOT REPORT IN CUBIC YARDS!

- If the waste is being sent to another facility for transfer or processing prior to disposal (e.g. Transfer station or C&D debris processing facility), please identify name, address, corresponding State/Country, County/Province, and Destination Planning Unit of the transfer destination and the amount of waste transferred in the "*Amount to Transfer Destination*" column.
- If the waste is being sent to a landfill or combustor, please identify the name, address, corresponding State/Country, County/Province, and Destination Planning Unit of the disposal destination and the amount of waste being sent for disposal in the "*Amount to Disposal Destination*" column.
- If the waste is being sent to a landfill to be utilized as Alternative Operating Cover (AOC), please identify the name, address, corresponding State/Country, County/Province, and Destination Planning Unit of the landfill and the amount of waste being sent for use as AOC in the "*Amount Used as AOC*" column.

Specify transport method, list type of material(s) and percentages of total material transported by each:

_____% Road: Waste Type(s):_____ _____% Rail: Waste Type(s):_____

_____% Water: Waste Type(s):_____ _____% Other (specify: _____): Waste Type (s):_____

TRANSFER OR DISPOSAL DESTINATION								
TYPE OF WASTE	SOLID WASTE MANAGEMENT FACILITY TO WHICH IT WAS SENT (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	NYS PLANNING UNIT (See Attached List of NYS Planning Units	AMOUNT TO TRANSFER DESTINATION (TONS)	AMOUNT TO DISPOSAL DESTINATION (TONS)	AMOUNT USED AS AOC (TONS)	TOTAL YEAR (TONS)
Construction & Demolition (C&D) Debris								
Residue								
Other (specify)								
							TOTAL SENT (tons):	_____

If the waste type is not listed, use one of the "Other" lines and fill in the name of the material. If more "Other" lines are needed, cross out an unused type and fill in the other waste name. If still more "Other" lines are needed, attached another copy of this page, cross out an unused type, and fill in the other waste name.

SECTION 5 - MATERIAL RECOVERED FOR REUSE/RECYCLING

Please identify destination of recovered materials. Indicate the location of use/name of the destination, address, corresponding State/Country, County/Province, Destination Planning Unit/Municipality and the amount of material recovered. DO NOT REPORT IN CUBIC YARDS!

Specify transport method, list type of material(s) and percentages of total material transported by each:

_____% Road: Material(s):_____

_____% Rail: Material(s):_____

_____% Water: Material(s): _____

_____% Other (specify: _____): Material(s):_____

Loads of material that are to be used under a pre-determined or case-specific BUD do not need to be reported. The only exception is for specific material types (RCA, asphalt millings, etc.) distributed in excess of 10,000 tons (360.12(c)(5)). In this case, the total tonnage should be reported, but not the individual destinations.

MATERIAL RECOVERED FOR REUSE/RECYCLING					
MATERIAL RECOVERED	**LOCATION OF USE/DESTINATION** (Name & Address) Please note that "direct haul", "various", and "various locations" are not acceptable responses for the address of the location of use.	**DESTINATION STATE OR COUNTRY**	**DESTINATION COUNTY OR PROVINCE**	**NYS PLANNING UNIT** (See Attached List of NYS Planning Units)	**TONS RECOVERED** (out of facility)
Asphalt Millings					
Asphalt Pavement					
Asphalt Roofing Shingles					
Brick					
Bulk Metal (from C&D Debris)					

MATERIAL RECOVERED FOR REUSE/RECYCLING					
MATERIAL RECOVERED	**LOCATION OF USE/DESTINATION** (Name & Address) Please note that "direct haul", "various", and "various locations" are not acceptable responses for the address of the location of use.	**DESTINATION STATE OR COUNTRY**	**DESTINATION COUNTY OR PROVINCE**	**NYS PLANNING UNIT** (See Attached List of NYS Planning Units)	**TONS RECOVERED** (out of facility)
Concrete					
Gravel					
Gypsum Wallboard					
Limited-Use Fill					
Other Masonry Materials					
Restricted-Use Fill					
Rock					
Roofing Paper					

MATERIAL RECOVERED FOR REUSE/RECYCLING					
MATERIAL RECOVERED	**LOCATION OF USE/DESTINATION** (Name & Address) Please note that "direct haul", "various", and "various locations" are not acceptable responses for the address of the location of use.	**DESTINATION STATE OR COUNTRY**	**DESTINATION COUNTY OR PROVINCE**	**NYS PLANNING UNIT** (See Attached List of NYS Planning Units)	**TONS RECOVERED** (out of facility)
Sand					
Soil					
Unadulterated Wood					
Other (specify)					
				TOTAL RECOVERED (tons):	

If the material type is not listed, use one of the "Other" lines and fill in the name of the material. If more "Other" lines are needed, cross out an unused type and fill in the other materials name. If still more "Other" lines are needed, attached another copy of this page, cross out an unused type, and fill in the other materials name.

SECTION 6 – UNAUTHORIZED SOLID WASTE

Has unauthorized solid waste been received at the facility during the reporting period?

☐ Yes ☐ No If yes, give information below for each incident (attach additional sheets if necessary):

Date Received	Type Received	Date Disposed	Disposal Method & Location

SECTION 7 - COST ESTIMATES AND FINANCIAL ASSURANCE DOCUMENTS

Are there required cost estimates and financial assurance documents for closure?

☐ Yes ☐ No If yes, attach additional sheets reflecting annual adjustments for inflation and any changes to the Closure Plan?

SECTION 8 – PROBLEMS

Were any problems encountered during the reporting period (e.g., specific occurrences which have led to changes in facility procedures)?

☐ Yes ☐ No If yes, attach additional sheets identifying each problem and the methods for resolution of the problem.

SECTION 9 – CHANGES

Were there any changes from approved reports, plans, specifications, and permit conditions?

☐ Yes ☐ No If yes, attach additional sheets identifying changes with a justification for each change.

SECTION 10 - PERMIT/CONSENT ORDER REPORTING REQUIREMENTS

Are there any additional permit/consent order reporting requirements not covered by the previous sections of this form?

☐ Yes ☐ No If yes, attach additional sheets identifying the reporting requirements with their respective responses.

SECTION 11 - SIGNATURE AND DATE BY OWNER OR OPERATOR

Owner or Operator must sign, date and submit one completed form to the appropriate Regional Office (See attachment for Regional Office addresses, email addresses and Materials Management Contacts).

The Owner or Operator must also submit one copy by email, fax or mail to:

New York State Department of Environmental Conservation
Division of Materials Management
Bureau of Solid Waste Management
625 Broadway
Albany, New York 12233-7260
Fax 518-402-9041
Email address: SWMFannualreport@dec.ny.gov

I certify, under penalty of law, that the data and other information identified in this report have been prepared under my direction and supervision in compliance with a system designed to ensure that qualified personnel properly and accurately gather and evaluate this information. I am aware that any false statement I make in such report is punishable pursuant to section 71-2703(2) of the Environmental Conservation Law and section 210.45 of the Penal Law.

_____ Signature	_____ Date
Dawn M. Timm Name (Print or Type)	Interim. Administrator Title (Print or Type)
dawn.timm@niagaracounty.com Email (Print or Type)	
59 Park Ave. Address	Lockport City
New York 14094 State and Zip	(716) 439-7240 Phone Number

ATTACHMENTS: ☐ YES ☐ NO
(Please check appropriate line)

* This page for reference only. Please do not return with submittal. *

Division of Materials Management
New York State Department of Environmental Conservation
Albany, New York 12233-7260

PERMITTED CONSTRUCTION & DEMOLITION DEBRIS HANDLING AND RECOVERY FACILITY

A Construction and Demolition Debris Handling & Recovery Facility (CDDHRF) is a processing facility that receives and processes construction and demolition debris for recovery, transfer or disposal. Further information and a listing of the registered and regulated construction and demolition debris processing facilities are available online at http://www.dec.ny.gov/chemical/23686.html.

This annual report for is specifically for permitted CDDHRFs. If your facility is a registered CDDHRF, you need to submit a Registered Construction & Demolition Debris Handling and Recovery Facility Annual Report.

If your facility is authorized to operate a construction and demolition debris landfill, you need to submit a Construction & Demolition Debris Landfill Annual Report. If your facility is authorized to process construction and demolition debris and operate a construction and demolition debris landfill you must submit both annual reports.

If your facility is authorized to operate as a transfer facility, you need to submit a Transfer Facility Annual Report instead of a CDDHRF Annual Report. If your facility is authorized to operate as a transfer facility and as a CDDHRF you must submit both annual reports.

If your facility is authorized to operate as a recyclables handling and recovery facility, you must submit a Recyclables Handling and Recovery Facility Annual Report instead of a CDDHRF Facility Annual Report. If your facility is authorized to operate as a CDDHRF facility and a recyclables handling & recovery facility you must submit both annual reports.

Forms for all solid waste management facilities can be found at http://www.dec.ny.gov/chemical/52706.html and a brief description of each type of facility can be found at http://www.dec.ny.gov/chemical/8495.html .

Annual Report

Submit the Annual Report no later than March 1, 2023.

Reporting of the information indicated on this C&D Debris Handling and Recovery Facility Annual Report form is required pursuant to 6 NYCRR Part 360. Failure to provide the required information requested is a violation of Environmental Conservation Law. Timely submission of a properly completed form to the Department's Regional Office that has jurisdiction over your facility and to the Department's Central Office is required to meet the Annual/Quarterly Report requirements of 6 NYCRR Part 360.

Where the Annual Report requirements have been modified, appropriate Sections (as necessary to reflect the modification) must be completed and submitted with a copy of the Department's written notification which allows the modification.

Entries on the report forms should be either typewritten or neatly printed in black ink. Attach additional sheets if space on the pages is insufficient or supplementary information is required or appropriate.

Solid Waste Volume to Weight Conversion Factors

Material	Conversion Factor (tons/yd^3)
Concrete and Other Masonry Materials	2.02
Brick	1.35
Asphalt Pavement and Asphalt Millings	1.95
Asphalt Roofing Shingles and Roofing Paper	0.37
Gypsum Wallboard	0.23
Wood	.085
Soil	1.12
Sand	1.35
Gravel	1.48
Rock	2.23
Restricted-use Fill	1.12
Limited-use Fill	1.12
Concrete, Asphalt, Rock, Brick and Soil (CARBS) mixture	1.6
Mixed C&D Debris (with minimal CARBS)	0.25
Crushed Aggregate	1.5

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Useful Definitions

SECTION 3 – SERVICE AREA OF MATERIAL RECEIVED

Identify the facility's service area by indicating the type of material received, the Solid Waste Management facility (SWMF) from which it was received (or Direct Haul), the corresponding State/Country, the County/Province, and the NYS Planning Unit from which waste was received. **Refer to the list of NYS Planning Units that can be found at the end of this report.** The total amount reported here should equal the total amount reported in Section 2 (Material Received). DO NOT REPORT IN CUBIC YARDS!

Additional Service Area Guidance:

1) Direct hauled from the generator of the material. In the case where the material is hauled to your facility from the generator (i.e. hauled from residences, job sites, commercial establishments, etc.), "Direct Haul" is the appropriate response in Column 2 under "Service Area." Please report the tonnage by material type and identify the state, county and planning unit where it was generated;

2) Sent to your C&D Debris Handling and Recovery Facility from another solid waste management facility. Material may be sent to your C&D Debris Handling and Recovery Facility from another solid waste management facility. In this case, please report the tonnage by material type from each sending solid waste management facility, as well as the sending facility's name, address, county, and the planning unit where the sending facility is located.

*This page for reference only. Please do not return with submittal.

New York State Planning Units & Regions

When completing the annual report, please use the ***Planning Unit*** listed below that corresponds with the municipality and county. Note: The Planning Unit is not the DEC Region.

DEC Region	Planning Unit	County	Municipality
1	Glen Cove	Nassau	Glen Cove (City)
	Hempstead		Hempstead (Town)
	Long Beach		Long Beach (City)
	North Hempstead Solid Waste Management Authority		North Hempstead (Town), except 8 villages (see below)
	Oyster Bay Solid Waste Disposal District		Oyster Bay (Town), except 16 villages (see below)
	Babylon	Suffolk	Babylon (Town)
	Brookhaven		Brookhaven (Town)
	East Hampton		East Hampton (Town)
	Fishers Island Waste Management District		Fishers Island
	Huntington		Huntington (Town)
	Islip Resource Recovery Agency		Islip (Town)
	Riverhead		Riverhead (Town)
	Shelter Island		Shelter Island (Town)
	Smithtown		Smithtown (Town)
	Southampton		Southampton (Town)
	Southold		Southold (Town), except Fishers Island
2	New York City	Bronx	Bronx
		Kings	Kings (Brooklyn)
		New York	New York (Manhattan)
		Queens	Queens
		Richmond	Richmond (Staten Island)
3	Dutchess County	Dutchess	
	Orange County	Orange	
	Putnam County	Putnam	
	Rockland County Solid Waste Management Authority (RCSWMA)	Rockland	
	Sullivan County	Sullivan	
	Ulster County Resource Recovery Agency (UCRRA)	Ulster	
	Westchester County	Westchester	
4	Colonie	Albany	Cohoes (City)
			Colonie (Town)
			Colonie (Village)
			Menands (Village)
			Watervliet (City)
	Capital Region Solid Waste Management Partnership	Albany	Albany (City)
			Altamont (Village)
			Berne (Town)
			Bethelehem (Town)
			Green Island (Town/Village)
			Guilderland (Town)
			Knox (Town)
			New Scotland (Town)
			Rensselaerville (Town)
			Voorheesville (Village)
			Westerlo (Town)

4		Rensselaer	East Greenbush (Town)
			Rensselaer (City)
	Eastern Rensselaer County Solid Waste Management Authority	Rensselaer	Castleton-on-Hudson (Village)
			Hoosick Falls (Village)
			Nassau (Village)
			Pittstown (Town)
			Schaghticoke (Town/Village)
			Stephentown (Town)
			Valley Falls (Village)
	Columbia County	Columbia	All, except Town of Canaan
	Delaware County	Delaware	
	Greene County	Greene	
	Montgomery County	Montgomery	
	Otsego County	Otsego	
	Schoharie County	Schoharie	
	Schenectady County	Schenectady	
5	Clinton County	Clinton	
	Essex County	Essex	
	County of Franklin Solid Waste Management Authority (CFSWMA)	Franklin	
	Fulton County	Fulton	
	Hamilton County	Hamilton	
	Saratoga County	Saratoga	
	Warren County	Warren	
	Washington County	Washington	
6	Development Authority of the North Country (DANC)	Jefferson	
		Lewis	
		St. Lawrence	
	Oneida-Herkimer Solid Waste Authority	Oneida	
		Herkimer	
7	Broome County	Broome	
	Cayuga County	Cayuga	
	Chenango County	Chenango	
	Cortland County	Cortland	
	Madison County	Madison	
	Onondaga County	Onondaga	All municipalities, except Town and Village of Skaneatles (See below)
	Oswego County	Oswego	
	Tioga County	Tioga	
	Tompkins County	Tompkins	
8	Chemung County	Chemung	
	GLOW Region Solid Waste Management Committee	Genesee	
		Livingston	
	Monroe County	Monroe	
	Ontario County	Ontario	
	Orleans County	Orleans	
	Schuyler County	Schuyler	
	Seneca County	Seneca	
	Steuben County	Steuben	
	Wayne County	Wayne	
	Yates County	Yates	
9	Allegany County	Allegany	
	Cattaraugus County	Cattaraugus	
	Chautauqua County	Chautauqua	

9	GLOW Region Solid Waste Management Committee	Wyoming	
	Niagara	Niagara	
	Northeast-Southtowns Solid Waste Management Board (NEST)	Erie	Akron (Village)
			Alden (Town/Village)
			Angola (Village)
			Aurora (Town)
			Blasdell (Village)
			Boston (Town)
			Brant (Town)
			Cheektowaga (Town)
			Clarence (Town)
			Colden (Town)
			Collins (Town)
			Concord (Town)
			Depew (Village)
			East Aurora (Village)
			Eden (Town)
			Elma (Town)
			Evans (Town)
			Farnham (Village)
			Gowanda (Village)
			Hamburg (Town/Village)
			Holland (Town)
			Lackawanna (City)
			Lancaster (Town/Village)
			Marilla (Town)
			Newstead (Town)
			North Collins (Town/Village)
			Orchard Park (Town/Village)
			Sardinia (Town)
			Sloan (Village)
			Springville (Village)
			Wales (Town)
			West Seneca (Town)
	Northwest Communities Solid Waste Management Board (NWCB)	Erie	Amherst (Town)
			Grand Island (Town)
			Kenmore (Village)
			Tonawanda (Town/Village)
			Williamsville (Village)

Municipalities Not Currently Affiliated With a Recognized Planning Unit

DEC Region	County	Non-Member Municipality	
1	Nassau	North Hempstead	Great Neck Estates (Village)
			Great Neck Plaza (Village)
			Mineola (Village)
			New Hyde Park (Village)
			Plandome (Village)
			Plandome Manor (Village)
			Westbury (Village)
			Williston Park (Village)
		Oyster Bay	Bayville (Village)
			Brookville (Village)
			Centre Island (Village)
			Cove Neck (Village)
			Glenwood – Glen Head Garbage District
			Lattington (Village)
			Laurel Hollow (Village)
			Matinecock (Village)
			Mill Neck (Village)
			Muttontown (Village)
			Old Brookville (Village)
			Old Westbury (Village) (portion)
			Oyster Bay Cove (Village)
			Roslyn Harbor (Village) (portion)
			Sea Cliff (Village)
			Upper Brookville (Village)
4	Albany	Coeymans (Town)	
		Ravena (Village)	
	Rensselaer	Berlin (Town)	
		Brunswick (Town)	
		Grafton (Town)	
		Hoosick (Town)	
		Nassau (Town)	
		Petersburg (Town)	
		Poestenkill (Town)	
		North Greenbush (Town)	
		Sand Lake (Town)	
		Schodack (Town)	
		Troy (City)	
	Columbia	Canaan (Town)	
7	Onondaga	Skaneatles (Town/Village)	
9	Erie	Buffalo (City)	

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New York State Department of Environmental Conservation
Division of Materials Management
Bureau of Solid Waste Managment

MATERIAL MANAGEMENT PROGRAM CONTACTS

CENTRAL OFFICE
Bureau of Solid Waste Management
625 Broadway
Albany, NY 12233-7260
Phone: (518) 402-8678

For Submission of Solid Waste Management Facility Annual Reports only:
Fax: (518) 402-9041
Email: swmfannualreport@dec.ny.gov

REGIONAL OFFICE ADDRESS & LEAD CONTACT PERSON

REGION 1 (Nassau, Suffolk)

Syed Rahman / David Gibb
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790
Phone: (631) 444-0375
SWMFannualreportR1@dec.ny.gov

REGION 2 (Bronx, Kings, New York, Queens, Richmond)

Mahmoud Assi
47-40 21st Street
Long Island City, NY 11101-5407
Phone: (718) 482-4896
SWMFannualreportR2@dec.ny.gov

REGION 3 (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester)

Lee Reiff
21 South Putt Corners Road
New Paltz, NY 12561
Phone: (845) 256-3134
SWMFannualreportR3@dec.ny.gov

REGION 4 (Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie)

Brian Maglienti
1130 North Westcott Road
Schenectady, NY 12306
Phone: (518) 357-2085
SWMFannualreportR4@dec.ny.gov

REGION 5 (Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington)

Jessie Sangster
1115 State Route 86, PO Box 296
Ray Brook, NY 12977
Phone: (518) 897-1266
SWMFannualreportR5@dec.ny.gov

REGION 6 (Herkimer, Jefferson, Lewis, Oneida, St. Lawrence)

Gary McCullouch
317 Washington Street
Watertown, NY 13601
Phone: (315) 785-2513
SWMFannualreportR6@dec.ny.gov

REGION 7 (Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins)

Steve Perrigo
615 Erie Boulevard West
Syracuse, NY 13204
Phone: (315) 426-7419
SWMFannualreportR7@dec.ny.gov

REGION 8 (Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates)

Greg MacLean
6274 East Avon-Lima Road
Avon, NY 14414
Phone: (585) 226-5411
SWMFannualreportR8@dec.ny.gov

REGION 9 (Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming)

Peter Grasso
700 Delaware Avenue
Buffalo, NY 14209
Phone: (716) 851-7220
SWMFannualreportR9@dec.ny.gov

December 2022

ATTACHMENT D

Inactive Solid Waste Management Facility or Activity Notification Form

Division of Materials Management
New York State Department of Environmental Conservation

INACTIVE SOLID WASTE MANAGEMENT FACILITY OR ACTIVITY NOTIFICATION FORM

FACILITY NAME: Niagara County Refuse Disposal District

FACILITY ADDRESS:

FACILITY CITY: Lockport **STATE:** NY **ZIP CODE:** 14094

TYPE OF INACTIVE FACILITY OR ACTIVITY: (Check all applicable boxes)

- ☐ Anaerobic Digestion – permit
- ☐ Anaerobic Digestion – registration
- ☐ C&D Processing – permit
- ☐ C&D Processing – registration
- ☐ Composting – Source Separated Organic Waste – permit
- ☐ Composting – Source Separated Organic Waste – registration
- ☐ Composting – Yard Waste – permit
- ☐ Composting – Yard Waste – registration
- ☐ Composting/other Processing – Biosolids/other
- ☐ Household Hazardous Waste
- ☐ Land Application – Biosolids/Septage/other – permit
- ☐ Land Application – Nonrecognizable Food Processing Waste – registration
- ☐ Land Application – Septage - registration
- ☐ Landfill – Construction & Demolition Debris
- ☐ Landfill – Industrial/Commercial
- ☐ Landfill – Land Clearing Debris
- ☐ Landfill – Long Island
- ☐ Landfill – Municipal Solid Waste
- ☐ Mobile Vehicle Crushers
- ☐ Municipal Waste Combustor
- ☐ Recyclable Handling & Recovery
- ☐ Regulated Medical Waste – Radiopharmacy
- ☐ Regulated Medical Waste – Onsite Treatment
- ☐ Regulated Medical Waste – Commercial Treatment
- ☐ Regulated Medical Waste – Transfer Station
- ☐ Storage – Biosolids/Septage – permit
- ☐ Storage – Nonrecognizable Food Processing Waste
- ☐ Storage – Septage – registration
- ☐ Transfer Station – permit
- ☐ Transfer Station – registration
- ☐ Vehicle Dismantling Facility
- ☐ Waste Tire Storage – Dealer
- ☐ Waste Tire Storage – New Product Manufacturing
- ☐ Waste Tire Storage – Onsite Energy Recovery
- ☐ Waste Tire Storage – permitted
- ☐ Waste Tire Storage – Retreader
- ☐ Other _____

DEC ACTIVITY CODE(S) OR REGISTRATION NUMBER(S):

FACILITY COUNTY: Niagara

NYSDEC REGION #: 9

This document certifies that the type of facility or activity identified above is no longer operational. The owner/ operator relinquishes their NYSDEC permit/registration and retains no other permit, registrations, or licenses related to the identified activity. It is recognized that in order to resume operation, a new permit application or registration form must be submitted to the Department for processing and approval. This notification does not excuse the facility from any closure, post-closure, or other requirements identified in 6 NYCRR Part 360.

I hereby affirm under penalty of perjury that information provided on this form was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority to sign this form pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Dawn M. Timm	Interim. Administrator	(_____) _____
Name (Print or Type)	Title (Print or Type)	Phone Number
59 Park Ave.	Lockport	New York 14094
Address	City	State and Zip Code
_____	_____	
Signature	Date	

ATTACHMENT E

Niagara County Refuse Disposal District Quarterly Leachate Totals

NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
YEAR-TO-DATE LEACHATE TOTALS

FOR THE YEAR: 2022

MONTH	C & D LANDFILL	LANDFILL #1	LANDFILL #2
JANUARY	14,970	0	24,950
FEBRUARY	24,950	9,980	54,890
MARCH	27,750	2,400	44,510
APRIL	13,370	0	25,140
MAY	15,970	0	24,460
JUNE	8,000	0	21,860
JULY	4,990	0	9,980
AUGUST	5,990	9,980	18,370
SEPTEMBER	7,490	0	17,460
OCTOBER	14,070	1,400	19,470
NOVEMBER	21,250	10,480	28,150
DECEMBER	12,870	1,490	35,540
TOTALS	171,670	35,730	324,780
GRAND TOTAL	**532,180**		

NIAGARA COUNTY REFUSE DISPOSAL DISTRICT
QUARTERLY LEACHATE TOTALS

QUARTER Fourth (Oct - Dec)

DATE	C & D LANDFILL	LANDFILL #1	LANDFILL #2
7-Oct			4,990
17-Oct	4,990		4,990
19-Oct	4,990	1,400	3,600
26-Oct	4,090		5,890
	14,070	**1,400**	**19,470**
2-Nov	1,290		3,700
3-Nov		4,990	
15-Nov	4,990		4,990
16-Nov		2,500	7,480
23-Nov		2,990	6,990
29-Nov	4,990		4,990
30-Nov	9,980		
	21,250	**10,480**	**28,150**
6-Dec		1,490	8,490
8-Dec	2,890		2,100
15-Dec			4,990
21-Dec	4,990		9,980
29-Dec	4,990		
30-Dec			9,980
	12,870	**1,490**	**35,540**

NEWFANE WASTEWATER TREATMENT FACILITY NON-HAZARDOUS WASTE HAULER LOG

DATE	TIME	HAULER	DRIVER	SOURCE	GALLONS DELIVERED
7-Oct	8:00	NCRDD	R. Rees	Landfill 2	4990
17-Oct	10:10	NCRDD	G. Joseph	C&D	4990
17-Oct	12:30	NCRDD	G. Joseph	Landfill 2	4990
19-Oct	0:00	NCRDD	G. Joseph	C&D	4990
19-Oct	12:17	NCRDD	G. Joseph	Landfill 2	3600
19-Oct	13:02	NCRDD	G. Joseph	Landfill 1 East	1400
26-Oct	9:17	NCRDD	G. Joseph	Landfill 2	4990
26-Oct	11:28	NCRDD	G. Joseph	C&D	4090
26-Oct	11:45	NCRDD	G. Joseph	Landfill 2	900
					34,940

Oct. GALLONS

NEWFANE WASTEWATER TREATMENT FACILITY NON-HAZARDOUS WASTE HAULER LOG

DATE	TIME	HAULER	DRIVER	SOURCE	GALLONS DELIVERED
2-Nov	8:14	NCRDD	G. Joseph	Landfill 2	3,700
2-Nov	9:00	NCRDD	G. Joseph	C&D	1,290
3-Nov	9:00	NCRDD	G. Joseph	Landfill 1 East	4,990
15-Nov	8:25	NCRDD	G. Joseph	Landfill 2	4,990
15-Nov	11:05	NCRDD	G. Joseph	C&D	4,990
16-Nov	9:14	NCRDD	G. Joseph	Landfill 2	4,990
16-Nov	11:42	NCRDD	G. Joseph	Landfill 2	2,490
16-Nov	12:15	NCRDD	G. Joseph	Landfill 1 East	2,500
23-Nov	8:25	NCRDD	G. Joseph	Landfill 2	4,990
23-Nov	10:53	NCRDD	G. Joseph	Lanndfill 2	2,000
23-Nov	11:25	NCRDD	G. Joseph	Landfill 1 East	2,990
29-Nov	8:38	NCRDD	G. Joseph	Landfill 2	4,990
29-Nov	10:54	NCRDD	G. Joseph	C&D	4,990
30-Nov	8:44	NCRDD	G. Joseph	C&D	4,990
30-Nov	10:50	NCRDD	G. Joseph	C&D	4,990
					59,880

Nov. GALLONS

NEWFANE WASTEWATER TREATMENT FACILITY NON-HAZARDOUS WASTE HAULER LOG

DATE	TIME	HAULER	DRIVER	SOURCE	GALLONS DELIVERED
6-Dec	8:30	NCRDD	G. Joseph	Landfill 2	4,990
6-Dec	10:48	NCRDD	G. Joseph	Landfill 2	3,500
6-Dec	11:30	NCRDD	G. Joseph	Landfill 1 East	1,490
8-Dec	8:46	NCRDD	G. Joseph	Landfill 2	2,100
8-Dec	9:22	NCRDD	G. Joseph	C&D	2,890
15-Dec	8:30	NCRDD	G. Joseph	Landfill 2	4,990
21-Dec	8:20	NCRDD	G. Joseph	C&D	4,990
21-Dec	10:32	NCRDD	G. Joseph	Landfill 2	4,990
29-Dec	8:15	NCRDD	G. Joseph	Landfill 2	4,990
29-Dec	10:43	NCRDD	G. Joseph	C&D	4,990
30-Dec	8:10	NCRDD	G. Joseph	Landfill 2	4,990
30-Dec	10:20	NCRDD	G. Joseph	Landfill 2	4,990
					49,900

Dec. GALLONS

NIAGARA COUNTY CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL SECONDARY LOADOUT SUMMARY

Date	Secondary Load Out Flow Meter (Daily Gallons)	Secondary Load Out Flow Meter (Monthly Gallons)
Sat - 10/1/22	230	230
Sun - 10/2/22	230	460
Mon - 10/3/22	370	830
Tue - 10/4/22	90	920
Wed - 10/5/22	0	920
Thu - 10/6/22	440	1,360
Fri - 10/7/22	0	1,360
Sat - 10/8/22	40	1,400
Sun - 10/9/22	50	1,450
Mon - 10/10/22	20	1,470
Tue - 10/11/22	370	1,840
Wed - 10/12/22	0	1,840
Thu - 10/13/22	120	1,960
Fri - 10/14/22	80	2,040
Sat - 10/15/22	460	2,500
Sun - 10/16/22	660	3,160
Mon - 10/17/22	10	3,170
Tue - 10/18/22	620	3,790
Wed - 10/19/22	730	4,520
Thu - 10/20/22	1,100	5,620
Fri - 10/21/22	750	6,370
Sat - 10/22/22	790	7,160
Sun - 10/23/22	1,020	8,180
Mon - 10/24/22	370	8,550
Tue - 10/25/22	450	9,000
Wed - 10/26/22	480	9,480
Thu - 10/27/22	610	10,090
Fri - 10/28/22	400	10,490
Sat - 10/29/22	410	10,900
Sun - 10/30/22	460	11,360
Mon - 10/31/22	170	11,530

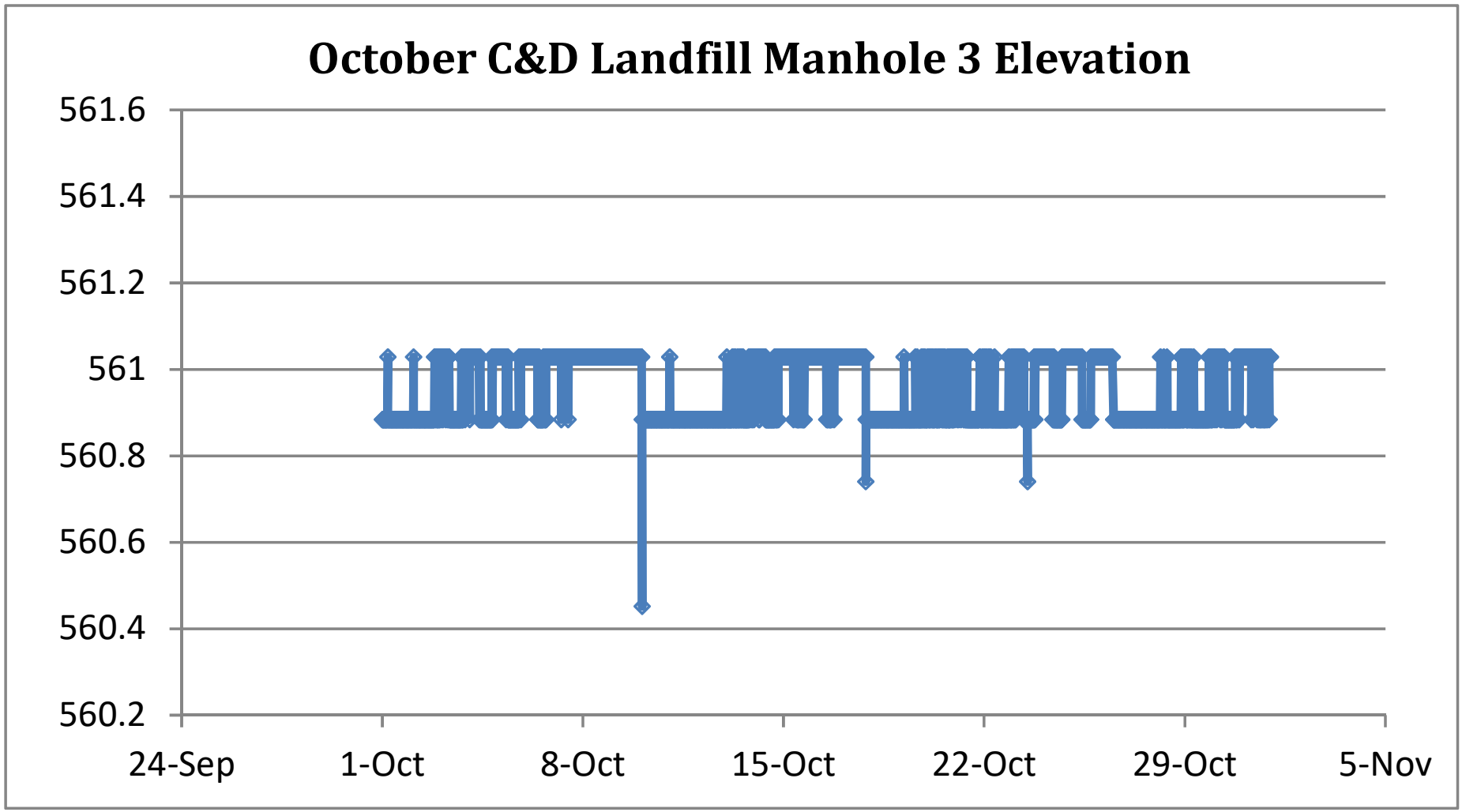
Notes:

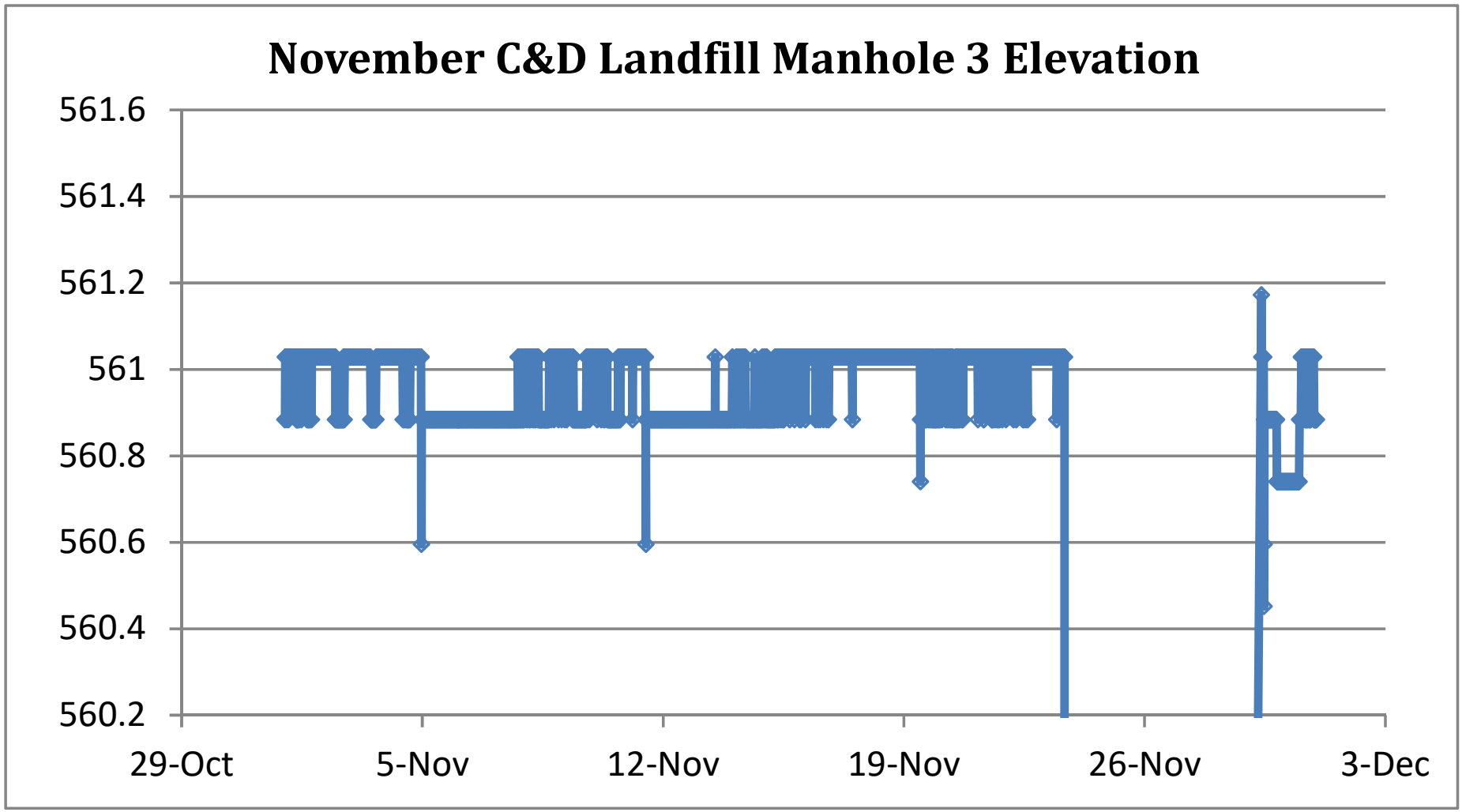
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL SECONDARY LOAD OUT SUMMARY

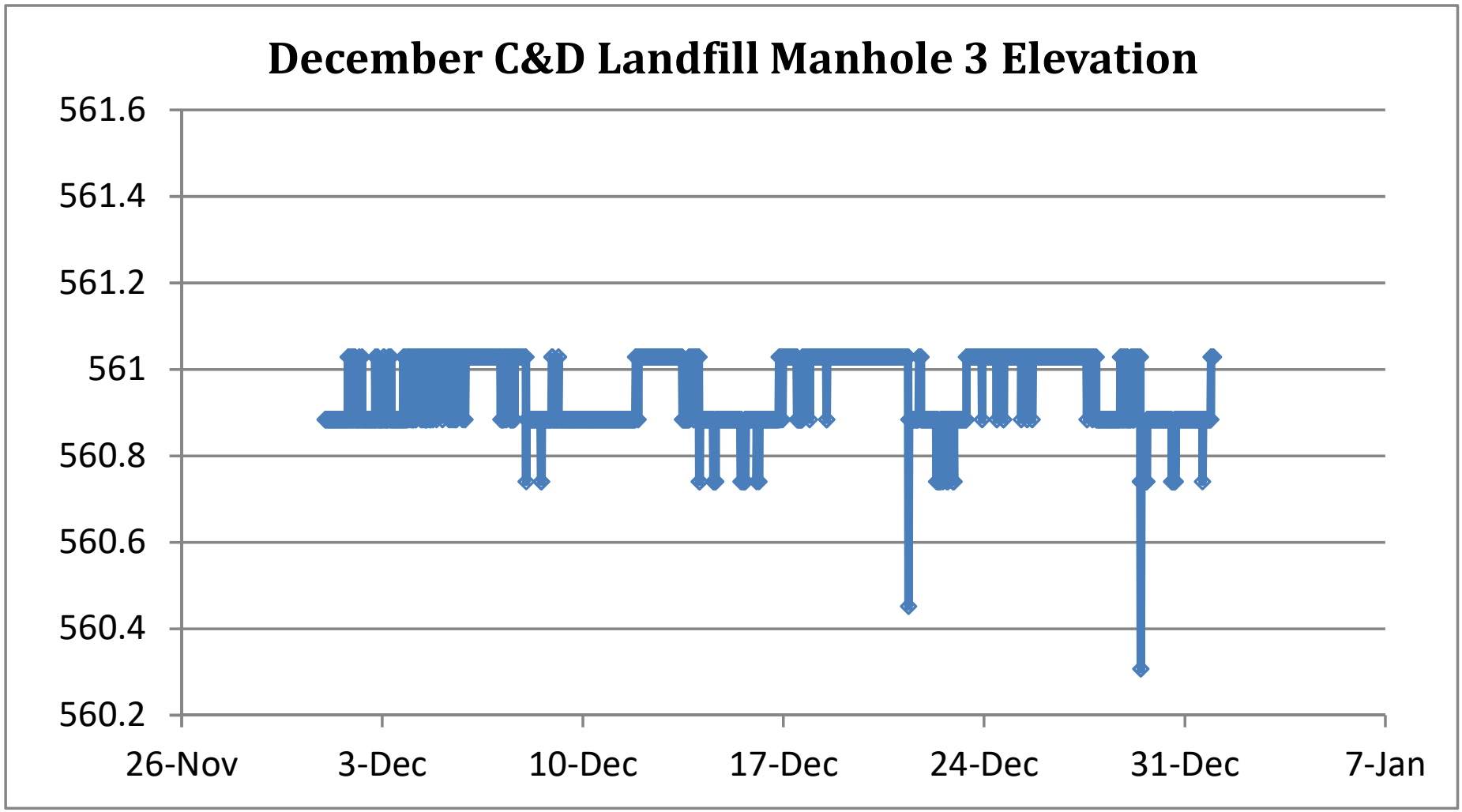
Date	Secondary Load Out Flow Meter (Daily Gallons)	Secondary Load Out Flow Meter (Monthly Gallons)	*Notes:*
Tue - 11/1/22	380	380	
Wed - 11/2/22	70	450	
Thu - 11/3/22	420	870	
Fri - 11/4/22	160	1,030	
Sat - 11/5/22	520	1,550	
Sun - 11/6/22	130	1,680	
Mon - 11/7/22	480	2,160	
Tue - 11/8/22	640	2,800	
Wed - 11/9/22	350	3,150	
Thu - 11/10/22	240	3,390	
Fri - 11/11/22	720	4,110	
Sat - 11/12/22	790	4,900	
Sun - 11/13/22	0	4,900	
Mon - 11/14/22	0	4,900	
Tue - 11/15/22	10	4,910	
Wed - 11/16/22	2,970	7,880	
Thu - 11/17/22	710	8,590	
Fri - 11/18/22		8,590	Power Outage
Sat - 11/19/22	1,120	9,710	
Sun - 11/20/22	0	9,710	
Mon - 11/21/22	0	9,710	
Tue - 11/22/22	0	9,710	
Wed - 11/23/22	0	9,710	
Thu - 11/24/22	10	9,720	
Fri - 11/25/22		9,720	Power Outage
Sat - 11/26/22		9,720	Power Outage
Sun - 11/27/22		9,720	Power Outage
Mon - 11/28/22		9,720	Power Outage
Tue - 11/29/22	3,210	12,930	
Wed - 11/30/22	2,860	15,790	

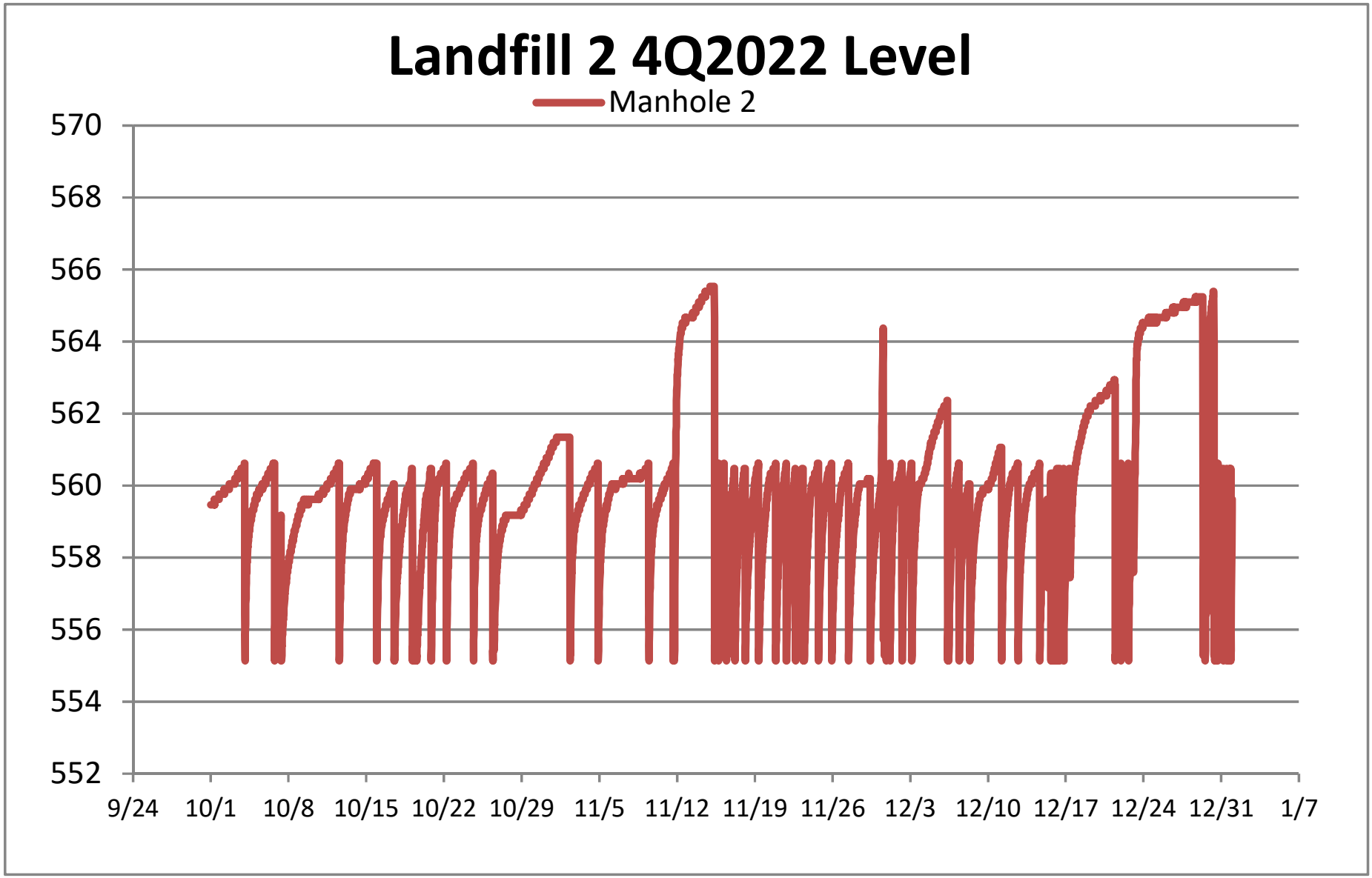
NIAGARA COUNTY REFUSE DISPOSAL DISTRICT CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL SECONDARY LOAD OUT SUMMARY

Date	Secondary Load Out Flow Meter (Daily Gallons)	Secondary Load Out Flow Meter (Monthly Gallons)	*Notes:*
Thu - 12/1/22	510	510	
Fri - 12/2/22	900	1,410	
Sat - 12/3/22	860	2,270	
Sun - 12/4/22	680	2,950	
Mon - 12/5/22	740	3,690	
Tue - 12/6/22	460	4,150	
Wed - 12/7/22	850	5,000	
Thu - 12/8/22	70	5,070	
Fri - 12/9/22	560	5,630	
Sat - 12/10/22	390	6,020	
Sun - 12/11/22	420	6,440	
Mon - 12/12/22	370	6,810	
Tue - 12/13/22	320	7,130	
Wed - 12/14/22	380	7,510	
Thu - 12/15/22	780	8,290	
Fri - 12/16/22	310	8,600	
Sat - 12/17/22	820	9,420	
Sun - 12/18/22	10	9,430	
Mon - 12/19/22	0	9,430	Power Failure
Tue - 12/20/22	0	9,430	Power Failure
Wed - 12/21/22	2,210	11,640	
Thu - 12/22/22	660	12,300	
Fri - 12/23/22	640	12,940	
Sat - 12/24/22	650	13,590	
Sun - 12/25/22	0	13,590	Tank Full/Blizzard restricted access
Mon - 12/26/22	0	13,590	Tank Full/Blizzard restricted access
Tue - 12/27/22	0	13,590	Tank Full/Blizzard restricted access
Wed - 12/28/22	0	13,590	Tank Full/Blizzard restricted access
Thu - 12/29/22	20	13,610	
Fri - 12/30/22	4,090	17,700	
Sat - 12/31/22	20	17,720	


October C&D Landfill Manhole 3 Elevation
561.6
561.4
561.2
561
560.8
560.6
560.4
560.2
24-Sep
1-Oct
8-Oct
15-Oct
22-Oct
29-Oct
5-Nov


November C&D Landfill Manhole 3 Elevation
561.6
561.4
561.2
561
560.8
560.6
560.4
560.2
29-Oct
5-Nov
12-Nov
19-Nov
26-Nov
3-Dec


December C&D Landfill Manhole 3 Elevation
561.6
561.4
561.2
561
560.8
560.6
560.4
560.2
26-Nov
3-Dec
10-Dec
17-Dec
24-Dec
31-Dec
7-Jan


Landfill 2 4Q2022 Level
Manhole 2
570
568
566
564
562
560
558
556
554
552
9/24
10/1
10/8
10/15
10/22
10/29
11/5
11/12
11/19
11/26
12/3
12/10
12/17
12/24
12/31
1/7