

# *SYOSSET LANDFILL*

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## *2023 ANNUAL POST-CLOSURE SUMMARY REPORT*

Volume 2 of 2

Ground Water-Monitoring Program



**TOWN OF OYSTER BAY**

**DEPARTMENT OF PUBLIC WORKS  
SYOSSET, NEW YORK 11791**

**June 2024**



**SYOSSET LANDFILL**

**2023 ANNUAL POST-CLOSURE  
SUMMARY REPORT**

**VOLUME 2 OF 2**

**GROUND WATER-MONITORING PROGRAM**

**June 2024**

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## SECTION 1

### INTRODUCTION

The Town of Oyster Bay (Town) is required to perform ground-water monitoring at the Syosset Landfill (Landfill) during the post-closure period pursuant to two Records of Decision (RODs) from the United States Environmental Protection Agency (USEPA) Region II for the Landfill. These RODs are enforceable under a Consent Decree (CV-90-4183) entered into by the Town and the USEPA.

The scope of the ground water-monitoring program is specified in Section 4 (Groundwater Monitoring System) of the Post-Closure Monitoring and Maintenance Operations Manual (O&M Manual), prepared by Lockwood, Kessler and Bartlett, Inc. (LKB), dated April 2003. The main purpose of the ground water-monitoring program is to track ground water-flow and quality conditions now that capping has been completed, to ensure that the Landfill continues to not pose a threat to public health and the environment via the ground-water pathway. The Landfill was removed from the National Priorities List on April 28, 2005.

The ground water-monitoring system for the Landfill is comprised of 20 wells. The locations of the wells are indicated in Figure 1. As shown in this figure, twelve of the wells are located onsite, along the upgradient (south) boundary, within, and along the downgradient (north) boundary of the Landfill. Note that on-site Well SY-1 could not be located during the 2021 and 2023 monitoring rounds and may no longer be present. The other eight wells are located offsite, downgradient of the Landfill, in three clusters. The on-site wells are screened in either the shallow, intermediate or deep zone of the Magothy Aquifer, which is the uppermost aquifer as the overlying Upper Glacial Formation is unsaturated beneath the Landfill. All the off-site downgradient wells are screened in the Magothy Aquifer.

The post-closure monitoring well network is comprised of the following 11 wells:

- SY-6 (Upgradient Well);
- SY-2R, SY-2D, SY-3, SY-3D and SY-3DD (On-Site Downgradient Wells); and
- PK-10S, PK-10I, PK-10D, RW-12I and RW-12D (Off-Site Downgradient Wells).

This Report presents the results of the 2023 annual well inspection and ground water-monitoring round, which were performed on February 10<sup>th</sup>, 13<sup>th</sup>, March 29<sup>th</sup>, 30<sup>th</sup>, and April 6<sup>th</sup>. The scope of work followed Section 4.0 of the O&M Manual and incorporated the recommendations in the 2021 ground water-monitoring round report. Ground-water monitoring was not required in 2022 due to the every-fifth-quarter monitoring schedule.

Sections 2.0 through 4.0 of this Report summarize the results of monitoring well inspections and/or repairs, water-level measurements, and ground-water sampling, respectively. Section 5.0 compares the 2023 results to the previous annual post-closure monitoring results obtained since 2003, and to the 1988 OU-1 RI and the 1993 OU-2 RI

results. Conclusions and recommendations based on the results are provided in Section 6.0. Each section is supported by tables, figures, and appendices, as appropriate.

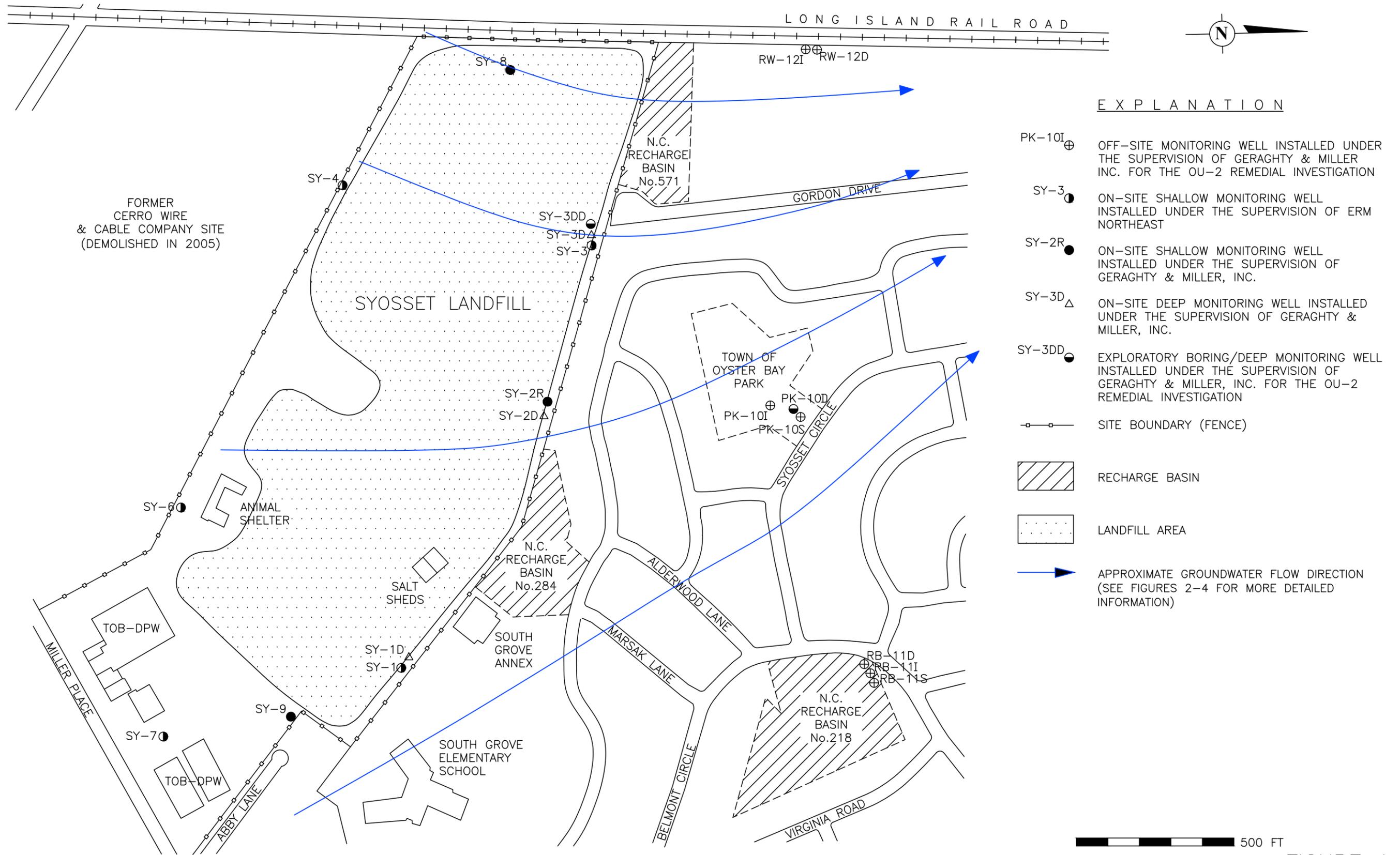


FIGURE 1

**GROUNDWATER MONITORING WELL LOCATION PLAN  
SYOSSET LANDFILL, SYOSSET, NY**

## **SECTION 2**

### **RESULTS OF TASK 1 – WELL INSPECTION, MODIFICATION AND/OR REPAIR**

Prior to performing the 2023 ground water-monitoring round, 19 of the 20 existing monitoring wells were located and inspected on February 10<sup>th</sup> and 13<sup>th</sup>. One well, SY-1, was not able to be found in the field and may no longer be present. The 19 wells found in the field were in usable condition. In terms of repairs, all locks need to be replaced on the wells. The inspection information for each ground water-monitoring well was recorded on a Well Inspection Checklist form, which are included in Appendix A.

## SECTION 3

### RESULTS OF TASK 2 – WATER-LEVEL MEASUREMENT

The 2023 synoptic water-level round was performed on February 10<sup>th</sup> and 13<sup>th</sup>. Measurements were made to the nearest 0.01-foot utilizing an electronic water-level meter. Water-level measurements were obtained from all 19 located site monitoring wells.

The 2023 water-level data are summarized in Table 1. Monitoring well construction details are provided in Table 2. Ground water-flow maps for the shallow, intermediate, and deep zones of the Magothy Aquifer in the vicinity of the Landfill, based on the 2023 water-level measurements, are provided in Figures 2, 3 and 4, respectively.

#### 3.1 Horizontal Ground Water-Flow Directions and Gradients

##### 3.1.1 *Shallow Zone*

As shown in Figure 2, the overall horizontal ground water-flow direction in the shallow zone of the Magothy Aquifer beneath the Landfill is from south to north. Downgradient of the Landfill, horizontal ground water-flow directions converge in the vicinity of Well Cluster PK-10 and then shift direction to the north-northwest. Moreover, based on the ground water-flow directions shown in Figure 2, Well Cluster RW-12 is located side-gradient to, rather than directly downgradient of, the Landfill.

The converging ground water-flow pattern observed in the shallow zone of the Magothy Aquifer downgradient of the Landfill is attributed to the influence of a buried glacial valley that begins beneath the western half of the Landfill and appears to trend to the north-northeast. The Upper Glacial Formation is unconfined and more permeable than the Magothy Formation, which is locally semi-confined. Therefore, in the vicinity of the buried glacial valley, ground water tends to flow out of the section of Magothy Formation in contact with the buried glacial valley and into the Upper Glacial Formation, resulting in the converging flow pattern observed. The buried glacial valley is discussed in more detail in Section 3.3 below.

The horizontal hydraulic gradient for the shallow zone of the Magothy Aquifer, calculated by dividing the difference in water-level elevation between Well SY-6 and Well PK-10S in 2023 (1.31 feet) by the distance between the two wells (1,975 feet), is 0.0007. This gradient is similar to the gradients (0.0008 – 0.0012) observed from 2013 through 2023 and therefore, appears to represent typical conditions. In contrast, in 2011 and 2012, lower horizontal hydraulic gradients (0.0003 and 0.0002, respectively) were observed in this aquifer zone. They were attributed to the unusually rapid rises in the water-table elevation in late 2011 and late 2012 due to the above-normal infiltration from the hurricanes and nor'easters that occurred earlier in those years.

**Table 1**  
**Summary of Water-Level Results**  
**Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report**

Well No.	MP Elev.	MP Description	WL Depth	WL Elev.	Vertical Gradient (ft/ft)
<b>On-Site Wells</b>					
SY-1	198.48	Top of 2-inch steel casing.	NA	NA	
SY-1D	197.02	Top of 4-inch PVC cap.	114.04	82.98	
SY-2R	190.86	Top of 4-inch PVC casing.	108.25	82.61	0.0000 (SY-2R / SY-2D)
SY-2D	190.91	Top of 3-inch PVC casing.	108.30	82.61	
SY-3	193.96	Top of 2-inch steel casing.	110.90	83.06	0.0128 (SY-3 / SY-3D)
SY-3D	194.47	Top of 3-inch PVC casing.	112.10	82.37	0.0008 (SY-3D / SY-3DD)
SY-3DD	193.95	Top of 2-inch PVC casing.	111.85	82.10	
SY-4	192.39	Top of 2-inch steel casing.	108.20	84.19	
SY-6	186.94	Top of 2-inch steel casing.	103.50	83.44	
SY-7	197.46	Top of 2-inch steel casing.	113.75	83.71	
SY-8	197.94	Top of 4-inch PVC cap.	114.55	83.39	
SY-9	202.41	Top of 4-inch PVC casing.	119.25	83.16	
<b>Off-Site Wells</b>					
PK-10S	188.73	Top of 4-inch PVC casing.	106.60	82.13	0.0008 (PK-10S / PK-10I)
PK-10I	187.10	Top of 4-inch PVC casing.	105.15	81.95	0.0015 (PK-10I / PK-10D)
PK-10D	188.25	Top of 4-inch PVC casing.	106.50	81.75	
RW-12I	197.32	Top of 4-inch PVC casing.	115.67	81.65	0.0001 (RW-12I / RW-12D)
RW-12D	197.29	Top of 4-inch PVC casing.	115.65	81.64	
RB-11S	189.91	Top of 4-inch PVC cap.	107.33	82.58	0.0040 (RB-11S / RB-11I)
RB-11I*	190.22	Top of 4-inch PVC casing.	108.50	81.72	-0.0012 (RB-11I / RB-11D)
RB-11D*	190.50	Top of 4-inch PVC casing.	108.60	81.90	

**Notes:**

Water-level data collected on February 13, 2023.

MP - Measuring Point. Some elevations differ from the ones shown in Table 2 due to more recent repairs.

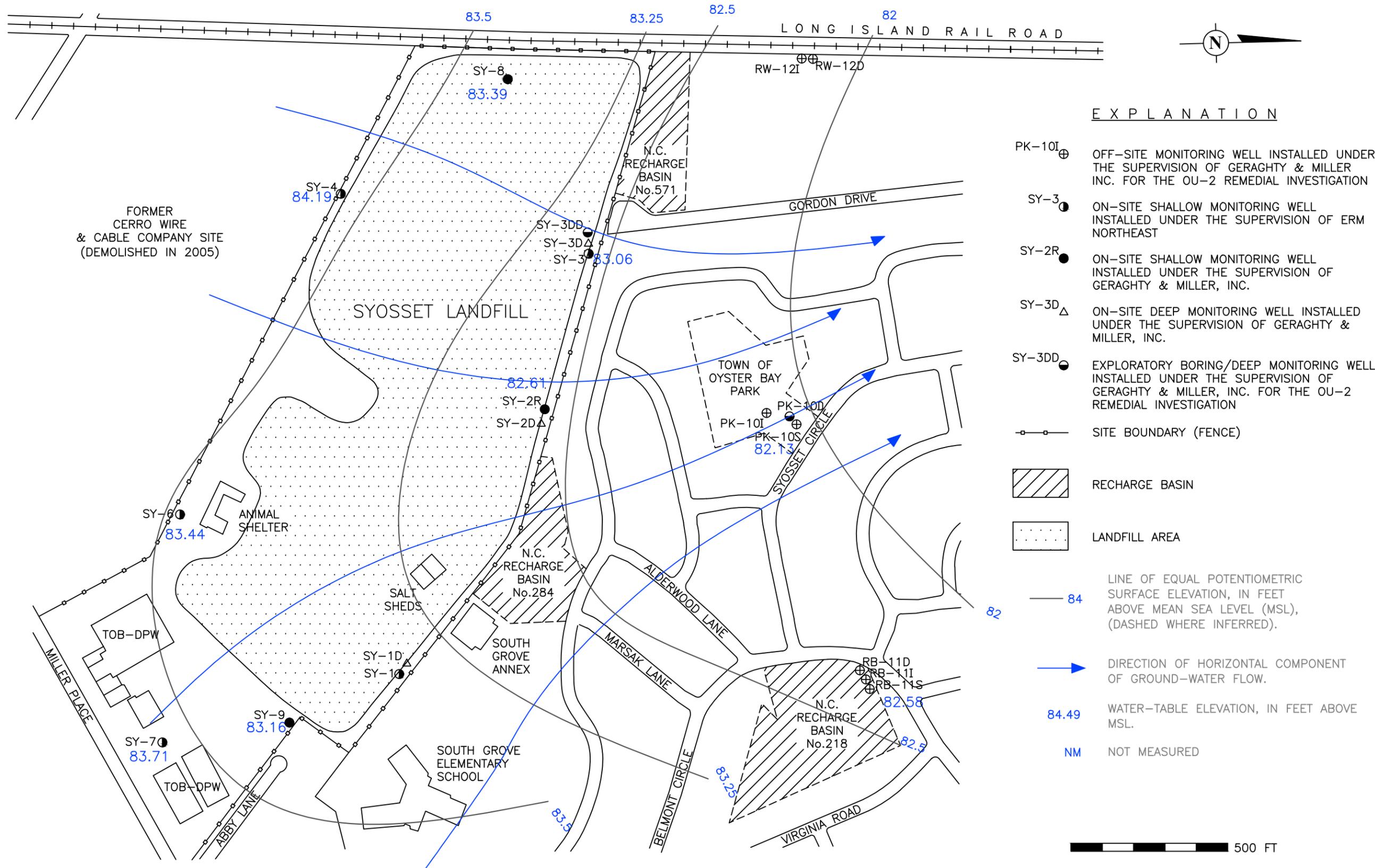
\* MP elevation decreased by 0.1 feet to account for removal of pumps and PVC caps in early 2019.

\*\*Unable to locate Well SY-1 during 2021 and 2023 monitoring rounds, it may no longer be present

Table 2  
Summary of Construction Details for Monitoring Wells Installed at and Near the Syosset Landfill  
(Reference: OU-2 RI Report, 1993)

Well Designation	Completion Date	Well Diameter (inches)	Total Depth (feet below land surface)	Screen Setting (feet below land surface)	Interval Gravel Packed (feet below land surface)	Interval Sealed With Bentonite Pellets (feet below land surface)	Interval Sealed With Bentonite Slurry/Volclay (feet below land surface)	Height of Measuring Point (a) (relative to land surface)	Elevation of Measuring Point (b) (feet above mean sea level)	Well Casing and Screen Material
SY-1 (c)	10/19/82	2	135	125 - 135 (d)	35 - 135 (d)	34 - 35	8 - 34 (e)	-0.15	194.52	Black steel
SY-1D	2/2/88	4	218	182 - 192	179 - 218	177 - 179	2 - 177	+2.31	197.36	PVC
SY-2R	2/12/88	4	150	115 - 125	112 - 150	110 - 112	2 - 110	+1.95	187.12	PVC
SY-2D	2/9/88	3	215	190 - 200	187 - 215	185 - 187	2 - 185	+2.18	186.33	PVC
SY-3 (c)	10/20/82	2	145	135 - 145	47 - 145 (d)	45 - 47	4 - 45 (e)	-0.50	191.38	Black steel
SY-3D	2/25/88	3	240	189 - 199	184 - 240	181 - 184	2 - 181	+2.45	194.74	PVC
<b>SY-3DD</b>	<b>12/9/92</b>	<b>2</b>	<b>540</b>	<b>530 - 540</b>	<b>517 - 540</b>	<b>512 - 517 (f)</b>	<b>2 - 512</b>	<b>0</b>	<b>194.23</b>	<b>PVC, stainless steel</b>
SY-4	10/20/82	2	153	143 - 153 (d)	57 - 153 (d)	54 - 57	4 - 54 (e)	-0.20	193.32	Black steel
SY-5 (c) (h)	10/20/82	2.5	135	125 - 135 (d)	46 - 135 (d)	44 - 46	5 - 44 (e)	+4.20	188.07	Galvanized steel
SY-6 (c)	10/19/82	2	145	135 - 145 (d)	31 - 145 (d)	28 - 31	5 - 28 (e)	-0.10	185.92	Black steel
SY-6D	3/9/88	4	215	195 - 205	192 - 215	190 - 192	3 - 192	-0.30	185.60	PVC
SY-7 (c)	10/21/82	2	145	135 - 145 (d)	52 - 145 (d)	49 - 52	5 - 49 (e)	-0.25	197.46	Black steel
SY-8	12/19/87	4	142	127 - 137	125 - 142	122 - 125	2 - 122	+2.25	195.84	PVC
SY-9	1/29/88	4	140	110 - 120	107 - 140	105 - 107	2 - 105	-0.70	199.41	PVC
W-3	11/10/87	2	120	105 - 115	102 - 120	100 - 102	2 - 100	+2.63	190.61	PVC
W-4 (h)	11/18/87	2	120	104 - 114	102 - 120	100 - 102	2 - 100	+2.56	192.82	PVC
PK-10S	3/25/93	4	149	139 - 149	5 - 149	(i)	(i)	-0.40	188.70	PVC, stainless steel
PK-10I	4/14/93	4	362	352 - 362	346.5 - 363	341.5 - 346.5 (f)	2 - 341.5 (g)	0	187.62	PVC, stainless steel
PK-10D	12/31/92	4	499	489 - 499	477 - 500	472 - 477 (f)	2 - 472 (g)	0	188.23	PVC, stainless steel
RB-11S	8/26/93	4	143	133 - 143	120 - 144	115 - 120 (f)	2 - 115 (g)	0	189.91	PVC, stainless steel
RB-11I	8/19/93	4	358.5	348.5 - 358.5	339 - 359	333 - 339 (f)	2 - 333 (g)	0	190.32	PVC, stainless steel
RB-11D	8/9/93	4	503	493 - 503	487 - 509	480 - 487 (f)	2 - 480 (g)	0	190.60	PVC, stainless steel
RW-12I	10/7/93	4	360	350 - 360	338 - 364	330 - 338 (f)	2 - 330 (g)	0	197.76	PVC, stainless steel
RW-12D	9/27/93	4	500	490 - 500	482 - 508	475 - 482 (f)	2 - 482 (g)	0	197.72	PVC, stainless steel

- (a) The measuring point of each well is the top of the well casing.  
 (b) Survey performed to U.S. Geological Survey (USGS) datum.  
 (c) Well installed during the ERM-Northeast site investigation.  
 (d) It appears that this interval consists of formation collapse.  
 (e) Information not available as to whether grout or backfill (drill cuttings) was used to fill the annular space in this interval.  
 (f) #00 Sand used above J. Morie, Co. No. 1 Sand.  
 (g) Volclay grout sealant used (composed of 100 percent bentonite).  
 (h) Destroyed.  
 (i) Well PK-10S was installed in the initial PK-10I borehole, which had collapsed at 328 feet due to unstable formation; PK-10S was constructed with the gravel pack extending to within 5 feet of land surface to allow for the gravel pack to stabilize before a permanent seal was installed. PK-10S is currently sealed at the land surface with a steel plate and rubber gasket. Gravel can be monitored/added through a 1-inch diameter access port.
- PVC Polyvinyl chloride.



- EXPLANATION**
- PK-10I ⊕ OFF-SITE MONITORING WELL INSTALLED UNDER THE SUPERVISION OF GERAGHTY & MILLER INC. FOR THE OU-2 REMEDIAL INVESTIGATION
  - SY-3 ● ON-SITE SHALLOW MONITORING WELL INSTALLED UNDER THE SUPERVISION OF ERM NORTHEAST
  - SY-2R ● ON-SITE SHALLOW MONITORING WELL INSTALLED UNDER THE SUPERVISION OF GERAGHTY & MILLER, INC.
  - SY-3D △ ON-SITE DEEP MONITORING WELL INSTALLED UNDER THE SUPERVISION OF GERAGHTY & MILLER, INC.
  - SY-3DD ● EXPLORATORY BORING/DEEP MONITORING WELL INSTALLED UNDER THE SUPERVISION OF GERAGHTY & MILLER, INC. FOR THE OU-2 REMEDIAL INVESTIGATION
  - SITE BOUNDARY (FENCE)
  - ▨ RECHARGE BASIN
  - ▤ LANDFILL AREA
  - 84 — LINE OF EQUAL POTENTIOMETRIC SURFACE ELEVATION, IN FEET ABOVE MEAN SEA LEVEL (MSL), (DASHED WHERE INFERRED).
  - ➔ DIRECTION OF HORIZONTAL COMPONENT OF GROUND-WATER FLOW.
  - 84.49 WATER-TABLE ELEVATION, IN FEET ABOVE MSL.
  - NM NOT MEASURED

FIGURE 2

**POTENTIOMETRIC SURFACE OF THE SHALLOW ZONE OF THE MAGOTHY AQUIFER ON FEBRUARY 10, 2023  
SYOSSET LANDFILL, SYOSSET, NY**

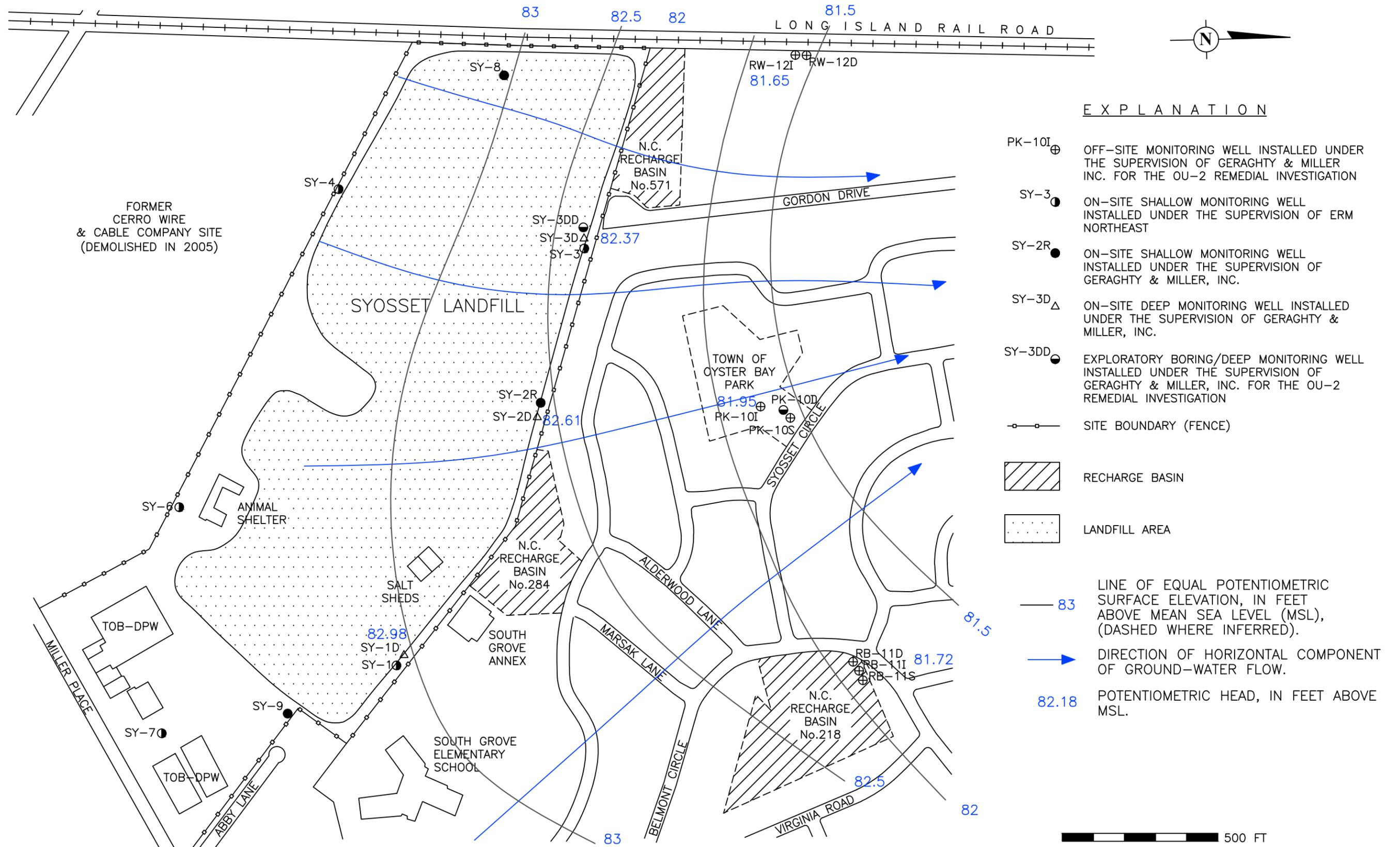


FIGURE 3

POTENTIOMETRIC SURFACE OF THE INTERMEDIATE ZONE OF THE MAGOTHY AQUIFER ON FEBRUARY 10, 2023  
 SYOSSET LANDFILL, SYOSSET, NY

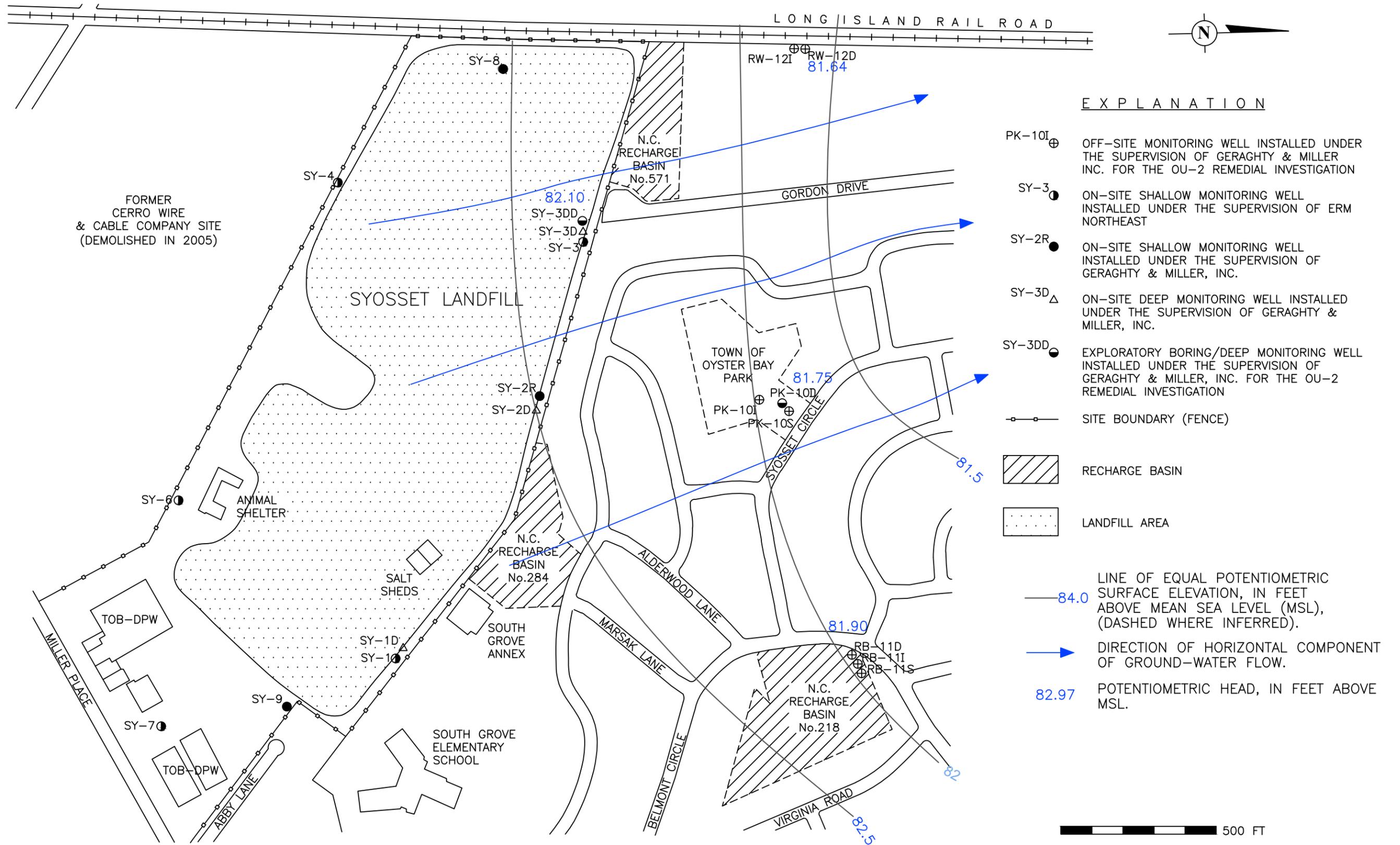


FIGURE 4

**DEEP POTENTIOMETRIC SURFACE ZONE OF THE MAGOTHY AQUIFER ON FEBRUARY 10, 2023**

**SYOSSET LANDFILL, SYOSSET, NY**

### 3.1.2 Intermediate Zone

As shown in Figure 3, based on the 2023 data, horizontal ground water-flow directions in the intermediate zone of the Magothy Aquifer are also generally from south to north beneath the Landfill. They also converge slightly downgradient of the Landfill in the vicinity of Well Cluster PK-10, although the degree of convergence is much less than that observed in the shallow zone of the Magothy Aquifer, and they do not appear to then shift to the northwest.

The horizontal hydraulic gradient for the intermediate zone of the Magothy Aquifer, based on difference in water-level elevation in Wells SY-1D and PK-10I (1.03 feet) and the distance between the wells (1,400 feet), is 0.0007, which is similar to the shallow zone gradient.

### 3.1.3 Deep Zone

As shown in Figure 4, based on the 2023 data, the horizontal ground water-flow direction in the deep zone of the Magothy Aquifer is generally from south-southeast to north-northwest in the vicinity of the Landfill. This flow direction is based on data from just four downgradient wells and should therefore be considered approximate. However, it is consistent with the shallow and intermediate zone results, as well as the results from previous monitoring rounds. The convergence noted in the shallower zones of the Magothy Aquifer is not observed in this zone. This finding is consistent with the fact that the deep zone of the Magothy Aquifer is not bisected by the buried glacial valley.

The horizontal hydraulic gradient for the deep zone of the Magothy Aquifer, based on the difference in the water-level elevation in Wells SY-3DD and RW-12D (0.46 feet) and the distance between the wells (900 feet), is 0.0005, which is slightly lower than the horizontal hydraulic gradients in the shallow and intermediate zones of the aquifer.

## 3.2 Vertical Hydraulic Gradients

Vertical hydraulic gradients are an indication of whether vertical ground water-flow directions, in the absence of confining units, are upward, downward or negligible. Vertical hydraulic gradients calculated using the 2023 water-level data are included in Table 1. A positive value indicates a downward gradient, whereas a negative value indicates an upward gradient. The vertical hydraulic gradients shown in Table 1 indicate that downward gradients predominate, and that the highest-magnitude downward gradients occur between the shallow and intermediate zones of the Magothy Aquifer at On-Site Downgradient Well Cluster SY-3. The vertical hydraulic gradient between the shallow and intermediate zones of the Magothy Aquifer is not calculated for Well Cluster RW-12 because there is no shallow zone well at this location.

Vertical hydraulic gradients between the intermediate and deep zones of the Magothy Aquifer are lower in magnitude and varied from slightly downward to slightly upward at the four downgradient well clusters for which data are available. The only upward gradient was between the intermediate and deep zone wells at Well Cluster RB-11.

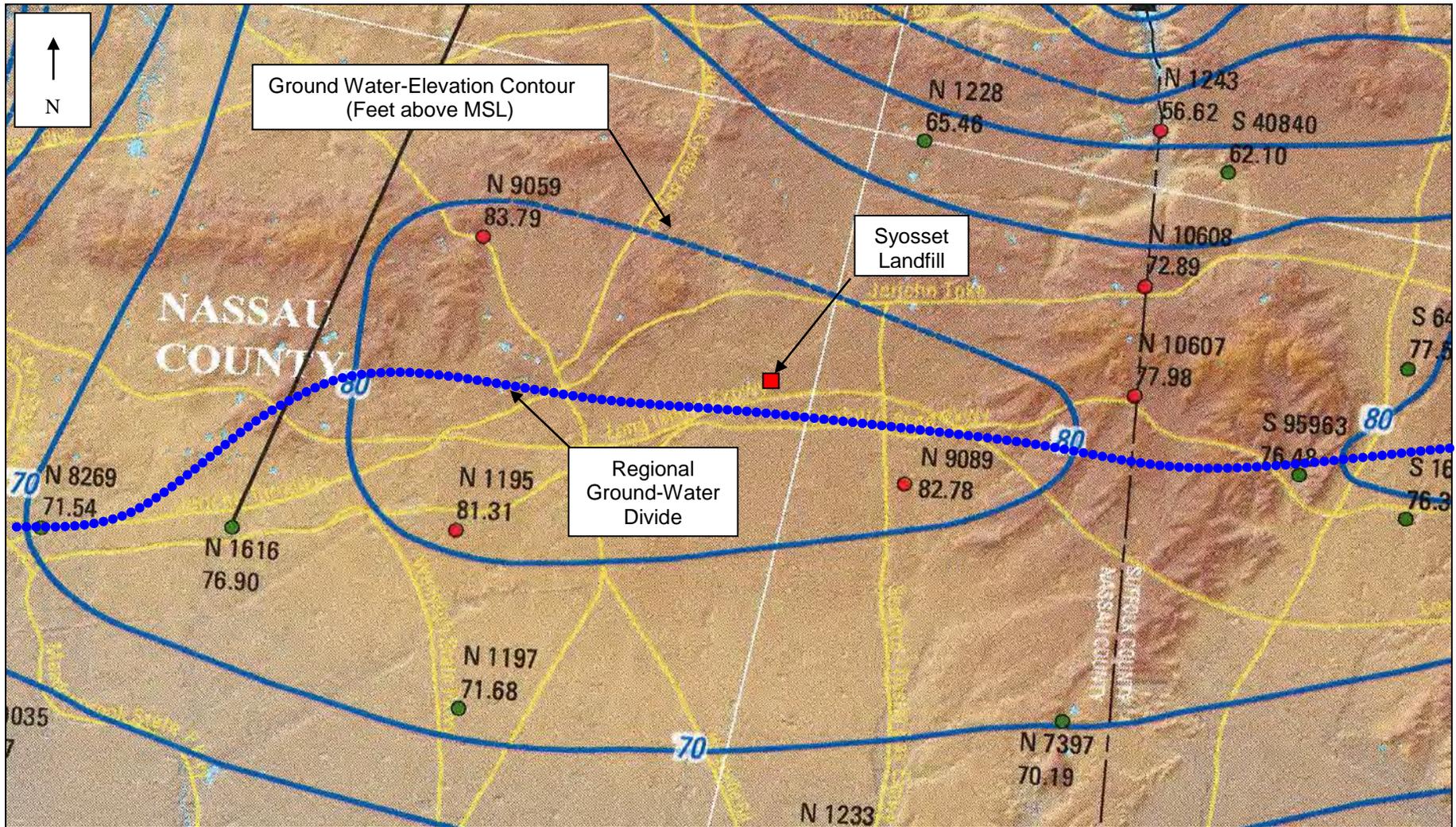
The predominance of downward vertical hydraulic gradients indicates the potential for ground water to migrate vertically downward in the absence of hydraulic barriers such as clay layers. Comparison of the average vertical gradient between the shallow and intermediate zone wells at each cluster (0.0044) to the horizontal gradient of the shallow zone of the Magothy Aquifer (0.0007) indicates that it is six times higher. This finding is consistent with the Landfill being located near the regional ground-water divide, as shown in Figure 5. Typically, ground water-flow directions in such areas have a stronger downward component. For this reason, assessment of impacts to the intermediate and deep zone wells must also take ground water-flow patterns in the shallow zone of the Magothy Aquifer into consideration.

### **3.3 Influence of the Buried Glacial Valley on Ground Water-Flow Patterns**

Figure 6 shows a generalized structure contour map of the top of Magothy Formation based on the well boring logs from the OU-1 and OU-2 RIs. As shown in Figure 6, a trough in the Magothy Formation begins beneath the western portion of the Landfill and extends off-site, apparently to the north-northeast. This feature was formed by erosion of the Magothy Formation by the overlying Upper Glacial Formation and is known as a buried glacial valley.

Due to differences in the hydraulic properties of Upper Glacial and Magothy Formations, the buried glacial valley influences local ground water-flow patterns. Specifically, the Upper Glacial Formation is more permeable than the Magothy Formation, which is finer-grained and contains localized clay layers that can cause semi-confined conditions. Therefore, in the vicinity of the buried glacial valley, ground water tends to flow out of the Magothy Aquifer and into the Upper Glacial Formation due to the hydraulic pressure differential between the formations. The influence of the buried glacial valley is most pronounced where it intersects the water table. Comparison of the structural contours in Figure 6 to the water-level data in Figure 2 indicates that the buried glacial valley gets deeper to the north-northeast and intersects the water table downgradient of the Landfill. This finding explains the converging ground water-flow patterns in the shallow and intermediate zones of the Magothy Aquifer downgradient of the Landfill.

Moreover, it should be noted that as a result of the tendency for horizontal ground water-flow directions in the shallow and intermediate zones of the Magothy Aquifer to converge downgradient of the Landfill, there is potential for contaminants that are not associated with the Landfill to migrate into the area downgradient of the Landfill. For example, in 2005, the gasoline service station located on the northwest corner of the intersection of South Oyster Bay Road and Miller Place replaced its underground storage tanks. LKB personnel noted that the excavated soil stockpile exhibited a very strong gasoline odor, indicating that a release had occurred. This gasoline service-station site could potentially



Source: Sheet 1 of USGS Scientific Investigations Map 3326, showing water table-elevation contours during April-May 2013.

**FIGURE 5**

LOCATION OF SYOSSET LANDFILL  
RELATIVE TO REGIONAL GROUND-WATER DIVIDE

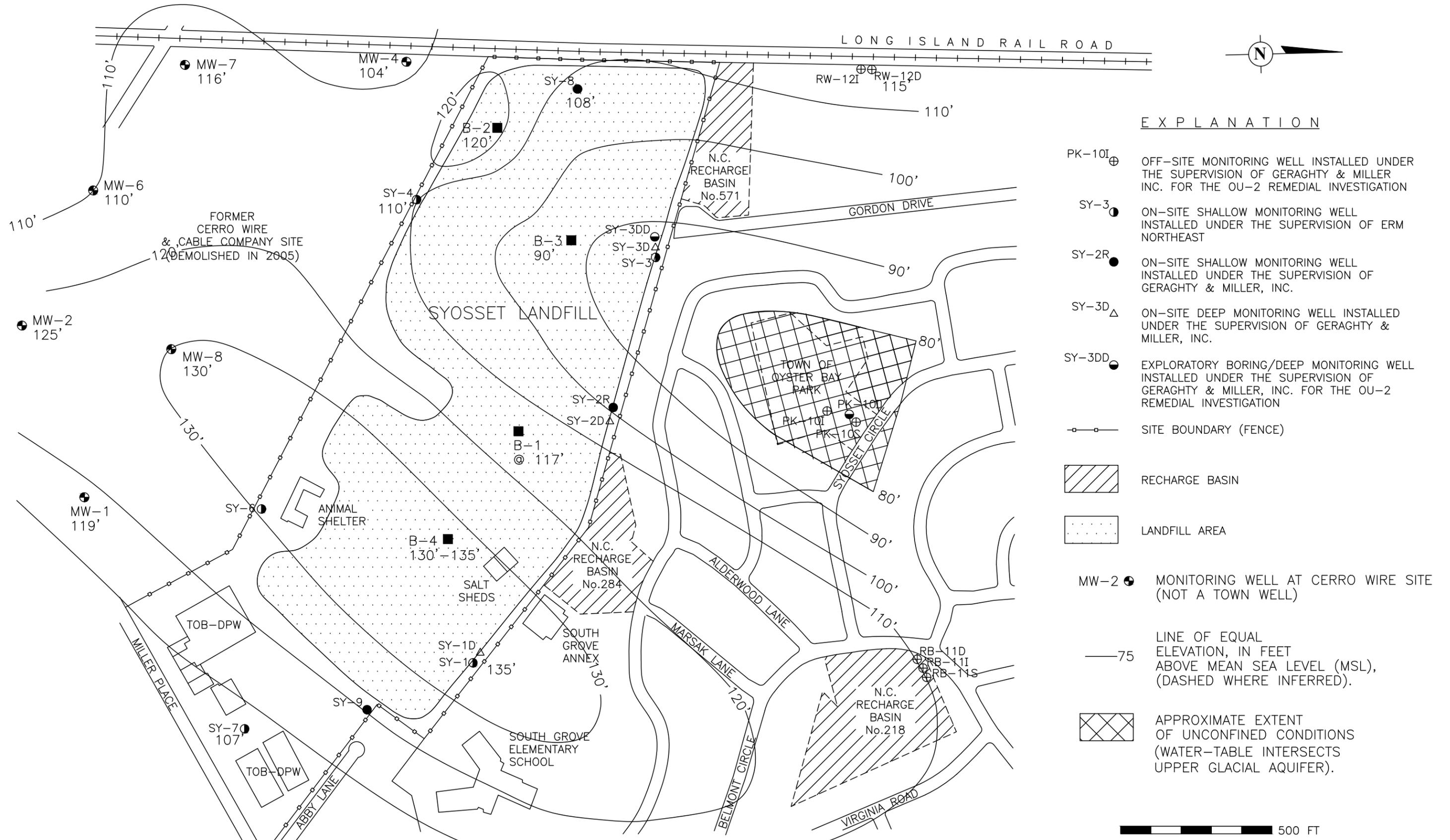


FIGURE 6  
 GENERALIZED STRUCTURE CONTOUR MAP OF THE TOP OF THE MAGOTHY FORMATION  
 SYOSSET LANDFILL, SYOSSET, NY

be a source of the gasoline-related VOCs that were previously detected periodically at Well Cluster PK-10. Also, during 2005, the former Cerro Wire site, located adjacent to and upgradient of the Landfill, and comprised of a large industrial building, water tower and paved parking areas, was demolished and a large quantity of contaminated soil was reportedly removed. The site was an open excavation for most of 2005, but was eventually re-graded, covered with topsoil and seeded. The changes at the Cerro Wire site in 2005 resulted in increased recharge directly upgradient of the Landfill and could potentially result in the contamination plume from that site migrating north beneath the Landfill. Recently, this site was redeveloped as an Amazon.com distribution center. The excavation associated with redevelopment could also potentially influence ground-water conditions beneath the Landfill.

## SECTION 4

### RESULTS OF TASK 3 – GROUND-WATER MONITORING

The 2023 ground water-quality monitoring round was performed on March 29<sup>th</sup>, 30<sup>th</sup>, and April 6<sup>th</sup>, and included the following 11 wells specified in the O&M Manual:

- SY-6 (Upgradient Well);
- SY-2R, SY-2D, SY-3, SY-3D and SY-3DD (On-Site Downgradient Wells); and
- PK-10S, PK-10I, PK-10D, RW-12I and RW-12D (Off-Site Downgradient Wells).

These ground water-monitoring wells were purged and sampled utilizing the modified low-flow procedure. The purged water from the off-site downgradient wells was collected and disposed of at a licensed facility. Two trip blanks, a field blank, a matrix spike/matrix spike duplicate, and an anonymous duplicate sample from Well SY-2D, labeled “Well SY-5”, were also collected. The sample from Well SY-3 was collected using a bailer due to the age, small diameter and steel construction of this well’s casing.

The samples were analyzed for the following parameters:

- USEPA Target Compound List (TCL) of Volatile Organic Compounds (VOCs)
- NYSDEC 6NYCRR Part 363 Baseline Field and Leachate Indicator Parameters
- Total and Dissolved USEPA Target Analyte List (TAL) Inorganic Parameters
- Total Cyanide

The ground-water samples were collected by LKB. The water purged from the off-site downgradient wells was collected and disposed of by Eastern Environmental Solutions, Inc. of Manorville, New York. Laboratory analyses were performed by CHEMTECH of Mountainside, New Jersey. The results were validated by Environmental Data Services, Inc. of Palm Beach Gardens, Florida.

The field parameter readings and validated laboratory results are summarized in Tables 3 through 7. The monitoring results are compared to NYSDEC Part 703 Ambient Water Quality Standards and TOGS 1.1.1 Guidance Values for Class GA (potable) ground water, except for the parameters arsenic and total dissolved solids (TDS). The results for arsenic and TDS are compared to the Federal MCL for arsenic and SMCL for TDS, respectively, because they are more stringent than the NYSDEC standards for these parameters. The data usability summary reports and validated laboratory data are provided in Appendix B.

#### 4.1 Results of Field Parameter Measurements

Prior to collecting the field parameter readings, a minimum of one well casing volume plus ten percent was purged from each well. Field parameters were then monitored continuously utilizing a YSI Professional Handheld Multiparameter Water Quality Meter equipped with a flow-through cell until the readings stabilized. Turbidity was also measured with a Hach portable turbidity meter. The final field readings are provided in Table 3. Review of Table 3 indicates noticeable differences for certain field parameters in certain downgradient wells, relative to Well SY-6. The specific differences vary by well and are summarized in the table below:

Well No.	Field Parameter Difference(s) Relative to Upgradient Well SY-6
SY-2R	Higher conductivity; lower pH and dissolved oxygen (DO); negative oxidation-reduction potential (ORP); slight odor.
SY-2D	Higher conductivity; lower DO and pH; negative ORP; slight odor.
SY-3	Higher conductivity; lower DO; negative ORP; slight odor.
SY-3D	Higher temperature and conductivity; lower DO; negative ORP.
SY-3DD	Higher temperature; lower DO, negative ORP.
PK-10S	Higher conductivity; lower pH.
PK-10I	Higher conductivity; lower DO; negative ORP.
PK-10D	Higher conductivity; lower DO; lower pH.
RW-12I	Higher conductivity; lower DO, negative ORP.
RW-12D	Higher conductivity; lower DO, negative ORP.

These differences include water-quality differences that appear to be Landfill-related, such as higher conductivity, lower DO, and negative ORP. Odor was also detected in three of the on-site downgradient wells. However, they also indicate water-quality differences that are attributed to water-quality impacts that are not Landfill-related. Specifically, relative to the upgradient well, turbidity was lower in every downgradient well except Well SY-3, which was sampled with a bailer instead of a pump. The higher turbidity in the upgradient well may be due to the recent reconstruction work at the Cerro Wire site. Overall, these findings are consistent with previous years' field parameter results.

Standards exist for two of the field parameters – pH and turbidity. The pH of ground water in the upgradient well and seven of the 10 downgradient wells was lower than the 6.5-8.5 standard unit range minimum. However, this is attributed to the naturally occurring low

Table 3  
 Summary of Field Parameter Monitoring Results  
 Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Field Parameter	Units	Water <sup>1</sup> Quality Standard	Upgradient Well SY-6	Downgradient Wells									
				On-Site					Off-Site				
				SY-2R	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
Temperature	°C	--	14.8	14.0	14.4	15.3	17.3	16.8	14.7	15.4	15.4	15.4	15.6
Conductivity	mS/cm	--	14.700	1,778.00	610.00	1,523.00	2.47	37.900	134.200	2,043.00	491.000	1,702.00	1,031.00
Dissolved Oxygen	mg/L	--	4.81	2.23	1.32	1.54	0.46	0.35	5.67	0.31	0.33	0.86	0.32
pH	SU	6.5-8.5	<b><u>6.28</u></b>	<b><u>5.68</u></b>	<b><u>5.87</u></b>	6.81	6.53	<b><u>6.46</u></b>	<b><u>5.39</u></b>	<b><u>5.99</u></b>	<b><u>5.57</u></b>	6.51	<b><u>5.98</u></b>
Oxidation-Reduction Potential	mV	--	55	-12	-76	-144	-38	-159	30	-50	30	-131	-3
Field Observations	NA	--	Clear,	Clear,	Clear,	Dark,	Clear,	Clear,	Clear,	Clear,	Clear,	Clear,	Clear,
		--	No Odor	Slt. Odor	Slt. Odor	Slt. Odor	No Odor	No Odor	No Odor	No Odor	No Odor	No Odor	No Odor
Turbidity	NTU	5	<b><u>29.4</u></b>	<b><u>5.6</u></b>	3.3	<b><u>70</u></b>	3.31	2.57	0.77	1.57	3.45	2.00	0.70

Notes:

1 = NYSDEC Part 703 Ambient Water Quality Standards or TOGS 1.1.1 Guidance Value (GV) for Class GA (Potable) ground water.

°C = Degrees Celcius.

mS/cm = miliSiemens per centimeter.

mg/L = milligrams per Liter.

SU = Standard Units.

mV = milliVolts.

NA = Not applicable.

NTU = Nephelometric Turbidity Units.

**Bold and Underlined** = Exceeds ground water-quality standard or guidance value.

-- = No standard or guidance value.

The elevated turbidity in Well SY-3 this round is due to this well being sampled with a bailer instead of a submersible pump.

pH of the ground water on Long Island. Turbidity was higher than the 5-NTU limit only in the upgradient well and two on-site downgradient wells. The highest turbidity in Well SY-3 is attributed to the sampling bailer resuspending sediment in the well. The slightly elevated turbidity in Wells SY-2R may be Landfill-related.

#### **4.2 Results of Volatile Organic Compound (VOC) Analyses**

The 2023 VOC results are summarized in Table 4. As shown in Table 4, VOCs were not detected in the upgradient well or in four of the five on-site downgradient wells. VOC detections in the remaining on-site downgradient well was limited to two VOCs at concentrations much lower than their standard or guidance value. The total VOC concentration in this on-site downgradient well was the estimated (J-qualified) concentration of 3.28 J ug/L, detected in Well SY-3D. This well is located near the northeast corner of the Landfill and is screened in the shallow zone of the Magothy Aquifer.

At Off-Site Downgradient Well Cluster PK-10, VOCs were not detected in Well PK-10S, screened in the shallow zone of the Magothy Aquifer; and VOC detections in Wells PK-10I and PK-10D, screened in the intermediate and deep zones of the Magothy Aquifer, respectively, were limited to three and five VOCs with estimated total concentrations of 3.10 J ug/L and 9.86 J ug/L. Except for a slight exceedance for chloroform in Well PK-10D, VOC concentrations in these wells were lower than their Class GA standards.

At Off-Site Downgradient Well Cluster RW-12, a number of chlorinated solvents and aromatic hydrocarbons were detected in both wells. Specifically, twelve VOCs were detected in the intermediate zone well (RW-12I) and fifteen VOCs were detected in the deep zone well (RW-12D). In general, the same VOCs were detected in both wells, however the highest concentrations of most of the VOCs detected in both wells occurred in the deep zone well. The total VOC concentration in Well RW-12I was 55.0 J ug/L, which is approximately 6 ug/L higher than last year's result. The total VOC concentration in Well RW-12D was 67.0 J ug/L, which is also higher than last year's result by approximately 10 ug/L.

The concentrations of three VOCs in Well RW-12I (chlorobenzene, 1,2-dichlorobenzene and 1,4-dichlorobenzene) and four VOCs in Well RW-12D (chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene and 1,1-dichloroethane) were higher than their respective Class GA ground-water standards. The exceedances of chlorobenzene and 1,4-dichlorobenzene ranged from approximately three to six times higher than the standards. The exceedances for 1,2-dichlorobenzene and 1,1-dichloroethane ranged from to slightly higher to around two times higher than the standards.

In summary, the VOC results from the 2023 post-closure monitoring round continue to indicate that the Landfill is not a significant source of VOCs. Specifically, VOC detections in the on-site downgradient wells were limited to low, estimated concentrations of acetone and trichloroethene in Well SY-3. Moreover, the fact that other VOCs detected at the off-site downgradient well clusters were not present in the on-site downgradient wells

Table 4  
Summary of Volatile Organic Compound (VOC) Results  
Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water <sup>1</sup> Quality Standard	Upgradient Well	Downgradient Wells											
				On-Site						Off-Site					
				SY-6	SY-2R	SY-5 <sup>2</sup>	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
1,1,1-Trichloroethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1,2,2-Tetrachloroethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1,2-Trichloroethane	ug/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1,2-Trichlorotrifluoroethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,1-Dichloroethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.50	<b>6.30</b>	
1,1-Dichloroethene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.74 J	0.24 J	
1,2,3-Trichlorobenzene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2,4-Trichlorobenzene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2-Dibromoethane	ug/L	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,2-Dichlorobenzene	ug/L	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20 J	<1.0	<b>4.80</b>	<b>6.80</b>	
1,2-Dichloroethane	ug/L	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.52 J	
1,2-Dichloropropane	ug/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
1,3-Dichlorobenzene	ug/L	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.40	2.90	
1,4-Dichlorobenzene	ug/L	3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>9.10</b>	<b>10.40</b>	
2-Butanone	ug/L	50 <sup>GV</sup>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
2-Hexanone	ug/L	50 <sup>GV</sup>	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
4-Methyl-2-pentanone	ug/L	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Acetone	ug/L	50 <sup>GV</sup>	<5.0	<5.0	<5.0	<5.0	2.90	<5.0	<5.0	<5.0	<5.0	<5.0	2.7 J	<5.0	
Benzene	ug/L	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.66 J	0.21 J	
Bromochloromethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromodichloromethane	ug/L	50 <sup>GV</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromoform	ug/L	50 <sup>GV</sup>	<1.0	<1.0	<1.0 J	<1.0 J	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bromomethane	ug/L	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Carbon disulfide	ug/L	60 <sup>GV</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Carbon tetrachloride	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Chlorobenzene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.50	0.38 J	<b>22.3</b>	<b>29.4</b>	
Chloroethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Chloroform	ug/L	7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>8.20</b>	<1.0	1.70
Chloromethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.28 J	
cis-1,2-Dichloroethene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.70	4.80	
cis-1,3-Dichloropropene	ug/L	0.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Cyclohexane	ug/L	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Dibromochloromethane	ug/L	50 <sup>GV</sup>	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Dichlorodifluoromethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.43 J	<1.0	0.35 J	
Ethylbenzene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Isopropylbenzene	ug/L	5	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
m&p-xylenes	ug/L	10*	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Methyl acetate	ug/L	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Methyl tert-butyl ether	ug/L	10 <sup>GV</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.40 J	<1.0	0.26 J	<1.0	
Methylcyclohexane	ug/L	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Methylene chloride	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
o-xylene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Styrene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Tetrachloroethene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.43 J	1.50	0.88 J	
Toluene	ug/L	5 <sup>GV</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
trans-1,2-Dichloroethene	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
trans-1,3-Dichloropropene	ug/L	0.4	<1.0	<1.0 J	<1.0 J	<1.0 J	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Trichloroethene	ug/L	5	<1.0	<1.0	<1.0	<1.0	0.38	<1.0	<1.0	<1.0	<1.0	<1.0	0.42 J	1.30	0.90 J
Trichlorofluoromethane	ug/L	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Vinyl chloride	ug/L	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.30	
No. of Target VOCs Detected <sup>3</sup> :	out of 51	N/A	0/51	0/51	0/51	0/51	2/51	0/51	0/51	0/51	0/51	3/51	5/51	12/51	15/51
Total VOC Concentration <sup>4</sup> :	ug/L	--	ND	ND	ND	ND	3.28 J	ND	ND	ND	3.10 J	9.86 J	54.96 J	66.98 J	

**Notes:**

ug/L = micrograms per Liter.

1 = NYSDEC Part 703 Ambient Water Quality Standards or TOGS 1.1.1. Guidance Value (GV) for Class GA (Potable) ground water.

2 = Duplicate sample collected from Well SY-2R.

3 = m- and p-xylene counted as one VOC.

4 = Based on all target VOCs detected, including estimated concentrations.

J = Estimated concentration.

**Bold and Underlined** = Exceeds ground water-quality standard or guidance value.

\* = Based on 5-ug/L limit for each isomer.

NA = Not applicable.

ND = None detected.

-- = No standard or guidance value.

indicates that they are not Landfill-related. This finding is consistent with the ground water-flow directions shown in Figures 2 through 4, which indicate that Well Cluster RW-12 is located sidegradient to, rather than downgradient of, the Landfill; and that contamination not associated with the Landfill can occur at Off-Site Downgradient Well Cluster PK-10 due to the converging ground water-flow pattern caused by the buried glacial valley.

#### **4.3 Results of NYSDEC 6NYCRR Part 363 Leachate Indicator Analyses**

The leachate indicators analyzed for included alkalinity, ammonia, BOD (biological oxygen demand), bromide, chloride, color, COD (chemical oxygen demand), total hardness, nitrate, total phenols, sulfate, TDS (total dissolved solids), TKN (total Kjeldahl nitrogen) and TOC (total organic carbon).

Review of Table 5 indicates that Landfill-related exceedances were limited to ammonia, chloride, color, phenols and TDS in certain downgradient wells. Downgradient increases in concentration for the leachate indicators are primarily limited to On-Site Downgradient Wells SY-3 and SY-3D, and Off-Site Downgradient Wells PK-10I, RW-12I and RW-12D. In these wells, nearly all leachate indicators were detected at higher concentrations than in Upgradient Well SY-6. The highest concentrations occurred in Wells SY-3 and SY-3D. In contrast, no leachate indicators were detected at higher concentrations in Wells SY-3DD, PK-10S, and PK-10D. Only two parameters (chloride and TDS) were detected at higher concentrations in Wells SY-2R and SY-2D.

Based on comparison of the leachate indicator results for the on-site and off-site downgradient wells, most of the parameters detected at elevated concentrations in On-Site Downgradient Wells SY-3 and SY-3D were detected at similar concentrations in Off-Site Downgradient Well PK-10I, indicating Landfill-related impacts in this well. However, this comparison also indicates that most of the parameters (e.g., alkalinity, ammonia, BOD, COD, sulfate and TKN) were detected at higher concentrations in one or both wells at Well Cluster RW-12 than in the on-site downgradient wells. Moreover, at least one parameter (e.g., chloride) detected at relatively high concentrations in most on-site downgradient wells and Off-Site Downgradient Well PK-10I, was detected at much lower concentrations in Well Cluster RW-12. These disparities, together with the VOC and ground water-flow direction results, suggest that the leachate indicators detected at Well Cluster RW-12 are not Landfill-related.

Taken as a whole, the 2023 leachate indicator results indicate that the Landfill continues to be a relatively minor source of the 6NYCRR Part 363 leachate-related contaminants.

#### **4.4 Results of USEPA Target Analyte List (TAL) and Cyanide Analyses**

The samples were analyzed for both total and dissolved TAL metals, and total cyanide. The RCRA (Resource Conservation and Recovery Act) and PPL (Priority Pollutant List) metals, which are a subset of 14 of the more toxic metals, are included in the TAL metals.

Table 5  
Summary of Leachate Indicator Results  
Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water <sup>1</sup> Quality Standard	Upgradient Well	Downgradient Wells										
				On-Site						Off-Site				
				SY-6	SY-2R	SY-5 <sup>2</sup>	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I
Alkalinity	mg/L	--	98.4	34.7	80.4	78.2	149	218	7.60	7.40	135	22.3	568	68.9
Ammonia	mg/L	2	<0.10	<0.10	<0.10	<0.10	<b>6.10</b>	<b>13.7</b>	<0.10	<0.10	<b>7.20</b>	<0.10	<b>62.1</b>	<b>4.70</b>
BOD	mg/L	--	<2.00	<2.00	<2.00	<2.0	<2.0	2.00	<2.00	<2.0	<2.0	<2.00	<2.00	38.8
Bromide	mg/L	2	0.96 J	<2.00	<2.00	<2.0	<2.0	<2.00	<2.00	<2.0	1.1 J	<2.0	1.90 J	1.1 J
Chloride	mg/L	250	34.8	<b>511</b>	118	118	<b>335</b>	<b>640</b>	4.70	8.60	<b>506</b>	99.9	136	151
COD	mg/L	--	<10.0	<10.0	<10.0	<10.0	23.0	6.97 J	<10.0	<10.0	5.97 J	3.96 J	35.0	5.97 J
Color	cu	15	<5.00	<5.0	<5.00	<5.00	<b>1250</b>	<b>400</b>	<5.00	<5.0	<5.0	<5.0	<5.0	<5.0
Hardness, Total	mg/L	--	140	160	55	58.0	180	190	6.2 J	40	160	72	290	190
Nitrate	mg/L	10	6.20 J	1.80	2.60	2.6	0.22 J	<0.50	0.26 J	4.70	<0.50	6.60 J	<0.50	9.20 J
Phenols, Total	mg/L	0.001	<0.05	<0.05	<0.05	<0.05	<b>0.43</b>	<b>0.28</b>	<0.05	<0.050	<b>0.29</b>	<0.050	<b>0.048 J</b>	<0.050
Sulfate	mg/L	250	34.1	30.0	23.6	24.1	37.7	50.7	1.70 J	21.6	37.3	26.8	90.2	149
TDS	mg/L	500*	163	<b>980</b>	328	287	<b>811</b>	<b>1320</b>	3.00 J	1.0	435	249	<b>756</b>	<b>675</b>
TKN	mg/L	--	0.15 J	0.17 J	0.22 J	0.20 J	6.30	13.3	0.16 J	<0.50	7.00	<0.50	39.1	3.20
TOC	mg/L	--	1.90	2.40	4.80	5.00	4.40	5.10	0.63 J	1.00	3.00	1.30	13.3	4.30

Notes:

1 = NYSDEC Part 703 Ambient Water Quality Standards or TOGS 1.1.1 Guidance Value (GV) for Class GA (Potable) ground water.

2 = Duplicate sample collected from Well SY-3DD.

\* = TDS limit is Federal SMCL, which is more stringent than the 1,000-mg/L NYSDEC limit for Class GA ground water.

mg/L = milligrams per Liter.

cu = color units.

J = Estimated concentration.

BOD = Biological oxygen demand.

COD = Chemical oxygen demand.

TDS = Total dissolved solids.

TKN = Total Kjeldhal nitrogen.

TOC = Total organic carbon.

**Bold & Underlined** = Exceeds ground water-quality standard or guidance value.

-- = No standard or guidance value.

The results are summarized in Table 6, and the RCRA and PPL metals are identified with asterisks.

As shown by the Table 6 total metals results, of the 24 parameters analyzed for, six (antimony, lead, selenium, silver, thallium and vanadium) were not detected. Moreover, of the 18 detected parameters, nine (aluminum, barium, beryllium, cadmium, cobalt, copper, cyanide, mercury and nickel) were only detected sporadically and/or at low, estimated concentrations below their respective Class GA standard or guidance value. One additional parameter (zinc) was only detected at a significant concentration in the upgradient well. The remaining eight detected TAL parameters include one RCRA/PPL metal (arsenic) and seven non-RCRA/PPL metals (calcium, chromium, iron, magnesium, manganese, potassium and sodium). The results for these eight parameters are discussed below.

Arsenic was detected in the unfiltered samples from On-Site Downgradient Wells SY-3 and SY-3D at concentrations exceeding the 10-ug/L Federal MCL by a factor of approximately 2.5.

Calcium, chromium, iron, magnesium, manganese, potassium and sodium were each detected in one or more downgradient wells at concentrations noticeably higher than in Upgradient Well SY-6. Except for sodium, which had a more widespread occurrence, the highest concentrations of these metals occurred in Wells SY-3, SY-3D, PK-10I, RW-12I and/or RW-12D.

Comparison of the results for the on-site and off-site downgradient wells indicates that Landfill-related off-site impacts are minimal. For example, the only metals occurring at higher concentration in off-site wells are calcium, chromium, magnesium and potassium. Moreover, the differences between the metals results for the on-site downgradient wells and Off-Site Downgradient Well Cluster RW-12 suggest that certain parameters detected at Well Cluster RW-12 are not Landfill-related. Review of Table 6 also indicates that overall, the detected TAL parameters were present at similar concentrations in unfiltered and filtered samples. This indicates that the detected TAL metals are primarily present in ground water in dissolved form.

Taken as a whole, the TAL metal and total cyanide results indicate that the Landfill continues to be a relatively minor source of certain metals/inorganic parameters but is not a significant source of the RCRA/PPL metals. The only Landfill-related exceedances for a RCRA/PPL metal in 2023 were exceedances for arsenic in Wells SY-3 and SY-3D. The exceedance for chromium in Well RW-12I does not appear to be Landfill-related.

Table 6  
Summary of Total and Dissolved Metals and Cyanide Results  
Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water <sup>1</sup> Quality Standard	Upgradient Well SY-6	Downgradient Wells										
				On-Site						Off-Site				
				SY-2R	SY-2D	SY-5 <sup>2</sup>	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
<b>TOTAL METALS RESULTS</b>														
Aluminum	ug/L	--	<200	220	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Antimony*	ug/L	3	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Arsenic*	ug/L	10**	<10	6.8 J	<10	<10	<b>23</b>	<b>25</b>	<10	<10	<10	<10	<10	<10
Barium*	ug/L	1,000	92 J	180 J	28 J	22 J	170 J	220	<200	16 J	63 J	31 J	56 J	52 J
Beryllium*	ug/L	3 <sup>GV</sup>	<5.0	2.3 J	<5.0	<5.0	0.40 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cadmium*	ug/L	5	<5.0	<5.0	<5.0	<5.0	3.0 J	1.1 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Calcium	ug/L	--	37,000	50,000	20,000	19,000	50,000	51,000	1,500 J	12,000	45,000	19,000	63,000	50,000
Chromium*	ug/L	50	2.1 J	4.8 J	6.3 J	13	<10	1.8 J	4.4 J	4.0 J	3.9 J	2.8 J	<b>57</b>	5.1 J
Cobalt	ug/L	--	<50	25 J	<50	<50	<50	19 J	1.1 J	<50	45 J	1.2 J	1.7 J	<50
Copper*	ug/L	200	23 J	<25	<25	<25	<25	<25	<25	<25	<25	<25	19 J	<25
Cyanide	ug/L	200	<10	3.1	2.9	3.6	<10	<10	<10	4.2 J	5.8 J	3.7 J	15	10
Iron	ug/L	300	<b>590</b>	100	<b>95 J</b>	130	<b>79,000</b>	<b>27,000</b>	<b>320</b>	42 J	84 J	38 J	<b>650</b>	85 J
Lead*	ug/L	25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Magnesium	ug/L	35,000 <sup>GV</sup>	11,000	9,200	2,000 J	1,900 J	14,000	16,000	590 J	2,500 J	12,000	5,900	32,000	15,000
Manganese	ug/L	300	21	47	<b>4.8 J</b>	5.1 J	<b>3,800</b>	<b>1,800</b>	52	2.6 J	<b>1,800</b>	26	64	12
Mercury*	ug/L	0.7	<0.20	<0.20	<0.20	<0.20	0.13 J	0.20	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel*	ug/L	100	6.1 J	85	5.5 J	7.8 J	4.2 J	5.2 J	24 J	5.7 J	4.7 J	6.3 J	87	9.9 J
Potassium	ug/L	--	1,300 J	4,800 J	1,700 J	1,600 J	16,000	23,000	<5,000	<5,000	18,000	680 J	60,000	4,400 J
Selenium*	ug/L	10	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35 J	<35	<35
Silver*	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	ug/L	20,000	<b>24,000</b>	<b>260,000</b>	<b>92,000</b>	<b>88,000</b>	<b>200,000</b>	<b>360,000</b>	4,000 J	4,700 J	<b>310,000</b>	<b>57,000</b>	<b>120,000</b>	<b>110,000</b>
Thallium*	ug/L	0.5	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Vanadium	ug/L	--	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Zinc*	ug/L	2,000 <sup>GV</sup>	1,200	120	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
<b>DISSOLVED METALS RESULTS</b>														
Aluminum	ug/L	--	<200	190 J	<200	<200	<200	<200	<200	<50	<50	<50	<50	<50
Antimony*	ug/L	3	<60	<60	<60	<60	<60	<60	<60	<25	<25	<25	<25	<25
Arsenic*	ug/L	10**	<4.6	<10	<10	<10	8.4 J	<30	<10	<10	<10	<10	<10	<10
Barium*	ug/L	1,000	89 J	180 J	25 J	20 J	110 J	230	<200	5.63 J	45.6 J	17.9 J	46.5 J	35.9 J
Beryllium*	ug/L	3 <sup>GV</sup>	<5.0	<b>3.1 J</b>	<5.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0
Cadmium*	ug/L	5	<5.0	<5.0	<5.0	<5.0	<5.0	1.0 J	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	ug/L	--	36,000	49,000	18,000	19,000	50,000	53,000 J	<1,500	10,700	40,100	17,500	59,800	45,900
Chromium*	ug/L	50	1.4 J	2.1 J	<10	1.6 J	<10	<10	<10	1.52 J	<5	<5	<5	<5
Cobalt	ug/L	--	<50	25 J	<50	<50	<50	20 J	0.89 J	<15	42.8	2.15 J	1.18 J	1.33 J
Copper*	ug/L	200	<8.3	<25	<25	<25	11 J	<25	<25	<10	<10	<10	<10	<10
Iron	ug/L	300	120	46 J	<100	<100	<b>2,000</b>	<b>28,000</b>	210	25.1 J	75.0	42.0 J	72	33.6 J
Lead*	ug/L	25	<10	<10	<10	<10	<10	<10	<10	<6	<6	<6	<6	<6
Magnesium	ug/L	35,000 <sup>GV</sup>	11,000	9,200	1,900 J	2,000 J	14,000	16,000	550 J	2,540	11,600	6,100	33,200	15,900
Manganese	ug/L	300	<26	49	7.0 J	<7.5	<b>3,500</b>	<b>1,800</b>	48	3.02 J	<b>1,670</b>	25.4	60	11.8
Mercury*	ug/L	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.10 J	0.26
Nickel*	ug/L	100	5.1 J	83	<40	<40	<40	<40	19 J	2.56 J	4.37 J	4.29 J	6.82 J	2.26 J
Potassium	ug/L	--	1,400 J	4,900 J	1,700 J	1,600 J	15,000	24,000	500 J	1,430	18,400	1,670	62,500	5,200
Selenium*	ug/L	10	<35	<35	<35	<35	<35	<35	<35	<10	<10	<10	<10	<10
Silver*	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<5	<5	<5	<5	<5
Sodium	ug/L	20,000	<b>23,000</b>	<b>260,000</b>	<b>87,000</b>	<b>91,000</b>	<b>200,000</b>	<b>370,000</b>	3,700 J	5,320	<b>323,000</b>	<b>59,100</b>	<b>140,000</b>	<b>117,000</b>
Thallium*	ug/L	0.5	<25	<25	<25	<25	<25	<25	<25	<20	<20	<20	<20	<20
Vanadium	ug/L	--	<50	<50	<50	<50	<50	<50	<50	<20	<20	<20	<20	<20
Zinc*	ug/L	2,000 <sup>GV</sup>	1,100	120	<60	<60	<60	<60	<60	8.03 J	8.46 J	9.28 J	2.26 J	4.19 J

**Notes:**

ug/L = micrograms per Liter.

1 = NYSDEC Part 703 Ambient Water Quality Standard or TOGS 1.1.1 Guidance Value (GV) for Class GA (Potable) ground water.

2 = Duplicate sample collected from Well SY-2D.

J = Estimated concentration.

**Bold & Underlined** = Exceeds ground water-quality standard or guidance value.

\* = RCRA/PPL metal.

\*\* = USEPA MCL, revised downward from 50 ug/L effective January 2006. NYSDEC Part 703 Class GA Standard is 25 ug/L.

-- = No standard or guidance value.

## SECTION 5

### COMPARISON OF CURRENT MONITORING RESULTS TO PREVIOUS MONITORING RESULTS

The 2023 ground water-monitoring results were compared to previous post-closure monitoring results, and the OU-1 RI and the OU-2 RI results, to determine if ground water-flow patterns and/or quality conditions have changed significantly since the Landfill was capped. This entailed 1) comparison of the current and historical post-closure water-level data, 2) comparison of the current and previous overall results for each parameter group, 3) comparison, on a well-to-well basis, of the current and previous results for Landfill-related exceedances of the ground-water standards or guidance values, and 4) trend analyses for the leachate indicators that have historically been detected on a regular basis.

#### 5.1 Temporal Variation in Water-Level Elevations

The 2023 water-level results are compared to post-closure water-level data collected since 2003 in Table 7. Review of Table 7 indicates that in February 2023 water-level elevations were, on average 2.13 feet lower relative to the most recent 2021 data. This change is attributed to natural temporal variations in recharge from precipitation, such as the below-normal precipitation from late 2021 through late 2023.

Review of the current ground water-contour maps (Figures 2, 3 and 4) indicates that, overall, ground water-flow directions are similar. One notable difference is that during the period from 2005 through 2008, ground water-flow directions in the shallow and intermediate zones of the Magothy Aquifer showed less convergence downgradient of the Landfill. This difference is attributed to the fact that the water-table elevation rose at a faster than normal rate during that period, which temporarily masked the influence of the buried glacial valley on ground water-flow patterns. The other notable difference is that in 2011 and 2012, water-level contours in the shallow and intermediate zones of the aquifer beneath the eastern half of the Landfill extended further south (upgradient) than is typically observed. This difference is attributed to the above-normal infiltration from the hurricanes and nor'easters that occurred earlier in these years.

#### 5.2 Temporal Variation in Ground-Water Quality

The 2023 ground water-quality results are also consistent with the previous post-closure monitoring results and the OU-1 and OU-2 RI results; and continue to indicate that the Landfill is not a significant source of VOCs or toxic metals and only relatively minor Landfill-related impacts are present in Off-Site Downgradient Well PK-10I. Moreover, based on comparison of the results for on-site and off-site wells and examination of the ground water-flow directions, the elevated levels of some VOCs and certain leachate indicator and TAL metals at Well Cluster RW-12 do not appear to be Landfill-related. The gasoline-related VOCs detected in Well PK-10S in 2003 and 2008 were again not detected in 2023. Semivolatile organic compounds, pesticides and polychlorinated



biphenyls were not detected during the July 2003 initial (baseline) post-closure monitoring round, and with USEPA approval samples are no longer collected and analyzed for these parameters.

The 2023 total VOC results are compared to previous results in Table 8. Review of Table 8 indicates that relative to 2021, total VOC concentrations were similar in most wells. Off-Site Downgradient wells RW-12I and RW-12D had slightly higher VOC concentrations than in 2021. The results for all wells were consistent with recent results, and overall total VOC concentrations in the downgradient wells continue to exhibit stable or decreasing trends. Moreover, no exceedances of a VOC ground water-quality standard or guidance value have occurred in an on-site downgradient well since 2003.

The 2023 exceedances for leachate indicators are compared to previous exceedances in Table 9. Review of Table 9 indicates that exceedances in the downgradient wells were basically the same as, or fewer, than in 2021. Overall, the leachate indicators for which exceedances occur have been stable or decreasing over time in every downgradient well. This finding indicates that, with respect to exceedances of the ground-water standards and guidance values for leachate indicators, ground water-quality conditions downgradient of the Landfill have been consistent or improving since 1993. Moreover, the relatively small number of exceedances listed in Table 9 demonstrates that the Landfill is not a significant source of leachate indicators at concentrations exceeding Class GA ground water-quality standards or guidance values.

With respect to TAL metals, the exceedances noted in the filtered samples from each well since 1993 are compared in Table 10. The results for the filtered samples are utilized because LKB noted that there were marked differences in the total results versus the dissolved results for certain samples collected during the OU-2 RI. This most likely was due to the presence of entrained sediment in the unfiltered samples as they were not collected utilizing a low-flow method. For this reason, only the TAL metals exceedances for filtered samples were compared.

Review of Table 10 indicates that the overall distribution of exceedances for dissolved TAL metals in 2023 is similar for all 18 post-closure monitoring rounds since 2003, particularly in the off-site downgradient wells. Taken as a whole, the results of this comparison indicate that the Landfill is not a significant source of the most toxic metals and is only a relatively minor source of certain other common metals at concentrations exceeding the Class GA ground-water standards and guidance values.

### **5.3 Results of Trend Analyses**

Trend analyses were performed to further assess post-closure changes in ground water-quality conditions. The trend analyses were performed for nine leachate indicator parameters that have been detected on a relatively consistent basis during the post-closure monitoring rounds. A series of nine graphs showing the trends for each parameter in all wells from 2003 through 2023 is provided in Appendix C. These results are also summarized in Table 11. The prior results from the 1988 OU-1 RI ground water-

Table 9  
Comparison of Current Leachate Indicator Exceedances to Previous Exceedances  
Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Well Number	Exceedances In July/Dec.'93	Exceedances In July 2003	Exceedances In Dec. 2005	Exceedances In Dec. 2006	Exceedances In Dec. 2007	Exceedances In Dec. 2008	Exceedances In Nov. 2009	Exceedances In Dec. 2010	Exceedances In Nov. 2011	Exceedances In Dec. 2012	Exceedances In Dec. 2013	Exceedances In Sept. 2014	Exceedances In Dec. 2015	Exceedances In Dec. 2016	Exceedances In Mar. 2018	Exceedances In June 2019	Exceedances In July 2020	Exceedances In Nov. 2021	Exceedances In Mar 2023
Upgradient Well																			
SY-6	None Noted	Color	None Noted	None Noted	None Noted	None Noted	Phenols	Phenols	None Noted	None Noted	None Noted	None Noted	Phenols	None Noted	None Noted	Color and Phenols	Color	Color and TDS	None Noted
On-Site Downgradient Wells																			
SY-2R	Chloride and TDS	Color	Bromide (Slight)	Chloride and TDS	Chloride and TDS	Bromide Chloride and TDS	Chloride and TDS	None Noted	None Noted	Chloride and TDS	None Noted	Chloride and TDS	Chloride Phenols and TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS
SY-2D	Ammonia	Ammonia	Ammonia	Ammonia (Very Slight)	Ammonia (Very Slight)	None Noted	None Noted	TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS	Chloride and TDS	Chloride Phenols and TDS	Chloride and TDS	Chloride, Color and TDS	Chloride and TDS	Chloride and TDS	Chloride, Phenols and TDS	None Noted
SY-3	Ammonia Chloride and TDS	Ammonia Chloride Color and TDS	Ammonia Bromide Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia and TDS	Ammonia and Color	Ammonia Color and TDS	Ammonia Color, Phenols and TDS	Ammonia Color and TDS	Ammonia Color and TDS	Ammonia Color and TDS	Ammonia, Color Phenols and TDS	Ammonia, Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color, Phenols, and TDS	Ammonia, Chloride, Color, Phenols, and TDS
SY-3D	Ammonia Chloride and TDS	Ammonia Bromide Chloride and TDS	Ammonia Bromide Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride, Color and TDS	Ammonia Chloride, Color and TDS	Ammonia Chloride Color, Phenols and TDS	Ammonia Chloride Color and TDS	Ammonia Chloride Color and TDS	Ammonia Chloride Color and TDS	Ammonia Chloride Color, Phenols and TDS	Ammonia Chloride Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color and TDS	Ammonia, Chloride, Color, Phenols, and TDS	Ammonia, Chloride, Color, Phenols, and TDS
SY-3DD	None Noted	Color	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	Phenols	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted
Off-Site Downgradient Wells																			
PK-10S	Sulfate*	Color	None Noted	None Noted	None Noted	None Noted	Color	None Noted	None Noted	None Noted	None Noted	None Noted	Phenols	Phenols	None Noted	None Noted	None Noted	None Noted	None Noted
PK-10I	Ammonia Chloride and TDS	Ammonia Color and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Bromide Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride Phenols and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Chloride and TDS	Ammonia Bromide Chloride and TDS	Ammonia, Chloride and TDS	Ammonia, Chloride and TDS	Ammonia, Chloride and TDS	Ammonia, Chloride, Phenols, and TDS	Ammonia, Chloride, and Phenols
PK-10D	None Noted	None Noted	Color	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	Phenols	None Noted	None Noted	Phenols	None Noted	None Noted				
RW-12I	Ammonia	Ammonia Bromide and TDS	Ammonia and Color	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide and TDS	Ammonia Bromide Phenols and TDS	Ammonia Bromide Phenols and TDS	Ammonia Bromide and TDS	Ammonia, Color Phenols and TDS	Ammonia Bromide and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia, Phenols, and TDS
RW-12D	Ammonia and TDS	Ammonia and TDS	Ammonia Color and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia Phenols and TDS	Ammonia and TDS	Ammonia Phenols and TDS	Ammonia and TDS	Ammonia Bromide and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS	Ammonia and TDS

Notes:  
\* = Not Landfill-related.

Table 10  
Comparison of Filtered Sample Metal Exceedances to Previous Exceedances  
Syosset Landfill 2023 Annual Post-Closure Ground Water-Monitoring Report

Well Number	Exceedances In July/Dec.'93	Exceedances In July 2003	Exceedances In Dec. 2005	Exceedances In Dec. 2006	Exceedances In Dec. 2007	Exceedances In Dec. 2008	Exceedances In Nov. 2009	Exceedances In Dec. 2010	Exceedances In Nov. 2011	Exceedances In Dec. 2012	Exceedances In Dec. 2013	Exceedances In Sept. 2014	Exceedances In Dec. 2015	Exceedances In Dec. 2016	Exceedances In Mar. 2018	Exceedances In June 2019	Exceedances In July 2020	Exceedances In Nov. 2021	Exceedances In Mar. 2023
Upgradient Well																			
SY-6	Sodium	None Noted	Iron	Iron	Iron and Zinc	Iron and Zinc	Iron and Zinc	Zinc	Antimony and Zinc	Zinc	None Noted	Zinc	Iron and Zinc	None Noted	None Noted	Iron	None Noted	None Noted	Sodium
On-Site Downgradient Wells																			
SY-2R	Iron and Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium and Thallium	Sodium	Antimony and Sodium	Sodium	Sodium	Sodium	Beryllium, Nickel and Sodium	Beryllium and Sodium	Beryllium and Sodium	Sodium	Sodium	Sodium	Beryllium and Sodium
SY-2D	Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese Sodium and Thallium	Manganese and Sodium	Manganese Sodium and Thallium	Manganese and Sodium	Antimony Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Iron Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Sodium
SY-3	Antimony Arsenic, Iron Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Iron Manganese and Sodium	Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese Sodium and Thallium	Arsenic, Iron Manganese and Sodium	Antimony Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron, Manganese, and Sodium	Iron, Manganese, and Sodium			
SY-3D	Iron Magnesium Manganese and Sodium	Magnesium Manganese and Sodium	Manganese and Sodium	Iron Magnesium Manganese and Sodium	Iron Magnesium Manganese and Sodium	Arsenic, Iron Magnesium Manganese and Sodium	Arsenic, Iron Manganese Sodium and Thallium	Arsenic, Iron Manganese and Sodium	Antimony, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese Sodium and Thallium	Arsenic, Iron Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Iron, Manganese and Sodium	Arsenic, Iron Manganese and Sodium	Iron, Manganese, and Sodium	Iron, Manganese, and Sodium
SY-3DD	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	Thallium	None Noted	Thallium	None Noted	None Noted	None Noted
Off-Site Downgradient Wells																			
PK-10S	Iron and Sodium	None Noted	Selenium (slight)	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted	None Noted
PK-10I	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese Sodium and Thallium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium	Manganese and Sodium
PK-10D	Nickel*	Nickel*	Mercury* and Nickel*	Nickel* and Sodium (slight)	Mercury* and Sodium (slight)	Mercury* and Sodium (slight)	Mercury* and Sodium	Mercury* and Sodium	Mercury* and Sodium	Mercury* and Sodium	Mercury* and Sodium	Mercury* and Sodium	Mercury*, Iron and Sodium	Mercury* and Sodium	Sodium	Sodium	Sodium	Sodium	Sodium
RW-12I	Sodium	Sodium	Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium Sodium and Thallium	Iron Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium and Sodium	Magnesium Selenium and Sodium**	Magnesium and Sodium	Magnesium and Sodium	Sodium
RW-12D	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium

**Notes:**  
 \* = Not Landfill-related.  
 \*\* = In 2018, an exceedance for arsenic also occurred in Well RW-12I, but was considered spurious because arsenic was not detected in the unfiltered sample from this well.  
 The 2003 iron results were qualified as rejected by data validator. The 2003 iron concentrations in Wells SY-3, SY-3D, RW-12I and RW-12D likely exceeded the limit but are not listed above.  
 Prior to 2006, the limit for arsenic was 25 ug/L. In 2006 it was lowered to 10 ug/L (new MCL). The 2003 arsenic concentrations in Wells SY-3 and SY-3D exceeded the current limit.



Table 11

Trend Analysis Summary for Selected Part 363 Leachate Indicator Parameters  
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Date*	Upgradient Well	Downgradient Wells										
		On-Site					Off-Site					
		SY-6	SY-2R	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
<b>Chemical Oxygen Demand</b>												
OU1 RI 5/2/1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 12/1/1993	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/26/2003	2.5	2.5	2.5	45	6	2.5	2.5	29	2.5	2.5	13	13
12/27/2005	38	2.5	2.5	5	25	2.5	2.5	2.5	2.5	39	17	17
12/27/2006	2.5	2.5	2.5	8	27	2.5	2.5	15	2.5	46	27	27
12/21/2007	2.5	2.5	2.5	38	21	2.5	2.5	9.13	2.5	65	18	18
12/29/2008	5.92	5.92	2.5	26	22	2.5	2.5	2.5	2.5	16	18	18
11/3/2009	2.5	5.98	2.5	38	26	2.5	2.5	5.98	2.5	67	9.83	9.83
12/6/2010	2.5	2.5	2.5	10.8	18.1	2.5	2.5	2.5	2.5	62.2	2.5	2.5
11/15/2011	1.20	1.20	3.79	11.6	14.6	1.20	4.77	5.75	2.81	71.4	16.5	16.5
12/13/2012	1.255	5.56	6.55	2.58	17.3	1.25	1.25	1.25	1.25	54.1	7.68	7.68
11/11/2013	3.03	4.97	4	11.8	18.5	2.5	2.5	7.88	2.5	52.5	9.82	9.82
9/24/2014	2.5	2.5	2.5	5.76	5.76	2.5	2.5	9.76	2.5	52.8	10.8	10.8
12/4/2015	5	6.59	15.5	15.5	14.5	2.5	2.5	2.5	2.5	31.4	2.5	2.5
6/24/2019	5	12.2	5	145	11.2	5	5	5	5	46.5	13.3	13.3
7/23/2020	9	5	4	10	13	5	5	6	4	31	12	12
11/9/2021	5.0	6.18	6.18	90.3	9.15	5	5	5.19	5	34.9	6.18	6.18
3/30/2023	5	5	5	23	6.97	5	5	5.97	3.96	35.0	5.97	5.97
Long-Term Trend:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
Trend Since 2005:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
<b>Chloride</b>												
OU1 RI 5/2/1988	30	52	220	99	340	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	20	57	200	110	330	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	43	449	108	136	269	4.2	15	291	14	106	122	122
OU2 RI 12/1/1993	34	613	97	176	265	4.5	14	287	14.2	118	139	139
6/26/2003	19	140	120	380	300	3.5	7.8	19	19	26	150	150
12/27/2005	18	180	160	380	510	4.1	10	340	47	190	160	160
12/27/2006	3.4	470	140	430	680	3.3	8.9	350	64	170	190	190
12/21/2007	7.2	480	150	490	770	3.9	11	390	90	240	190	190
12/29/2008	10	640	170	210	820	4.3	7.2	370	91	170	170	170
11/3/2009	7.8	420	200	160	910	4.1	7.9	450	120	190	200	200
12/6/2010	14	160	230	170	860	4.71	9.09	440	110	170	170	170
11/15/2011	4.7	220	310	180	820	4.5	13	490	110	170	200	200
12/13/2012	12	400	320	230	800	4.6	14	470	120	170	200	200
11/11/2013	9.54	218	291	228	820	4.15	12.5	469	118	160	199	199
9/24/2014	7.47	322	278	200	749	4.22	14.6	504	133	163	207	207
12/4/2015	5.14	399	252	190	524	4.5	11.8	506	128	146	197	197
12/8/2016	4.94	398	266	199	549	4.75	11.8	556	119	147	210	210
3/27/2018	6.9	461	461	372	508	4.8	12.3	583	112	144	206	206
6/24/2019	5.5	334	398	557	525	4.9	14.3	647	101	159	221	221
7/23/2020	7.8	312	339	419	708	4.7	7.8	601	105	141	189	189
11/9/2021	17.5	371	268	400	608	4.9	8.3	608	110	154	189	189
3/30/2023	34.8	511	118	335	640	4.7	8.60	506	99.9	136	151	151
Long-Term Trend:	Flat	Inc.	Inc.	Inc.	Inc.	Flat	Flat	Inc.	Inc.	Flat	Flat	Flat
Trend Since 2005:	Flat	Flat	Inc.	Inc.	Dec.	Flat	Flat	Inc.	Flat	Flat	Flat	Flat

Table 11

Trend Analysis Summary for Selected Part 363 Leachate Indicator Parameters  
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Date*	Upgradient Well	Downgradient Wells									
		On-Site					Off-Site				
		SY-6	SY-2R	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I
Hardness											
OU1 RI 5/2/1988	100	50	150	330	440	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	80	54	120	370	460	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	176	138	68.4	362	470	7.6	68.8	285	12.2	169	132
OU2 RI 12/1/1993	181	121	58.4	348	468	6.6	67.8	312	12.2	164	144
6/26/2003	120	54	51	200	490	6.0	53	220	22	42	250
12/27/2005	36	58	69	96	271	10	42	175	49	348	260
12/27/2006	52	178	70	350	359	6.1	42	187	70	350	317
12/21/2007	50	83	74	207	365	5.0	39	195	90	479	316
12/29/2008	100	109	96	185	330	11	46	180	114	453	276
11/3/2009	102	57	84	159	273	7	46	162	110	412	223
12/6/2010	66	36	97	159	266	7	43	165	111	409	208
11/15/2011	59.9	84.4	92.3	136	220	7.3	43.4	150	109	410	249
12/13/2012	77.3	127	121	140	112	6.68	42.3	166	112	6.62	110
11/11/2013	64	47.4	92.7	122	229	5.63	39.8	157	101	371	246
9/24/2014	85.13	124	76	131	211	5.73	38.9	160	117	347	253
12/4/2015	135	128	69.7	139	190	6.36	40.2	197	127	427	308
12/8/2016	156	105	76.1	166	192	6.76	39.4	181	99.2	357	273
3/27/2018	161	80.5	105	191	186	6.42	40.9	186	92.8	338	277
6/24/2019	168	33.4	98.9	199	212	6.56	42	204	75.7	345	286
7/23/2020	155	132	92.9	228	221	6.92	42.1	177	83.5	336	285
11/9/2021	110	120	75	230	210	6.7	40	190	79	300	220
3/30/2023	140	160	58	180	190	6.2	40	160	72	290	190
Long-Term Trend: Trend Since 2005:	Flat Inc.	Flat Flat	Flat Flat	Dec. Flat	Dec. Dec.	Flat Flat	Flat Flat	Flat Flat	Flat Flat	Inc. Dec.	Flat Flat
Sulfate											
OU1 RI 5/2/1988	50	50	47	42	22	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	40	54	68	16	14	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	10	56	23	33	27	1.8	40	89	16	31	32
OU2 RI 12/1/1993	20	58	17	26	23	11.9	51	110	12	34	54
6/26/2003	12	29	19	20	64	1	1,800	21	2.8	1	18
12/27/2005	1	29	22	40	41	1	29	67	1	79	120
12/27/2006	5.9	94	76	90	96	1.5	24	120	1	120	170
12/21/2007	6.5	39	13	36	42	1.5	21	46	8.1	64	130
12/29/2008	75	36	16	38	45	0.7	22	1.5	8.4	58	130
11/3/2009	54	33	12	36	41	1.6	27	28	9.64	61	190
12/6/2010	20	34	13	35	41	2.21	23	37	10	63	220
11/15/2011	19	27	14	34	40	2.1	20	37	10	64	180
12/13/2012	20	30	17	39	41	2.1	18	37	12	65	180
11/11/2013	15.8	33.8	13.2	43.1	44.7	2.01	17.8	39.3	10.7	61.7	230
9/24/2014	47.2	31.1	11	37.3	46.6	1.93	18.3	39.6	13.6	65.3	191
12/4/2015	72.7	26.8	11.1	39.1	45.9	1.83	17.1	36.6	17.9	62.1	204
12/8/2016	42.3	34.3	10.7	42.2	47.4	1.95	18.2	35.9	20.4	71	199
3/27/2018	38.7	36.6	15.7	36.2	40.5	0.38	17.6	36	22.4	64.4	183
6/24/2019	48.6	34.3	10.7	28.3	51.6	1.5	18.7	42.9	18.3	78.4	204
7/23/2020	36.8	21.7	9.7	25.4	47.4	0.95	17.8	37.6	19.6	80.6	195
11/9/2021	28.7	33.5	10.4	31.1	49.6	1.5	20.2	42.8	24.1	85.1	186
3/30/2023	34.1	30	24.1	37.7	50.7	1.7	21.6	37.3	26.8	90.2	149
Long-Term Trend: Trend Since 2005:	Flat Flat	Flat Flat	Flat Flat	Flat Flat	Flat Flat	Flat Flat	Dec. Flat	Flat Flat	Flat Flat	Flat Flat	Inc. Flat



Table 11  
Trend Analysis Summary for Selected Part 363 Leachate Indicator Parameters  
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Date*	Upgradient Well	Downgradient Wells										
		On-Site					Off-Site					
		SY-6	SY-2R	SY-2D	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
Total Organic Carbon												
OU1 RI 5/2/1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 12/1/1993	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6/26/2003	1.24	0.74	1.05	17	3.19	0.4	0.4	5.17	0.4	1.27	6.73	
12/27/2005	8.88	1.03	1.31	2.61	9.72	0.4	0.603	5.21	0.58	17	8.43	
12/27/2006	0.4	0.5	0.459	2.43	6.51	0.4	0.4	3.65	0.4	16	7.27	
12/21/2007	0.75	1.13	0.88	2.63	6.13	0.4	0.438	3.18	0.527	3.83	8.14	
12/29/2008	1.49	1.21	1.08	3.55	6.4	0.4	0.701	2.63	0.885	4.34	7.23	
11/3/2009	2.81	2.13	1.55	7.09	9.57	0.4	0.721	3.04	1.06	41	7.01	
12/6/2010	1.2	1.1	0.859	3	4.3	0.196	0.416	1.7	0.944	24	3.3	
11/15/2011	0.79	0.88	1	2.6	3.8	0.29	0.82	1.7	1	27	4.5	
12/13/2012	1.2	1.3	1.2	3.7	4.3	0.35	0.71	2.1	1.3	22	5.6	
11/11/2013	1.25	1.2	0.863	4.27	4.1	0.755	0.903	2.33	1.36	22	4.39	
9/24/2014	1.55	1.07	0.84	4.2	5.25	0.236	0.566	2.25	1.53	21.9	4.81	
12/4/2015	2.18	1.53	1.05	3.65	5.04	0.705	0.567	2.43	1.37	19.9	4.78	
12/8/2016	2.01	1.94	4.23	4.23	4.91	0.311	0.522	2.41	1.1	19.4	4.42	
3/27/2018	1.8	2.2	2.2	5.3	4.5	0.63	0.62	2.6	1.3	17.2	5.2	
6/24/2019	2.2	3.1	1.3	4.2	4.7	0.5	0.67	3.3	1.2	18.8	5.1	
7/23/2020	1.6	1.8	1	2.9	3.9	0.39	0.59	3	1.1	15.3	4.7	
11/9/2021	1.50	1.70	1.30	6.0	4.50	0.62	1.00	3.20	1.30	11.9	3.60	
3/30/2023	1.9	2.4	5	4.4	5.1	0.63	1.00	3.00	1.30	13.3	4.30	
Long-Term Trend:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Trend Since 2005:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	
Long-Term Trend Summary												
Total Flat:	9	7	6	6	6	9	7	6	7	6	7	
Total Decreasing:	0	0	1	2	2	0	2	1	0	0	0	
Total Increasing:	0	2	2	1	1	0	0	3	2	3	2	
Trend Since 2005 Summary												
Total Flat:	6	8	7	7	5	9	9	6	8	6	7	
Total Decreasing:	0	0	0	0	4	0	0	1	0	3	1	
Total Increasing:	3	1	2	2	0	0	0	2	1	0	1	

**Notes:**

All results are in units of milligrams per Liter (mg/L). Data qualifiers are omitted from this table to allow trend calculations.

Non-detectable results are listed as one-half the method detection limit.

N/A = Not Available (Well not installed yet, not sampled during monitoring round, or sample not analyzed for that parameter).

\* = Approximate date (Monitoring rounds typically take place over several days).

monitoring events and the 1993 OU-2 RI ground water-monitoring events, if available for a parameter and/or well, are also summarized in Table 11. Table 11 also identifies long-term trends (based on all available data) and trends since 2005 (to differentiate changes that may be related to the 2005 demolition work at the upgradient former Cerro Wire Site) for each parameter and well, and summarizes the numbers of parameters with flat, decreasing or increasing trends in each well for both time frames.

Review of the 2003 to 2023 trend graphs in Appendix C, and the Long-Term Trend Summary in Table 11, indicates that over the long term, a majority of the parameters in every well exhibit flat or decreasing trends. Review of the Trend Since 2005 Summary in Table 11 also shows that a majority of the parameters in every well exhibit flat or decreasing trends. Based on this finding, the short-term impacts previously attributed to the increased recharge associated with the demolition work at the former Cerro Wire Site in 2005 dissipated, as predicted in the 2008 Report, and ground water-quality conditions downgradient of the Landfill continue to be stable or improving over time. The possible impacts of the recent redevelopment of the former Cerro Wire Site on ground water-quality trends will be evaluated based on future monitoring results.

Based on the TDS trend chart in Appendix C, the TDS concentration in On-Site Downgradient Well SY-3D was significantly higher in 2021 relative to prior and current results, and appears to be an anomalous result.

## SECTION 6

### CONCLUSIONS AND RECOMENDATIONS

Based on the above results from the 2023 annual post-closure ground water-monitoring round, LKB concludes the following:

1. The ground water-monitoring system, specifically the existing monitoring well network and modified low-flow purging and sampling method specified in the O&M Manual, continues to provide ground water-flow and ground water-quality data of sufficient quantity and quality to monitor the Landfill during the post-closure period.
2. The Landfill is not a significant source of VOCs or the toxic RCRA/PPL metals and is only a relatively minor source of certain leachate-related contaminants and common TAL metals at concentrations exceeding Class GA ground-water standards and guidance values.
3. Overall, the current results show stable or improving ground water-quality conditions at the downgradient well locations relative to the previous post-closure monitoring rounds, the 1988 OU-1 RI results and the 1993 OU-2 RI results. This finding indicates that the selected remedy has been effective in mitigating ground water-quality impacts associated with the Landfill.
4. Based on the distribution of contaminants in ground water and the ground water-flow directions, a majority of the contaminants detected in Well Cluster RW-12 do not appear to be Landfill-related. This conclusion is consistent with the conclusions of previous post-closure monitoring reports and the OU-2 RI Report.
5. Taken as a whole, the results of the 2023 ground water-monitoring round continue to support the de-listing of the Landfill from the NPL, which occurred on April 28, 2005.
6. The stable or improving ground water-quality conditions in the upgradient well and on-site downgradient wells continue to indicate that ground-water conditions have equilibrated following the demolition work at the adjacent former Cerro Wire property in 2005. However, the recent redevelopment of the former Cerro Wire Site has the potential to impact ground-water quality upgradient of the Landfill.

Beginning with the 2018 monitoring round, ground-water monitoring is performed every fifth calendar quarter to provide data for all four seasons and calendar quarters during each five-year review period. Accordingly, the next round of ground-water monitoring will be performed during the second quarter of 2024.

Based on the above information, LKB recommends that the following work items be implemented during the 2024 annual monitoring round:

1. Continue to collect the duplicate sample from one of the on-site downgradient wells as these wells exhibit the highest degree of Landfill-related impacts.
2. Continue to collect and dispose of the purged ground water from the off-site downgradient wells, but discharge the purged ground water from the on-site wells onto the ground surface due to the low levels of contaminants encountered.
3. Continue to evaluate ground-water quality conditions at the upgradient well and the on-site downgradient wells for influences related to the recent development of the former Cerro Wire Site.

## **APPENDIX A**

### **Completed Well Inspection Checklist Forms**

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-1 - couldn't locate

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
Cracked	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
Missing	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
Lock – Intact	<input type="checkbox"/>	<input type="checkbox"/>	
4. Steel Casing (Stick-up) Straight	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
5. Designated Leveling Point Clearly Marked	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
6. PVC Cap Vented Properly	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
7. Well is Protected	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
8. Well is Clearly Marked	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>N/A</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>N/A</u>
5. Depth to Water from Top of PVC	<u>N/A</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-1D

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>114.04'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-2R

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under veg/soil)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Lock cut off</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
6. Remarks on Integrity of Casing	<u>OK</u>
Depth to Water from Top of PVC	<u>108.25'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-2D

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under veg/soil)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>_____</u>
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>_____</u>
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>_____</u>
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>_____</u>
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>On cap</u>

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>108.30'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-3

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under veg/soil)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Lock cut off</u>
4. Steel Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>On Cap</u>

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>110.90'</u>



**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-3DD

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under veg/soil)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>111.85'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-4

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under rip-rap)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Lock cut off</u>
4. Steel Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>108.20'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-6

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>103.50'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-7

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Not used, flush mount</u>
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>N/A, curb box, bolted, bolts deteriorating</u>
4. Steel Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>N/A (Flush-Mount)</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>Sediment accumulates in curb box</u>
5. Depth to Water from Top of PVC	<u>113.75'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** SY-8

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(Presumed, under veg/soil)</u>
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Lock cut off</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>OK</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>114.55'</u>



**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** PK-101

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Bolted, flush-mount, can't tighten bolts</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Inside of Lid, Closest to Ball Court</u>

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	_____ <u>N/A</u> _____
2. Stick-Up	_____ <u>N/A (Flush-Mount)</u> _____
3. Bottom of Well Below Grade	_____ <u>N/A</u> _____
4. Remarks on Integrity of Casing	_____ <u>OK</u> _____
5. Depth to Water from Top of PVC	_____ <u>105.15'</u> _____

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** PK-10D

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Bolt holes stripped, no bolts</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>N/A (Flush-Mount)</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>106.50'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** PK-10S

**DATE:** 2/10/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Missing 1 Bolt, Bolt Won't Tighten</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	<u>N/A</u>
2. Stick-Up	<u>N/A (Flush-Mount)</u>
3. Bottom of Well Below Grade	<u>N/A</u>
4. Remarks on Integrity of Casing	<u>OK</u>
5. Depth to Water from Top of PVC	<u>106.60'</u>

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.**   RW-12I  

**DATE:**   2/10/2023  

**PERSONNEL:**   G. Varghese and C. Blachly  

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Lock – Intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Bolted, flush-mount, threads worn, can't secure bolts</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	N/A (Flush-Mount)
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	115.67

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.**   RW-12D  

**DATE:**   2/13/2023  

**PERSONNEL:**   G. Varghese and C. Blachly  

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Bolted, flush-mount</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	_____ <u>N/A</u> _____
2. Stick-Up	_____ <u>N/A (Flush-Mount)</u> _____
3. Bottom of Well Below Grade	_____ <u>N/A</u> _____
4. Remarks on Integrity of Casing	_____ <u>OK</u> _____
5. Depth to Water from Top of PVC	_____ <u>115.65'</u> _____

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** RB-11S

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>1 bolt missing, flush-mount</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	_____ <u>N/A</u> _____
2. Stick-Up	_____ <u>N/A (Flush-Mount)</u> _____
3. Bottom of Well Below Grade	_____ <u>N/A</u> _____
4. Remarks on Integrity of Casing	_____ <u>OK</u> _____
5. Depth to Water from Top of PVC	_____ <u>107.33'</u> _____

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** RB-111

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>One Bolt Missing</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Not labeled</u>

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	_____ <u>N/A</u> _____
2. Stick-Up	_____ <u>N/A (Flush-Mount)</u> _____
3. Bottom of Well Below Grade	_____ <u>N/A</u> _____
4. Remarks on Integrity of Casing	_____ <u>OK</u> _____
5. Depth to Water from Top of PVC	_____ <u>108.50'</u> _____

**SYOSSET LANDFILL  
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM**

**2023 GROUNDWATER MONITORING WELL  
INSPECTION CHECKLIST**

**WELL NO.** RB-11D

**DATE:** 2/13/2023

**PERSONNEL:** G. Varghese and C. Blachly

**CHECKLIST FOR INSPECTION OF  
OUTSIDE OF EXISTING WELLS**

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Cement Seal			
Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Cracked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Missing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2. Ponding of Water Around Cement Seal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Lock – Intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Bolted, 1 Bolt Missing</u>
4. PVC Casing (Stick-up) Straight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5. Designated Leveling Point Clearly Marked	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
6. PVC Cap Vented Properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
7. Well is Protected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
8. Well is Clearly Marked	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____

**CHECKLIST FOR INSPECTION OF  
INSIDE OF EXISTING WELLS**

1. Bottom of Well from Top of PVC Casing	_____ <u>N/A</u> _____
2. Stick-Up	_____ <u>N/A (Flush-Mount)</u> _____
3. Bottom of Well Below Grade	_____ <u>N/A</u> _____
4. Remarks on Integrity of Casing	_____ <u>OK</u> _____
5. Depth to Water from Top of PVC	_____ <u>108.60'</u> _____

## **APPENDIX B**

### **Validated Laboratory Results**

**DATA USABILITY SUMMARY REPORT  
SYOSSET LANDFILL POST CLOSURE, SYOSSET, NEW YORK**

Client: Lockwood, Kessler, & Bartlett, Syosset, New York  
 SDG: 02137  
 Laboratory: ChemTech, Mountainside, New Jersey  
 Site: Syosset Landfill, Syosset, New York  
 Date: June 17, 2024

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-6	02137-01	Water
1MS+	SY-6MS	02137-01MS	Water
2D	SY-6	02137-02	Water
3	SY-3DD	02137-03	Water
3MS*	SY-3DDMS	02137-03MS	Water
4D	SY-3DD	02137-04	Water
5*	SY-3D	02137-5	Water
6D	SY-3D	02137-06	Water
7	SY-2R	02137-07	Water
8D	SY-2R	02137-08	Water
9	SY-2D	02137-09	Water
10D	SY-2D	02137-10	Water
11	SY-5	02137-11	Water
11MS++	SY-5MS	02137-11MS	Water
12D	SY-5	02137-12	Water
13	TRIP-BLANK-1	02137-13	Water
14	FIELD-BLANK	02137-14	Water
15D	FIELD-BLANK	02137-15	Water

\* - TOC only      +- - COD, Ammonia, and Phenols only      ++- Anions only

A Data Usability Summary Review was performed on the analytical data for twelve water samples, two aqueous field blank samples, and one aqueous trip blank sample collected on March 29, 2023 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Contract Laboratory Program (CLP) Multi-Media Multi-Concentration Inorganic Analysis ISM02.3", "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions" the "Methods for Chemical Analysis of Water and Wastes" and the "Standard Methods for the Examination of Water and Wastewater".

Specific method references are as follows:

<i>Analysis</i>	<i>Method References</i>
VOCs	USEPA SW846 8260C
Metals/Mercury/Cyanide	USEPA CLP Method ISM02.4

<u>Analysis</u>	<u>Method References</u>
Alkalinity	Standard Method SM2320 B
Ammonia (as N)	Standard Method SM4500-NH3
Bromide	USEPA Method 300.0
Chloride	USEPA Method 300.0
Nitrate	USEPA Method 300.0
Sulfate	USEPA Method 300.0
BOD5	Standard Method SM5210 B
COD	Standard Method SM5220D
Color	Standard Method SM2120 B
Phenolics	USEPA SW-846 Method 9065
Total Dissolved Solids	Standard Method SM2540C
Total Kjeldahl Nitrogen	Standard Method SM4500-N Org B or C
Total Organic Carbon	Standard Method SM5310B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the USEPA National Functional Guidelines for Organic and Inorganic Data Review, and the site QAPP as follows:

- The USEPA “Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review,” January 2017;
- The USEPA “Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review,” January 2017;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

### ***Organics***

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

### ***Inorganics***

- Holding times and sample preservation
- Inductively Coupled Plasma/Mass Spectrometry (ICP/MS) Tuning
- Initial and continuing calibration verifications
- Method blank and field QC blank contamination
- ICP Interference Check Sample
- Laboratory Control Sample (LCS) recoveries

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Duplicate Sample Analysis
- ICP Serial Dilution
- Compound Quantitation
- Field Duplicate sample precision

### **Data Usability Assessment**

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

### **Volatile Organic Compounds (VOCs)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

#### **Initial Calibration**

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

#### **Continuing Calibration**

- The continuing calibrations exhibited acceptable %D and RRF values.

#### **Method Blank**

- The method blanks were free of contamination.

### Field Blank

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. For detected compound concentrations <RL, the results are negated and qualified (U). For detected sample concentrations >RL of acetone, 2-butanone and methylene chloride (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds >RL, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
TRIP-BLANK-1	None - ND	-	-	-
FIELD-BLANK	Acetone	6.00	None	ND
	Methylene Chloride	1.50	None	ND

### Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

### Laboratory Control Samples

- The LCS samples exhibited acceptable %R values except for the following.

LCS ID	Compound	LCS %R/LCSD %R/RPD	Qualifier	Affected Samples
VX0331WBS04	Trichlorofluoromethane	121%	None	ND
	1,1,2-Trichlorotrifluoroethane	132%		
	1,1-Dichloroethene	123%		
	Cyclohexane	112%		

### Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

### Compound Quantitation

- All criteria were met.

**Tentatively Identified Compounds (TICs)**

- TICs were not reported.

**Field Duplicate Sample Precision**

- Field duplicate samples are summarized below.

Compound	SY-2D ug/L	SY-5 ug/L	RPD	Qualifier
None	ND	ND	-	-

## Total & Dissolved Metals & Hardness & Cyanide

### Holding Times

- All samples were prepared and analyzed within 14 days for cyanide, 28 days for mercury and 180 days for all other metals.

### ICP/MS Tuning

- ICP/MS tuning not required.

### Initial Calibration Verification

- All initial calibration criteria were met.

### Continuing Calibration Verification

- All continuing calibration criteria were met.

### Method Blank

- The method blanks were free of contamination.

### Field Blank

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. Detected sample concentrations less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Total Metals/Hg & Cyanide				
Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELD-BLANK	Calcium	99	None	>10X

Dissolved Metals/Hg				
Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELD-BLANK	Calcium	170	U	4
	Copper	13	U	2
	Manganese	3.4	U	2, 10, 12
	Arsenic	9.1	U	2, 6

### ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

### Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS samples (Reference) exhibited acceptable percent recoveries (%R) except for the following.

Sample ID	Compound	MS %R	Qualifier
Reference	Silver	156%	ND
	Dissolved Silver	154%	ND

### ICP Serial Dilution

- The ICP serial dilution (Reference) exhibited acceptable percent differences (%D).

### Compound Quantitation

- All criteria were met.

### Field Duplicate Sample Precision

- Field duplicate samples are summarized below.

Total Metals				
Compound	SY-2D mg/L	SY-5 mg/L	RPD	Qualifier
Barium	28	22	24%	None
Calcium	20000	19000	5%	
Chromium	6.3	13	69%	None <5X RL
Iron	95	130	31%	
Magnesium	2000	1900	5%	None
Manganese	4.8	5.1	6%	
Nickel	5.5	7.8	35%	None <5X RL
Potassium	1700	1600	6%	
Sodium	92000	88000	4%	None
Hardness	58	55	5%	
Cyanide	2.9	3.6	22%	

Dissolved Metals				
Compound	SY-2D mg/L	SY-5 mg/L	RPD	Qualifier
Barium	25	20	22%	None
Calcium	18000	19000	5%	
Magnesium	1900	2000	5%	
Potassium	1700	1600	6%	
Sodium	87000	91000	4%	

**Wet Chemistry Parameters: Alkalinity, Ammonia, Bromide, Chloride, Nitrate, Sulfate, BOD5, COD, Color, Phenolics, TDS, TKN, TOC**

**Holding Times**

- All samples were prepared and analyzed within the recommended holding time for each analysis except for EDS Sample 1. The sample was qualified estimated (J) for nitrate.

**Initial and Continuing Calibration**

- All %R criteria were met.

**Method Blank**

- The method blank results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
LB124770BL	TDS	1	None	For Wet Chemistry

**Field Blank**

- Field QC results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
FIELD-BLANK	TKN	0.17	None	For Wet Chemistry
	TOC	1.40	None	

**Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- The MS/MSD samples exhibited acceptable percent recoveries (%R).

**Laboratory Control Samples**

- The LCS sample exhibited acceptable recoveries.

### Compound Quantitation

- Several samples exhibited a high concentration of various analytes and was flagged (OR) for over the calibration range by the laboratory. The sample was diluted and reanalyzed. The dilution result for this compound should be used for reporting purposes.

### Field Duplicate Sample Precision

- Field duplicate samples are summarized below. The precision was acceptable.

Compound	SY-2D mg/L	SY-5 mg/L	RPD	Qualifier
Alkalinity	78.2	80.4	3%	None
Nitrate	2.60	2.60	0%	
Sulfate	24.1	23.6	2%	
TDS	287	328	13%	
TKN	0.20	0.22	10%	
TOC	5.00	4.80	4%	
Chloride	118	118	0%	

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed:

Nancy Weaver  
Nancy Weaver  
Senior Chemist

Dated: 6/18/24

<b>Data Qualifier</b>	<b>Definition</b>
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.



**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-6	SDG No.:	O2137
Lab Sample ID:	O2137-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034900.D	1		04/01/23 04:14	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-6	SDG No.:	O2137
Lab Sample ID:	O2137-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034900.D	1		04/01/23 04:14	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	52.7		74 - 125	105%	SPK: 50
1868-53-7	Dibromofluoromethane	47.2		75 - 124	94%	SPK: 50
2037-26-5	Toluene-d8	48.7		86 - 113	97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.9		64 - 133	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	265000	5.55			
540-36-3	1,4-Difluorobenzene	466000	6.763			
3114-55-4	Chlorobenzene-d5	419000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	191000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3DD	SDG No.:	O2137
Lab Sample ID:	O2137-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034901.D	1		04/01/23 04:37	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3DD	SDG No.:	O2137
Lab Sample ID:	O2137-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034901.D	1		04/01/23 04:37	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromofrom	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.4		74 - 125	101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	49.3		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.2		64 - 133	94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	266000	5.55			
540-36-3	1,4-Difluorobenzene	453000	6.763			
3114-55-4	Chlorobenzene-d5	398000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	164000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3D	SDG No.:	O2137
Lab Sample ID:	O2137-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034902.D	1		04/01/23 05:00	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3D	SDG No.:	O2137
Lab Sample ID:	O2137-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034902.D	1		04/01/23 05:00	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	51.4		74 - 125	103%	SPK: 50
1868-53-7	Dibromofluoromethane	47.8		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	49.6		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.0		64 - 133	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	272000	5.55			
540-36-3	1,4-Difluorobenzene	468000	6.763			
3114-55-4	Chlorobenzene-d5	418000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	181000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2R	SDG No.:	O2137
Lab Sample ID:	O2137-07	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034903.D	1		04/01/23 05:23	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2R	SDG No.:	O2137
Lab Sample ID:	O2137-07	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034903.D	1		04/01/23 05:23	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.9		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	48.8		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.3		64 - 133	91%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	263000	5.556			
540-36-3	1,4-Difluorobenzene	451000	6.763			
3114-55-4	Chlorobenzene-d5	392000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	161000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2D	SDG No.:	O2137
Lab Sample ID:	O2137-09	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034904.D	1		04/01/23 05:46	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2D	SDG No.:	O2137
Lab Sample ID:	O2137-09	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034904.D	1		04/01/23 05:46	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromofom	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.7		74 - 125	101%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	49.2		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		64 - 133	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	290000	5.556			
540-36-3	1,4-Difluorobenzene	498000	6.763			
3114-55-4	Chlorobenzene-d5	442000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	192000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-5	SDG No.:	O2137
Lab Sample ID:	O2137-11	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034905.D	1		04/01/23 06:10	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Ø</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Ø</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Ø</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Ø</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-5	SDG No.:	O2137
Lab Sample ID:	O2137-11	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034905.D	1		04/01/23 06:10	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.7		74 - 125	101%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	49.3		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		64 - 133	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	285000	5.55			
540-36-3	1,4-Difluorobenzene	489000	6.763			
3114-55-4	Chlorobenzene-d5	435000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	196000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	TRIP-BLANK-1	SDG No.:	O2137
Lab Sample ID:	O2137-13	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034906.D	1		04/01/23 06:33	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U <del>Q</del>	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U <del>Q</del>	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U <del>Q</del>	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U <del>Q</del>	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	TRIP-BLANK-1	SDG No.:	O2137
Lab Sample ID:	O2137-13	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034906.D	1		04/01/23 06:33	VX033123

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	50.8		74 - 125	102%	SPK: 50
1868-53-7	Dibromofluoromethane	47.6		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	49.5		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.6		64 - 133	97%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	267000	5.55			
540-36-3	1,4-Difluorobenzene	457000	6.763			
3114-55-4	Chlorobenzene-d5	410000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	181000	12.024			

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	FIELD-BLANK	SDG No.:	O2137
Lab Sample ID:	O2137-14	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034928.D	1		04/03/23 13:38	VX040323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	6.00		1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.50		0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	FIELD-BLANK	SDG No.:	O2137
Lab Sample ID:	O2137-14	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034928.D	I		04/03/23 13:38	VX040323

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.9		74 - 125	100%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	49.9		86 - 113	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		64 - 133	95%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	266000	5.556			
540-36-3	1,4-Difluorobenzene	455000	6.757			
3114-55-4	Chlorobenzene-d5	408000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	177000	12.024			





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EPA SAMPLE NO.

SY-6

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. : \_\_\_\_\_ SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-02  
 % Solids: \_\_\_\_\_ Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1742
7440-36-0	Antimony	60	U	03/31/2023	1742
7440-38-2	Arsenic	4.6	<del>U</del>	03/31/2023	1742
7440-39-3	Barium	89	J	03/31/2023	1742
7440-41-7	Beryllium	5.0	U	03/31/2023	1742
7440-43-9	Cadmium	5.0	U	03/31/2023	1742
7440-70-2	Calcium	36000		03/31/2023	1742
7440-47-3	Chromium	1.4	J	03/31/2023	1742
7440-48-4	Cobalt	50	U	03/31/2023	1742
7440-50-8	Copper	8.3	<del>U</del>	03/31/2023	1742
7439-89-6	Iron	120		03/31/2023	1742
7439-92-1	Lead	10	U	03/31/2023	1742
7439-95-4	Magnesium	11000		03/31/2023	1742
7439-96-5	Manganese	26	<del>U</del>	03/31/2023	1742
7440-02-0	Nickel	5.1	J	03/31/2023	1742
7440-09-7	Potassium	1400	J	03/31/2023	1742
7782-49-2	Selenium	35	U	03/31/2023	1742
7440-22-4	Silver	10	<del>U</del>	03/31/2023	1742
7440-23-5	Sodium	23000		03/31/2023	1742
7440-28-0	Thallium	25	U	03/31/2023	1742
7440-62-2	Vanadium	50	U	03/31/2023	1742
7440-66-6	Zinc	1100		03/31/2023	1742

NOTE: Hardness (total) is reported in mg/L

Comments:

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EPA SAMPLE NO.

SY-3DD

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-03  
 % Solids:  Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm³): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1814
7440-36-0	Antimony	60	U	03/31/2023	1814
7440-38-2	Arsenic	10	U	03/31/2023	1814
7440-39-3	Barium	200	U	03/31/2023	1814
7440-41-7	Beryllium	5.0	U	03/31/2023	1814
7440-43-9	Cadmium	5.0	U	03/31/2023	1814
7440-70-2	Calcium	1500	J	03/31/2023	1814
7440-47-3	Chromium	4.4	J	03/31/2023	1814
7440-48-4	Cobalt	1.1	J	03/31/2023	1814
7440-50-8	Copper	25	U	03/31/2023	1814
7439-89-6	Iron	320		03/31/2023	1814
7439-92-1	Lead	10	U	03/31/2023	1814
7439-95-4	Magnesium	590	J	03/31/2023	1814
7439-96-5	Manganese	52		03/31/2023	1814
7440-02-0	Nickel	24	J	03/31/2023	1814
7440-09-7	Potassium	5000	U	03/31/2023	1814
7782-49-2	Selenium	35	U	03/31/2023	1814
7440-22-4	Silver	10	U ✓	03/31/2023	1814
7440-23-5	Sodium	4000	J	03/31/2023	1814
7440-28-0	Thallium	25	U	03/31/2023	1814
7440-62-2	Vanadium	50	U	03/31/2023	1814
7440-66-6	Zinc	60	U	03/31/2023	1814
Hardness	Hardness (total)	6.2	J	03/31/2023	1814

NOTE: Hardness (total) is reported in mg/L

Comments:

MT 6/17/24

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.  
SY-3DD

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-04  
% Solids: Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1818
7440-36-0	Antimony	60	U	03/31/2023	1818
7440-38-2	Arsenic	10	U	03/31/2023	1818
7440-39-3	Barium	200	U	03/31/2023	1818
7440-41-7	Beryllium	5.0	U	03/31/2023	1818
7440-43-9	Cadmium	5.0	U	03/31/2023	1818
7440-70-2	Calcium	1500	JU	03/31/2023	1818
7440-47-3	Chromium	10	U	03/31/2023	1818
7440-48-4	Cobalt	0.89	J	03/31/2023	1818
7440-50-8	Copper	25	U	03/31/2023	1818
7439-89-6	Iron	210		03/31/2023	1818
7439-92-1	Lead	10	U	03/31/2023	1818
7439-95-4	Magnesium	550	J	03/31/2023	1818
7439-96-5	Manganese	48		03/31/2023	1818
7440-02-0	Nickel	19	J	03/31/2023	1818
7440-09-7	Potassium	500	J	03/31/2023	1818
7782-49-2	Selenium	35	U	03/31/2023	1818
7440-22-4	Silver	10	UJ	03/31/2023	1818
7440-23-5	Sodium	3700	J	03/31/2023	1818
7440-28-0	Thallium	25	U	03/31/2023	1818
7440-62-2	Vanadium	50	U	03/31/2023	1818
7440-66-6	Zinc	60	U	03/31/2023	1818

NOTE: Hardness (total) is reported in mg/L

Comments:



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B

EPA SAMPLE NO.

SY-3D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-06  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1830
7440-36-0	Antimony	60	U	03/31/2023	1830
7440-38-2	Arsenic	30	U	03/31/2023	1830
7440-39-3	Barium	230		03/31/2023	1830
7440-41-7	Beryllium	5.0	U	03/31/2023	1830
7440-43-9	Cadmium	1.0	J	03/31/2023	1830
7440-70-2	Calcium	53000		03/31/2023	1830
7440-47-3	Chromium	10	U	03/31/2023	1830
7440-48-4	Cobalt	20	J	03/31/2023	1830
7440-50-8	Copper	25	U	03/31/2023	1830
7439-89-6	Iron	28000		03/31/2023	1830
7439-92-1	Lead	10	U	03/31/2023	1830
7439-95-4	Magnesium	16000		03/31/2023	1830
7439-96-5	Manganese	1800		03/31/2023	1830
7440-02-0	Nickel	40	U	03/31/2023	1830
7440-09-7	Potassium	24000		03/31/2023	1830
7782-49-2	Selenium	35	U	03/31/2023	1830
7440-22-4	Silver	10	U	03/31/2023	1830
7440-23-5	Sodium	370000		03/31/2023	1830
7440-28-0	Thallium	25	U	03/31/2023	1830
7440-62-2	Vanadium	50	U	03/31/2023	1830
7440-66-6	Zinc	60	U	03/31/2023	1830

NOTE: Hardness (total) is reported in mg/L

Comments:

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EPA SAMPLE NO.

SY-2R

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-07  
 % Solids: Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	220		03/31/2023	1834
7440-36-0	Antimony	60	U	03/31/2023	1834
7440-38-2	Arsenic	6.8	J	03/31/2023	1834
7440-39-3	Barium	180	J	03/31/2023	1834
7440-41-7	Beryllium	2.3	J	03/31/2023	1834
7440-43-9	Cadmium	5.0	U	03/31/2023	1834
7440-70-2	Calcium	50000		03/31/2023	1834
7440-47-3	Chromium	4.8	J	03/31/2023	1834
7440-48-4	Cobalt	25	J	03/31/2023	1834
7440-50-8	Copper	25	U	03/31/2023	1834
7439-89-6	Iron	100		03/31/2023	1834
7439-92-1	Lead	10	U	03/31/2023	1834
7439-95-4	Magnesium	9200		03/31/2023	1834
7439-96-5	Manganese	47		03/31/2023	1834
7440-02-0	Nickel	85		03/31/2023	1834
7440-09-7	Potassium	4800	J	03/31/2023	1834
7782-49-2	Selenium	35	U	03/31/2023	1834
7440-22-4	Silver	10	U	03/31/2023	1834
7440-23-5	Sodium	260000		03/31/2023	1834
7440-28-0	Thallium	25	U	03/31/2023	1834
7440-62-2	Vanadium	50	U	03/31/2023	1834
7440-66-6	Zinc	120		03/31/2023	1834
Hardness	Hardness (total)	160		03/31/2023	1834

NOTE: Hardness (total) is reported in mg/L

Comments:

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.  
SY-2R

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-08  
% Solids: Date Received: 03/30/2023  
Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	190	J	03/31/2023	1838
7440-36-0	Antimony	60	U	03/31/2023	1838
7440-38-2	Arsenic	10	U	03/31/2023	1838
7440-39-3	Barium	180	J	03/31/2023	1838
7440-41-7	Beryllium	3.1	J	03/31/2023	1838
7440-43-9	Cadmium	5.0	U	03/31/2023	1838
7440-70-2	Calcium	49000		03/31/2023	1838
7440-47-3	Chromium	2.1	J	03/31/2023	1838
7440-48-4	Cobalt	25	J	03/31/2023	1838
7440-50-8	Copper	25	U	03/31/2023	1838
7439-89-6	Iron	46	J	03/31/2023	1838
7439-92-1	Lead	10	U	03/31/2023	1838
7439-95-4	Magnesium	9200		03/31/2023	1838
7439-96-5	Manganese	49		03/31/2023	1838
7440-02-0	Nickel	83		03/31/2023	1838
7440-09-7	Potassium	4900	J	03/31/2023	1838
7782-49-2	Selenium	35	U	03/31/2023	1838
7440-22-4	Silver	10	U	03/31/2023	1838
7440-23-5	Sodium	260000		03/31/2023	1838
7440-28-0	Thallium	25	U	03/31/2023	1838
7440-62-2	Vanadium	50	U	03/31/2023	1838
7440-66-6	Zinc	120		03/31/2023	1838

NOTE: Hardness (total) is reported in mg/L

Comments:

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.  
SY-2D

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-09  
% Solids: Date Received: 03/30/2023

Analytical Method: ICP AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): µg/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1842
7440-36-0	Antimony	60	U	03/31/2023	1842
7440-38-2	Arsenic	10	U	03/31/2023	1842
7440-39-3	Barium	28	J	03/31/2023	1842
7440-41-7	Beryllium	5.0	U	03/31/2023	1842
7440-43-9	Cadmium	5.0	U	03/31/2023	1842
7440-70-2	Calcium	20000		03/31/2023	1842
7440-47-3	Chromium	6.3	J	03/31/2023	1842
7440-48-4	Cobalt	50	U	03/31/2023	1842
7440-50-8	Copper	25	U	03/31/2023	1842
7439-89-6	Iron	95	J	03/31/2023	1842
7439-92-1	Lead	10	U	03/31/2023	1842
7439-95-4	Magnesium	2000	J	03/31/2023	1842
7439-96-5	Manganese	4.8	J	03/31/2023	1842
7440-02-0	Nickel	5.5	J	03/31/2023	1842
7440-09-7	Potassium	1700	J	03/31/2023	1842
7782-49-2	Selenium	35	U	03/31/2023	1842
7440-22-4	Silver	10	U	03/31/2023	1842
7440-23-5	Sodium	92000		03/31/2023	1842
7440-28-0	Thallium	25	U	03/31/2023	1842
7440-62-2	Vanadium	50	U	03/31/2023	1842
7440-66-6	Zinc	60	U	03/31/2023	1842
Hardness	Hardness (total)	58		03/31/2023	1842

NOTE: Hardness (total) is reported in mg/L

Comments:

MT 6/12/24

108

6

B

EPA SAMPLE NO.

SY-2D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: O2137  
 Matrix: Water Lab Sample ID: O2137-10  
 % Solids: Date Received: 03/30/2023  
 Analytical Method: ICP\_AES  
 Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1846
7440-36-0	Antimony	60	U	03/31/2023	1846
7440-38-2	Arsenic	10	U	03/31/2023	1846
7440-39-3	Barium	25	J	03/31/2023	1846
7440-41-7	Beryllium	5.0	U	03/31/2023	1846
7440-43-9	Cadmium	5.0	U	03/31/2023	1846
7440-70-2	Calcium	18000		03/31/2023	1846
7440-47-3	Chromium	10	U	03/31/2023	1846
7440-48-4	Cobalt	50	U	03/31/2023	1846
7440-50-8	Copper	25	U	03/31/2023	1846
7439-89-6	Iron	100	U	03/31/2023	1846
7439-92-1	Lead	10	U	03/31/2023	1846
7439-95-4	Magnesium	1900	J	03/31/2023	1846
7439-96-5	Manganese	7.0	<del>U</del>	03/31/2023	1846
7440-02-0	Nickel	40	U	03/31/2023	1846
7440-09-7	Potassium	1700	J	03/31/2023	1846
7782-49-2	Selenium	35	U	03/31/2023	1846
7440-22-4	Silver	10	<del>U</del>	03/31/2023	1846
7440-23-5	Sodium	87000		03/31/2023	1846
7440-28-0	Thallium	25	U	03/31/2023	1846
7440-62-2	Vanadium	50	U	03/31/2023	1846
7440-66-6	Zinc	60	U	03/31/2023	1846

NOTE: Hardness (total) is reported in mg/L

Comments:

*mt w/24*

11

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B

EPA SAMPLE NO.

SY-5

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-11  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: ICP\_AES  
 Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	04/03/2023	1612
7440-36-0	Antimony	60	U	04/03/2023	1612
7440-38-2	Arsenic	10	U	04/03/2023	1612
7440-39-3	Barium	22	J	04/03/2023	1612
7440-41-7	Beryllium	5.0	U	04/03/2023	1612
7440-43-9	Cadmium	5.0	U	04/03/2023	1612
7440-70-2	Calcium	19000		04/03/2023	1612
7440-47-3	Chromium	13		04/03/2023	1612
7440-48-4	Cobalt	50	U	04/03/2023	1612
7440-50-8	Copper	25	U	04/03/2023	1612
7439-89-6	Iron	130		04/03/2023	1612
7439-92-1	Lead	10	U	04/03/2023	1612
7439-95-4	Magnesium	1900	J	04/03/2023	1612
7439-96-5	Manganese	5.1	J	04/03/2023	1612
7440-02-0	Nickel	7.8	J	04/03/2023	1612
7440-09-7	Potassium	1600	J	04/03/2023	1612
7782-49-2	Selenium	35	U	04/03/2023	1612
7440-22-4	Silver	10	U*	04/03/2023	1612
7440-23-5	Sodium	88000		04/03/2023	1612
7440-28-0	Thallium	25	U	04/03/2023	1612
7440-62-2	Vanadium	50	U	04/03/2023	1612
7440-66-6	Zinc	60	U	04/03/2023	1612
Hardness	Hardness (total)	55		04/03/2023	1612

NOTE: Hardness (total) is reported in mg/L

Comments:

120

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B

EPA SAMPLE NO.

SY-5

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-12  
 % Solids:  Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	04/03/2023	1616
7440-36-0	Antimony	60	U	04/03/2023	1616
7440-38-2	Arsenic	10	U	04/03/2023	1616
7440-39-3	Barium	20	J	04/03/2023	1616
7440-41-7	Beryllium	5.0	U	04/03/2023	1616
7440-43-9	Cadmium	5.0	U	04/03/2023	1616
7440-70-2	Calcium	19000		04/03/2023	1616
7440-47-3	Chromium	1.6	J	04/03/2023	1616
7440-48-4	Cobalt	50	U	04/03/2023	1616
7440-50-8	Copper	25	U	04/03/2023	1616
7439-89-6	Iron	100	U	04/03/2023	1616
7439-92-1	Lead	10	U	04/03/2023	1616
7439-95-4	Magnesium	2000	J	04/03/2023	1616
7439-96-5	Manganese	7.5	<del>U</del>	04/03/2023	1616
7440-02-0	Nickel	40	U	04/03/2023	1616
7440-09-7	Potassium	1600	J	04/03/2023	1616
7782-49-2	Selenium	35	U	04/03/2023	1616
7440-22-4	Silver	10	<del>U</del>	04/03/2023	1616
7440-23-5	Sodium	91000		04/03/2023	1616
7440-28-0	Thallium	25	U	04/03/2023	1616
7440-62-2	Vanadium	50	U	04/03/2023	1616
7440-66-6	Zinc	60	U	04/03/2023	1616

NOTE: Hardness (total) is reported in mg/L

Comments:

*MT 6/17/24*

14

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B

EPA SAMPLE NO.

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-14  
 % Solids:  Date Received: 03/30/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1806
7440-36-0	Antimony	60	U	03/31/2023	1806
7440-38-2	Arsenic	10	U	03/31/2023	1806
7440-39-3	Barium	200	U	03/31/2023	1806
7440-41-7	Beryllium	5.0	U	03/31/2023	1806
7440-43-9	Cadmium	5.0	U	03/31/2023	1806
7440-70-2	Calcium	99	J	03/31/2023	1806
7440-47-3	Chromium	10	U	03/31/2023	1806
7440-48-4	Cobalt	50	U	03/31/2023	1806
7440-50-8	Copper	25	U	03/31/2023	1806
7439-89-6	Iron	100	U	03/31/2023	1806
7439-92-1	Lead	10	U	03/31/2023	1806
7439-95-4	Magnesium	5000	U	03/31/2023	1806
7439-96-5	Manganese	15	U	03/31/2023	1806
7440-02-0	Nickel	40	U	03/31/2023	1806
7440-09-7	Potassium	5000	U	03/31/2023	1806
7782-49-2	Selenium	35	U	03/31/2023	1806
7440-22-4	Silver	10	U	03/31/2023	1806
7440-23-5	Sodium	5000	U	03/31/2023	1806
7440-28-0	Thallium	25	U	03/31/2023	1806
7440-62-2	Vanadium	50	U	03/31/2023	1806
7440-66-6	Zinc	60	U	03/31/2023	1806
Hardness	Hardness (total)	33	U	03/31/2023	1806

NOTE: Hardness (total) is reported in mg/L

Comments:

*MT 6/12/24*

150

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EPA SAMPLE NO.

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-15  
 % Solids:  Date Received: 03/30/2023

Analytical Method: ICP AES

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	03/31/2023	1810
7440-36-0	Antimony	60	U	03/31/2023	1810
7440-38-2	Arsenic	9.1	J	03/31/2023	1810
7440-39-3	Barium	200	U	03/31/2023	1810
7440-41-7	Beryllium	5.0	U	03/31/2023	1810
7440-43-9	Cadmium	5.0	U	03/31/2023	1810
7440-70-2	Calcium	170	J	03/31/2023	1810
7440-47-3	Chromium	10	U	03/31/2023	1810
7440-48-4	Cobalt	50	U	03/31/2023	1810
7440-50-8	Copper	13	J	03/31/2023	1810
7439-89-6	Iron	100	U	03/31/2023	1810
7439-92-1	Lead	10	U	03/31/2023	1810
7439-95-4	Magnesium	5000	U	03/31/2023	1810
7439-96-5	Manganese	3.4	J	03/31/2023	1810
7440-02-0	Nickel	40	U	03/31/2023	1810
7440-09-7	Potassium	5000	U	03/31/2023	1810
7782-49-2	Selenium	35	U	03/31/2023	1810
7440-22-4	Silver	10	U	03/31/2023	1810
7440-23-5	Sodium	5000	U	03/31/2023	1810
7440-28-0	Thallium	25	U	03/31/2023	1810
7440-62-2	Vanadium	50	U	03/31/2023	1810
7440-66-6	Zinc	60	U	03/31/2023	1810

NOTE: Hardness (total) is reported in mg/L

Comments:

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MT 6/2/24



FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SY-6

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-01  
% Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2122

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments:

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.  
SY-6

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-02  
% Solids: Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2124

NOTE: Hardness (total) is reported in mg/L

Comments:

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C

EPA SAMPLE NO.

SY-3DD

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-03  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2126

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments:

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*MT W/V/M*

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EPA SAMPLE NO.

SY-3DD

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-04  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2128

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments: \_\_\_\_\_  
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MT W/VM

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EPA SAMPLE NO.

SY-3D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-05  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2131

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt WVM*

GD

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EPA SAMPLE NO.

SY-3D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-06  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2133

NOTE: Hardness (total) is reported in mg/L

Comments:

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mt 4/2/24

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B

D

EPA SAMPLE NO.

SY-2R

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-07  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2135

NOTE: Hardness (total) is reported in mg/L

Comments:

MT 6/17/24

80

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EPA SAMPLE NO.

SY-2R

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-08  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2138

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt w/m*

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EPA SAMPLE NO.

SY-2D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-09  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2140

NOTE: Hardness (total) is reported in mg/L

Comments:

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MA 6/2/24



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EPA SAMPLE NO.

SY-5

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-11  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2144

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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*mt w/v/m*

12D

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EPA SAMPLE NO.

SY-5

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-12  
 % Solids:  Date Received: 03/30/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2147

NOTE: Hardness (total) is reported in mg/L

Comments:

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*MA 6/12/24*

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EPA SAMPLE NO.

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2137  
 Matrix: Water Lab Sample ID: O2137-14  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: Hg  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2149

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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*MT 6/1/24*

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EPA SAMPLE NO.

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-15  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: Hg  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/02/2023	2151

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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MT 4/12/24



FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.  
SY-6

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-01  
 % Solids:  Date Received: 03/30/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	03/31/2023	1416

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments: \_\_\_\_\_  
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EPA SAMPLE NO.

SY-3DD

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-03  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: CN  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	03/31/2023	1424

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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EPA SAMPLE NO.

SY-3D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2137  
 Matrix: Water Lab Sample ID: O2137-05  
 % Solids:  Date Received: 03/30/2023  
 Analytical Method: CN  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	03/31/2023	1424

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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MT WVM

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b

EPA SAMPLE NO.

SY-2R

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
Matrix: Water Lab Sample ID: 02137-07  
% Solids:  Date Received: 03/30/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	3.1	J	03/31/2023	1424

NOTE: Hardness (total) is reported in mg/L

Comments:

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*Mr W/VM*

9

EPA SAMPLE NO.

SY-2D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.:02137  
 Matrix: Water Lab Sample ID: 02137-09  
 % Solids: \_\_\_\_\_ Date Received: 03/30/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	2.9	J	03/31/2023	1424

NOTE: Hardness (total) is reported in mg/L

Comments:

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\_\_\_\_\_  
\_\_\_\_\_

*MR W/VM*



14

6

EPA SAMPLE NO.

FIELD-BLANK

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02137  
 Matrix: Water Lab Sample ID: 02137-14  
 % Solids:  Date Received: 03/30/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10	U	03/31/2023	1424

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
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**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 10:40
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-6	SDG No.:	O2137
Lab Sample ID:	O2137-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	98.4		1	1.00	2.00	mg/L		04/06/23 11:01	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:34	SM 4500-NH3 B plus G-11
Bromide	0.96	J	1	0.27	2.00	mg/L		03/30/23 17:04	300.0
<del>Chloride</del>	<del>43.4</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>03/30/23 17:04</del>	<del>300.0</del>
<del>Nitrate</del>	<del>6.30</del>	<del>OR</del>	<del>1</del>	<del>0.084</del>	<del>0.50</del>	<del>mg/L</del>		<del>03/30/23 17:04</del>	<del>300.0</del>
<del>Sulfate</del>	<del>39.5</del>	<del>OR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>03/30/23 17:04</del>	<del>300.0</del>
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	1	2.52	10.0	mg/L		04/05/23 14:07	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		03/31/23 09:05	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	163		1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.15	J	1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 15:55	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	1.90		1	0.34	1.00	mg/L		04/06/23 11:33	SM 5310 B-14

Comments: Apparent color result reported at pH 6.34

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 10:40
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-6DL	SDG No.:	O2137
Lab Sample ID:	O2137-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
<del>Chloride</del>	<del>40.1</del>	<del>OR</del>	<del>2</del>	<del>0.22</del>	<del>1.20</del>	<del>mg/L</del>	<del></del>	<del>03/31/23 13:05</del>	<del>300.0</del>
Nitrate	6.20	J H	2	0.17	1.00	mg/L		03/31/23 13:05	300.0
Sulfate	34.1	J	2	1.10	6.00	mg/L		03/31/23 13:05	300.0

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 10:40
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-6DL2	SDG No.:	O2137
Lab Sample ID:	O2137-01DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	34.8	D	10	1.10	6.00	mg/L		03/31/23 13:37	300.0

## Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 12:36
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3DD	SDG No.:	O2137
Lab Sample ID:	O2137-03	Matrix:	Water
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	7.60		1	1.00	2.00	mg/L		04/06/23 12:06	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:34	SM 4500-NH3 B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		03/30/23 17:36	300.0
Chloride	4.70		1	0.11	0.60	mg/L		03/30/23 17:36	300.0
Nitrate	0.26	J	1	0.084	0.50	mg/L		03/30/23 17:36	300.0
Sulfate	1.70	J	1	0.55	3.00	mg/L		03/30/23 17:36	300.0
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	1	2.52	10.0	mg/L		04/05/23 14:09	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		03/31/23 09:15	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	3.00	J	1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.16	J	1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:06	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	0.63	J	1	0.34	1.00	mg/L		04/06/23 11:56	SM 5310 B-14

Comments: Apparent color result reported at pH 6.63

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 13:29
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3D	SDG No.:	O2137
Lab Sample ID:	O2137-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	218		1	1.00	2.00	mg/L		04/06/23 11:12	SM 2320 B-11
<del>Ammonia as N</del>	<del>15.1</del>	<del>OR</del>	<del>1</del>	<del>0.045</del>	<del>0.10</del>	<del>mg/L</del>	<del>04/05/23 08:45</del>	<del>04/05/23 14:34</del>	<del>SM 4500 NH3</del> B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		03/30/23 18:08	300.0
<del>Chloride</del>	<del>505</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>03/30/23 18:08</del>	<del>300.0</del>
Nitrate	0.50	U	1	0.084	0.50	mg/L		03/30/23 18:08	300.0
<del>Sulfate</del>	<del>57.0</del>	<del>OR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>03/30/23 18:08</del>	<del>300.0</del>
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	6.97	J	1	2.52	10.0	mg/L		04/05/23 14:09	SM 5220 D-11
Apparent Color	400	D	20	100	100	cu		03/31/23 09:20	SM 2120 B-11
Phenolics	0.28		1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	1320		1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
<del>TKN</del>	<del>13.2</del>	<del>OR</del>	<del>1</del>	<del>0.13</del>	<del>0.50</del>	<del>mg/L</del>	<del>04/05/23 09:30</del>	<del>04/05/23 16:06</del>	<del>SM4500-N Org</del> C-11 plus NH3 B plus G-11
TOC	5.10		1	0.34	1.00	mg/L		04/06/23 13:16	SM 5310 B-14

Comments: Apparent color result reported at pH 6.63

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 13:29
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3DDL	SDG No.:	O2137
Lab Sample ID:	O2137-05DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	13.7	D	10	0.45	1.00	mg/L	04/05/23 08:45	04/05/23 14:44	SM 4500-NH3 B plus G-11
<del>Chloride</del>	<del>845</del>	<del>OR</del>	<del>5</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>	<del>04/05/23 08:45</del>	<del>03/31/23 14:08</del>	<del>300.0</del>
Sulfate	50.7	Ø	5	2.80	15.0	mg/L		03/31/23 14:08	300.0
TKN	13.3	D	2	0.26	1.00	mg/L	04/05/23 09:30	04/05/23 16:38	SM4500-N Org C-11 plus NH3 B plus G-11

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

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**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 13:29
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-3DDL2	SDG No.:	O2137
Lab Sample ID:	O2137-05DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	640	<del>✓</del>	100	11.0	60.0	mg/L		03/31/23 14:40	300.0

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

*Mr W/2/24*

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 14:15
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2R	SDG No.:	O2137
Lab Sample ID:	O2137-07	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	34.7		1	1.00	2.00	mg/L		04/06/23 11:15	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:34	SM 4500-NH3 B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		03/30/23 18:39	300.0
<del>Chloride</del>	<del>438</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>03/30/23 18:39</del>	<del>300.0</del>
Nitrate	1.80		1	0.084	0.50	mg/L		03/30/23 18:39	300.0
Sulfate	30.0		1	0.55	3.00	mg/L		03/30/23 18:39	300.0
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	1	2.52	10.0	mg/L		04/05/23 14:10	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		03/31/23 09:25	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	980		1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.17	J	1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:06	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	2.40		1	0.34	1.00	mg/L		04/06/23 13:41	SM 5310 B-14

Comments: Apparent color result reported at pH 5.76

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 14:15
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2RDL	SDG No.:	O2137
Lab Sample ID:	O2137-07DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	511	<del>P</del>	100	11.0	60.0	mg/L		03/31/23 15:12	300.0

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 15:35
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2D	SDG No.:	O2137
Lab Sample ID:	O2137-09	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	78.2		I	1.00	2.00	mg/L		04/06/23 11:20	SM 2320 B-11
Ammonia as N	0.10	U	I	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:34	SM 4500-NH3 B plus G-11
Bromide	2.00	U	I	0.27	2.00	mg/L		03/30/23 19:11	300.0
<del>Chloride</del>	<del>166</del>	<del>QR</del>	<del>I</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>03/30/23 19:11</del>	<del>300.0</del>
Nitrate	2.60		I	0.084	0.50	mg/L		03/30/23 19:11	300.0
Sulfate	24.1		I	0.55	3.00	mg/L		03/30/23 19:11	300.0
BOD5	2.00	U	I	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	I	2.52	10.0	mg/L		04/05/23 14:10	SM 5220 D-11
Apparent Color	5.00	U	I	5.00	5.00	cu		03/31/23 09:30	SM 2120 B-11
Phenolics	0.050	U	I	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	287		I	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.20	J	I	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:06	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	5.00		I	0.34	1.00	mg/L		04/06/23 14:08	SM 5310 B-14

Comments: Apparent color result reported at pH 6.15

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 15:35
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-2DDL	SDG No.:	O2137
Lab Sample ID:	O2137-09DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	118	<del>Ø</del>	50	5.50	30.0	mg/L		03/31/23 18:22	300.0

Comments: \_\_\_\_\_

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 16:00
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-5	SDG No.:	O2137
Lab Sample ID:	O2137-11	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	80.4		1	1.00	2.00	mg/L		04/06/23 11:24	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:44	SM 4500-NH3 B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		03/30/23 19:43	300.0
<del>Chloride</del>	<del>165</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>03/30/23 19:43</del>	<del>300.0</del>
Nitrate	2.60		1	0.084	0.50	mg/L		03/30/23 19:43	300.0
Sulfate	23.6		1	0.55	3.00	mg/L		03/30/23 19:43	300.0
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	1	2.52	10.0	mg/L		04/05/23 14:12	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		03/31/23 09:35	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	328		1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.22	J	1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:06	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	4.80		1	0.34	1.00	mg/L		04/06/23 14:35	SM 5310 B-14

Comments: Apparent color result reported at pH 6.14

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 16:00
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	SY-5DL	SDG No.:	O2137
Lab Sample ID:	O2137-11DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	118	D	50	5.50	30.0	mg/L		03/31/23 18:53	300.0

Comments: \_\_\_\_\_

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	03/29/23 10:00
Project:	Syosset Landfill 2023	Date Received:	03/30/23
Client Sample ID:	FIELD-BLANK	SDG No.:	O2137
Lab Sample ID:	O2137-14	Matrix:	Water
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	2.00	U	1	1.00	2.00	mg/L		04/06/23 12:20	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/05/23 08:45	04/05/23 14:44	SM 4500-NH3 B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		03/30/23 22:21	300.0
Chloride	0.60	U	1	0.11	0.60	mg/L		03/30/23 22:21	300.0
Nitrate	0.50	U	1	0.084	0.50	mg/L		03/30/23 22:21	300.0
Sulfate	3.00	U	1	0.55	3.00	mg/L		03/30/23 22:21	300.0
BOD5	2.00	U	1	0.17	2.00	mg/L		03/31/23 09:45	SM 5210 B-16
COD	10.0	U	1	2.52	10.0	mg/L		04/05/23 14:12	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		03/31/23 09:40	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/04/23 12:15	04/04/23 16:32	9065
TDS	10.0	U	1	1.00	10.0	mg/L		03/31/23 16:15	SM 2540 C-15
TKN	0.17	J	1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:06	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	1.40		1	0.34	1.00	mg/L		04/06/23 17:28	SM 5310 B-14

Comments: Apparent color result reported at pH 5.79

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**DATA USABILITY SUMMARY REPORT  
SYOSSET LANDFILL POST CLOSURE, SYOSSET, NEW YORK**

Client: Lockwood, Kessler, & Bartlett, Syosset, New York  
 SDG: 02190  
 Laboratory: ChemTech, Mountainside, New Jersey  
 Site: Syosset Landfill, Syosset, New York  
 Date: June 17, 2024

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-3	02190-01	Water
1MS*	SY-3MS	02190-01MS	Water
1MSD*	SY-3MSD	02190-01MSD	Water
2D	SY-3	02190-02	Water

\*Anions only

A Data Usability Summary Review was performed on the analytical data for two water samples collected on April 3, 2024 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) “Contract Laboratory Program (CLP) Multi-Media Multi-Concentration Inorganic Analysis ISM02.3”, “Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions” the “Methods for Chemical Analysis of Water and Wastes” and the “Standard Methods for the Examination of Water and Wastewater”.

Specific method references are as follows:

<u>Analysis</u>	<u>Method References</u>
VOCs	USEPA SW846 8260C
Metals/Mercury/Cyanide	USEPA CLP Method ISM02.4
Alkalinity	Standard Method SM2320 B
Ammonia (as N)	Standard Method SM4500-NH3
Bromide	USEPA Method 300.0
Chloride	USEPA Method 300.0
Nitrate	USEPA Method 300.0
Sulfate	USEPA Method 300.0
BOD5	Standard Method SM5210 B
COD	Standard Method SM5220D
Color	Standard Method SM2120 B
Phenolics	USEPA SW-846 Method 9065
Total Dissolved Solids	Standard Method SM2540C
Total Kjeldahl Nitrogen	Standard Method SM4500-N Org B or C
Total Organic Carbon	Standard Method SM5310B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the USEPA National Functional Guidelines for Organic and Inorganic Data Review, and the site QAPP as follows:

- The USEPA “Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review,” January 2017;
- The USEPA “Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review,” January 2017;
- and the reviewer's professional judgment.

The following data quality indicators were reviewed for this report:

### *Organics*

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

### *Inorganics*

- Holding times and sample preservation
- Inductively Coupled Plasma/Mass Spectrometry (ICP/MS) Tuning
- Initial and continuing calibration verifications
- Method blank and field QC blank contamination
- ICP Interference Check Sample
- Laboratory Control Sample (LCS) recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Duplicate Sample Analysis
- ICP Serial Dilution
- Compound Quantitation
- Field Duplicate sample precision

### **Data Usability Assessment**

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

### **Volatile Organic Compounds (VOCs)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

#### **Initial Calibration**

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

#### **Continuing Calibration**

- The continuing calibrations exhibited acceptable %D and RRF values.

#### **Method Blank**

- The method blanks were free of contamination.

#### **Field Blank**

- Field QC samples were not collected.

#### **Surrogate Spike Recoveries**

- All samples exhibited acceptable surrogate recoveries.

#### **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- MS/MSD samples were not analyzed.

### **Laboratory Control Samples**

- The LCS samples exhibited acceptable %R values.

### **Internal Standard (IS) Area Performance**

- All internal standards met response and retention time (RT) criteria.

### **Compound Quantitation**

- All criteria were met.

### **Tentatively Identified Compounds (TICs)**

- TICs were not reported.

### **Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

## Total & Dissolved Metals & Hardness & Cyanide

### Holding Times

- All samples were prepared and analyzed within 14 days for cyanide, 28 days for mercury and 180 days for all other metals.

### ICP/MS Tuning

- ICP/MS tuning not required.

### Initial Calibration Verification

- All initial calibration criteria were met.

### Continuing Calibration Verification

- All continuing calibration criteria were met.

### Method Blank

- The method blanks were free of contamination.

### Field Blank

- Field QC samples were not collected.

### ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

### Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

### Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS samples (Reference) exhibited acceptable percent recoveries (%R).

### **ICP Serial Dilution**

- The ICP serial dilution (Reference) exhibited acceptable percent differences (%D).

### **Compound Quantitation**

- All criteria were met.

### **Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

**Wet Chemistry Parameters: Alkalinity, Ammonia, Bromide, Chloride, Nitrate, Sulfate, BOD5, COD, Color, Phenolics, TDS, TKN, TOC**

**Holding Times**

- All samples were prepared and analyzed within the recommended holding time for each analysis.

**Initial and Continuing Calibration**

- All %R criteria were met.

**Method Blank**

- The method blanks were free of contamination.

**Field Blank**

- Field QC samples were not collected.

**Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- The MS/MSD samples exhibited acceptable percent recoveries (%R) except for the following.

MS/MSD Sample	Compound	MS %R/MSD %R/RPD	Qualifier
1	Nitrate	73%/73%/OK	J

**Laboratory Control Samples**

- The LCS sample exhibited acceptable recoveries.

**Compound Quantitation**

- Sample 1 exhibited a high concentration of several analytes and was flagged (OR) for over the calibration range by the laboratory. The sample was diluted and reanalyzed. The dilution result for this compound should be used for reporting purposes.

**Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 6/18/24  
Nancy Weaver  
Senior Chemist

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.



**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/03/23
Project:	Syosset Landfill 2023	Date Received:	04/04/23
Client Sample ID:	SY-3	SDG No.:	O2190
Lab Sample ID:	O2190-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034945.D	1		04/05/23 11:50	VX040523

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	2.90	J	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	0.38	J	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/03/23
Project:	Syosset Landfill 2023	Date Received:	04/04/23
Client Sample ID:	SY-3	SDG No.:	O2190
Lab Sample ID:	O2190-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034945.D	1		04/05/23 11:50	VX040523

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.9		74 - 125	96%	SPK: 50
1868-53-7	Dibromofluoromethane	48.6		75 - 124	97%	SPK: 50
2037-26-5	Toluene-d8	48.9		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.1		64 - 133	92%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	258000	5.55			
540-36-3	1,4-Difluorobenzene	433000	6.763			
3114-55-4	Chlorobenzene-d5	378000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	160000	12.024			



FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SY-3

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2190  
 Matrix: Water Lab Sample ID: O2190-01  
 % Solids:  Date Received: 04/04/2023

Analytical Method: ICP AES

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	04/06/2023	1503
7440-36-0	Antimony	60	U	04/06/2023	1503
7440-38-2	Arsenic	23		04/06/2023	1503
7440-39-3	Barium	170	J	04/06/2023	1503
7440-41-7	Beryllium	0.40	J	04/06/2023	1503
7440-43-9	Cadmium	3.0	J	04/06/2023	1503
7440-70-2	Calcium	50000		04/06/2023	1503
7440-47-3	Chromium	10	U	04/06/2023	1503
7440-48-4	Cobalt	50	U	04/06/2023	1503
7440-50-8	Copper	25	U	04/06/2023	1503
7439-89-6	Iron	79000		04/06/2023	1503
7439-92-1	Lead	10	U	04/06/2023	1503
7439-95-4	Magnesium	14000		04/06/2023	1503
7439-96-5	Manganese	3800		04/06/2023	1503
7440-02-0	Nickel	4.2	J	04/06/2023	1503
7440-09-7	Potassium	16000		04/06/2023	1503
7782-49-2	Selenium	35	U	04/06/2023	1503
7440-22-4	Silver	10	U	04/06/2023	1503
7440-23-5	Sodium	200000		04/06/2023	1503
7440-28-0	Thallium	25	U	04/06/2023	1503
7440-62-2	Vanadium	50	U	04/06/2023	1503
7440-66-6	Zinc	60	U	04/06/2023	1503
Hardness	Hardness (total)	180		04/06/2023	1503

NOTE: Hardness (total) is reported in mg/L

Comments:

2D

6

B

EPA SAMPLE NO.

SY-3

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: O2190  
Matrix: Water Lab Sample ID: O2190-02  
% Solids: Date Received: 04/04/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	04/06/2023	1508
7440-36-0	Antimony	60	U	04/06/2023	1508
7440-38-2	Arsenic	8.4	J	04/06/2023	1508
7440-39-3	Barium	110	J	04/06/2023	1508
7440-41-7	Beryllium	5.0	U	04/06/2023	1508
7440-43-9	Cadmium	5.0	U	04/06/2023	1508
7440-70-2	Calcium	50000		04/06/2023	1508
7440-47-3	Chromium	10	U	04/06/2023	1508
7440-48-4	Cobalt	50	U	04/06/2023	1508
7440-50-8	Copper	11	J	04/06/2023	1508
7439-89-6	Iron	2000		04/06/2023	1508
7439-92-1	Lead	10	U	04/06/2023	1508
7439-95-4	Magnesium	14000		04/06/2023	1508
7439-96-5	Manganese	3500		04/06/2023	1508
7440-02-0	Nickel	40	U	04/06/2023	1508
7440-09-7	Potassium	15000		04/06/2023	1508
7782-49-2	Selenium	35	U	04/06/2023	1508
7440-22-4	Silver	10	U	04/06/2023	1508
7440-23-5	Sodium	200000		04/06/2023	1508
7440-28-0	Thallium	25	U	04/06/2023	1508
7440-62-2	Vanadium	50	U	04/06/2023	1508
7440-66-6	Zinc	60	U	04/06/2023	1508

NOTE: Hardness (total) is reported in mg/L

Comments:

MT W/VH



EPA SAMPLE NO.

SY-3

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02190  
 Matrix: Water Lab Sample ID: 02190-01  
 % Solids:  Date Received: 04/04/2023  
 Analytical Method: Hg  
 Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm<sup>3</sup>): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.13	J	04/06/2023	1252

NOTE: Hardness (total) is reported in mg/L

Comments:

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20

6

B

6

EPA SAMPLE NO.

SY-3

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2190  
 Matrix: Water Lab Sample ID: O2190-02  
 % Solids:  Date Received: 04/04/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/06/2023	1259

NOTE: Hardness (total) is reported in mg/L

Comments:

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**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/03/23 11:30
Project:	Syosset Landfill 2023	Date Received:	04/04/23
Client Sample ID:	SY-3	SDG No.:	O2190
Lab Sample ID:	O2190-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	149		1	1.00	2.00	mg/L		04/06/23 11:31	SM 2320 B-11
<del>Ammonia as N</del>	<del>6.40</del>	<del>OR</del>	<del>1</del>	<del>0.045</del>	<del>0.10</del>	<del>mg/L</del>	<del>04/05/23 08:45</del>	<del>04/05/23 14:44</del>	<del>SM 4500-NH3</del> B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		04/04/23 14:10	300.0
<del>Chloride</del>	<del>346</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/04/23 14:10</del>	<del>300.0</del>
Nitrate	0.22	J S	1	0.084	0.50	mg/L		04/04/23 14:10	300.0
<del>Sulfate</del>	<del>42.4</del>	<del>QR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>04/04/23 14:10</del>	<del>300.0</del>
BOD5	2.00	U	1	0.17	2.00	mg/L		04/05/23 10:30	SM 5210 B-16
COD	23.0		1	2.52	10.0	mg/L		04/05/23 14:13	SM 5220 D-11
Apparent Color	1250	B	50	250	250	cu		04/04/23 14:35	SM 2120 B-11
Phenolics	0.43		1	0.011	0.050	mg/L	04/04/23 14:00	04/04/23 16:32	9065
TDS	811		1	1.00	10.0	mg/L		04/04/23 16:00	SM 2540 C-15
TKN	6.30		1	0.13	0.50	mg/L	04/05/23 09:30	04/05/23 16:17	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	4.40		1	0.34	1.00	mg/L		04/06/23 18:17	SM 5310 B-14

Comments: Apparent color result reported at pH 6.34

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/03/23 11:30
Project:	Syosset Landfill 2023	Date Received:	04/04/23
Client Sample ID:	SY-3DL	SDG No.:	O2190
Lab Sample ID:	O2190-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	6.10	<del>0</del>	5	0.23	0.50	mg/L	04/05/23 08:45	04/05/23 14:44	SM 4500-NH3 B plus G-11
<del>Chloride</del>	<del>428</del>	<del>OR</del>	<del>2</del>	<del>0.22</del>	<del>1.20</del>	<del>mg/L</del>	<del>04/04/23 16:05</del>	<del>300.0</del>	
Sulfate	37.7	<del>0</del>	2	1.10	6.00	mg/L	04/04/23 16:05	300.0	

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/03/23 11:30
Project:	Syosset Landfill 2023	Date Received:	04/04/23
Client Sample ID:	SY-3DL2	SDG No.:	O2190
Lab Sample ID:	O2190-01DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	335	D	100	11.0	60.0	mg/L		04/04/23 16:37	300.0

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**DATA USABILITY SUMMARY REPORT  
SYOSSET LANDFILL POST CLOSURE, SYOSSET, NEW YORK**

Client: Lockwood, Kessler, & Bartlett, Syosset, New York  
 SDG: 02247  
 Laboratory: ChemTech, Mountainside, New Jersey  
 Site: Syosset Landfill, Syosset, New York  
 Date: June 17, 2024

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	PK-10S	02247-1	Water
2D	PK-10S	02247-02	Water
3	PK-101	02247-03	Water
4D	PK-101	02247-04	Water
5*	PK-10D	02247-05	Water
5MS	PK-10DMS	02247-05MS	Water
5MSD	PK-10DMSD	02247-05MSD	Water
6D	PK-10D	02247-06	Water
6DMS*	PK-10DMS	02247-06MS	Water
6DMSD*	PK-10DMSD	02247-06MSD	Water
11	RW-12I	02247-11	Water
12D	RW-12I	02247-12	Water
13	RW-12D	02247-13	Water
14D	RW-12D	02247-14	Water
15	TRIP-BLANK-2	02247-15	Water

\* - Metals/Hg only    D - Dissolved Metals/Hg

A Data Usability Summary Review was performed on the analytical data for ten water samples and one aqueous trip blank sample collected on April 6, 2024 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) "Contract Laboratory Program (CLP) Multi-Media Multi-Concentration Inorganic Analysis ISM02.3", "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions" the "Methods for Chemical Analysis of Water and Wastes" and the "Standard Methods for the Examination of Water and Wastewater".

Specific method references are as follows:

<u>Analysis</u>	<u>Method References</u>
VOCs	USEPA SW846 8260C
Metals/Mercury/Cyanide	USEPA CLP Method ISM02.4
Alkalinity	Standard Method SM2320 B
Ammonia (as N)	Standard Method SM4500-NH3
Bromide	USEPA Method 300.0
Chloride	USEPA Method 300.0
Nitrate	USEPA Method 300.0

<i>Analysis</i>	<i>Method References</i>
Sulfate	USEPA Method 300.0
BOD5	Standard Method SM5210 B
COD	Standard Method SM5220D
Color	Standard Method SM2120 B
Phenolics	USEPA SW-846 Method 9065
Total Dissolved Solids	Standard Method SM2540C
Total Kjeldahl Nitrogen	Standard Method SM4500-N Org B or C
Total Organic Carbon	Standard Method SM5310B

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the USEPA National Functional Guidelines for Organic and Inorganic Data Review, and the site QAPP as follows:

- The USEPA “Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review,” January 2017;
- The USEPA “Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review,” January 2017;
- and the reviewer’s professional judgment.

The following data quality indicators were reviewed for this report:

### *Organics*

- Holding times and sample preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field QC blank contamination
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries
- Internal standard area and retention time summary forms
- Target Compound Identification
- Compound Quantitation
- Field Duplicate sample precision

### *Inorganics*

- Holding times and sample preservation
- Inductively Coupled Plasma/Mass Spectrometry (ICP/MS) Tuning
- Initial and continuing calibration verifications
- Method blank and field QC blank contamination
- ICP Interference Check Sample
- Laboratory Control Sample (LCS) recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Duplicate Sample Analysis
- ICP Serial Dilution
- Compound Quantitation
- Field Duplicate sample precision

### **Data Usability Assessment**

There were no rejections of data.

The data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

### **Volatile Organic Compounds (VOCs)**

#### **Holding Times**

- All samples were analyzed within 14 days for preserved water samples.

#### **GC/MS Tuning**

- All criteria were met.

#### **Initial Calibration**

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients and mean RRF values.

#### **Continuing Calibration**

- The continuing calibrations exhibited acceptable %D and RRF values.

#### **Method Blank**

- The method blanks were free of contamination.

#### **Field Blank**

- The following table lists field QC samples with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. For detected compound concentrations <RL, the results are negated and qualified (U). For detected sample concentrations >RL of acetone, 2-butanone and methylene chloride

(common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U). For all other compounds >RL, an action level of five times (5x) the highest associated blank concentration is used.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
TRIP-BLANK-2	ND	-	-	-

**Surrogate Spike Recoveries**

- All samples exhibited acceptable surrogate recoveries.

**Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

**Laboratory Control Samples**

- The LCS samples exhibited acceptable %R values.

**Internal Standard (IS) Area Performance**

- All internal standards met response and retention time (RT) criteria.

**Compound Quantitation**

- All criteria were met.

**Tentatively Identified Compounds (TICs)**

- TICs were not reported.

**Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

## Total & Dissolved Metals & Hardness & Cyanide

### Holding Times

- All samples were prepared and analyzed within 14 days for cyanide, 28 days for mercury and 180 days for all other metals.

### ICP/MS Tuning

- ICP/MS tuning not required.

### Initial Calibration Verification

- All initial calibration criteria were met.

### Continuing Calibration Verification

- All continuing calibration criteria were met.

### Method Blank

- The following table lists method blanks with contamination and the samples associated with the blanks that had results qualified as a consequence of the blank contamination. For detected compound concentrations <RL, the results are negated and qualified (U). For detected sample concentrations >RL and less than ten times (10x) the highest associated blank concentration (after taking sample dilution levels, percent moisture and sample volume into account) are negated and qualified with a (U).

Dissolved Metals/Hg				
Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
PB152072BL	Mercury	0.079	None	ND

### Field Blank

- Field QC samples were not collected.

### ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

**Laboratory Control Samples**

- The LCS sample exhibited acceptable recoveries.

**Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- The MS samples (Reference) exhibited acceptable percent recoveries (%R) except for the following.

MS/MSD Sample	Compound	MS MSD %R/RPD	Qualifier	Samples Affected
5 (T)	Thallium	136%/OK/OK	None	ND
6 (D)	Zinc	183%/OK/57%	J	2, 4, 6, 12, 14

**ICP Serial Dilution**

- The ICP serial dilution (Reference) exhibited acceptable percent differences (%D).

**Compound Quantitation**

- All criteria were met.

**Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

**Wet Chemistry Parameters: Alkalinity, Ammonia, Bromide, Chloride, Nitrate, Sulfate, BOD5, COD, Color, Phenolics, TDS, TKN, TOC**

**Holding Times**

- All samples were prepared and analyzed within the recommended holding time for each analysis except EDS Samples 13 and 15 for nitrate. Both results were flagged (J).

**Initial and Continuing Calibration**

- All %R criteria were met.

**Method Blank**

- The method blank results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
LB124909BL	TDS	1	None	For Wet Chemistry

**Field Blank**

- Field QC samples were not collected.

**Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries**

- The MS/MSD samples exhibited acceptable percent recoveries (%R).

**Laboratory Control Samples**

- The LCS sample exhibited acceptable recoveries.

**Compound Quantitation**

- Several samples exhibited a high concentration of various analytes and were flagged (OR) for over the calibration range by the laboratory. The sample was diluted and reanalyzed. The dilution result for this compound should be used for reporting purposes.

**Field Duplicate Sample Precision**

- Field duplicate samples were not collected.

Please contact the undersigned at (561) 475-2000 if you have any questions or need further information.

Signed:

Nancy Weaver  
Nancy Weaver  
Senior Chemist

Dated:

6/18/24

<b>Data Qualifier</b>	<b>Definition</b>
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.





284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10S	SDG No.:	O2247
Lab Sample ID:	O2247-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034978.D	1		04/07/23 18:54	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

### Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10S	SDG No.:	O2247
Lab Sample ID:	O2247-01	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034978.D	1		04/07/23 18:54	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.5		74 - 125	97%	SPK: 50
1868-53-7	Dibromofluoromethane	47.8		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	49.7		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.3		64 - 133	95%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	264000	5.556			
540-36-3	1,4-Difluorobenzene	447000	6.763			
3114-55-4	Chlorobenzene-d5	403000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	173000	12.024			



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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-101	SDG No.:	O2247
Lab Sample ID:	O2247-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034979.D	1		04/07/23 19:17	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.40	J	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-101	SDG No.:	O2247
Lab Sample ID:	O2247-03	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034979.D	1		04/07/23 19:17	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	2.50		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	0.20	J	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.5		74 - 125	95%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1		75 - 124	94%	SPK: 50
2037-26-5	Toluene-d8	49.0		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.1		64 - 133	94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	280000	5.55			
540-36-3	1,4-Difluorobenzene	477000	6.763			
3114-55-4	Chlorobenzene-d5	425000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	186000	12.024			



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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10D	SDG No.:	O2247
Lab Sample ID:	O2247-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034980.D	1		04/07/23 19:40	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.43	J	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	8.20		0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	0.42	J	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10D	SDG No.:	O2247
Lab Sample ID:	O2247-05	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034980.D	1		04/07/23 19:40	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	0.43	J	0.17	1.00	ug/L
108-90-7	Chlorobenzene	0.38	J	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	48.9		74 - 125	98%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	49.2		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.0		64 - 133	96%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	256000	5.556			
540-36-3	1,4-Difluorobenzene	442000	6.763			
3114-55-4	Chlorobenzene-d5	394000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	176000	12.024			



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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-121	SDG No.:	O2247
Lab Sample ID:	O2247-11	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034981.D	1		04/07/23 20:03	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.74	J	0.21	1.00	ug/L
67-64-1	Acetone	2.70	J	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.26	J	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	4.50		0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	4.70		0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	0.66	J	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.30		0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



### Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-121	SDG No.:	O2247
Lab Sample ID:	O2247-11	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034981.D	1		04/07/23 20:03	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	1.50		0.17	1.00	ug/L
108-90-7	Chlorobenzene	22.3		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	2.40		0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	9.10		0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	4.80		0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.2		74 - 125	98%	SPK: 50
1868-53-7	Dibromofluoromethane	47.3		75 - 124	95%	SPK: 50
2037-26-5	Toluene-d8	48.8		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.8		64 - 133	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	261000	5.55			
540-36-3	1,4-Difluorobenzene	454000	6.763			
3114-55-4	Chlorobenzene-d5	411000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	185000	12.024			



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12D	SDG No.:	O2247
Lab Sample ID:	O2247-13	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034982.D	1		04/07/23 20:27	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	0.35	J	0.14	1.00	ug/L
74-87-3	Chloromethane	0.28	J	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.30		0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	0.24	J	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	6.30		0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	4.80		0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.70		0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	0.21	J	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	0.52	J	0.16	1.00	ug/L
79-01-6	Trichloroethene	0.90	J	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12D	SDG No.:	O2247
Lab Sample ID:	O2247-13	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034982.D	1		04/07/23 20:27	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethene	0.88	J	0.17	1.00	ug/L
108-90-7	Chlorobenzene	29.4		0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	2.90		0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	10.4		0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	6.80		0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	49.3		74 - 125	99%	SPK: 50
1868-53-7	Dibromofluoromethane	48.0		75 - 124	96%	SPK: 50
2037-26-5	Toluene-d8	49.7		86 - 113	99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.0		64 - 133	98%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	257000	5.556			
540-36-3	1,4-Difluorobenzene	443000	6.763			
3114-55-4	Chlorobenzene-d5	402000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	182000	12.024			



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

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## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	TRIP-BLANK-2	SDG No.:	O2247
Lab Sample ID:	O2247-15	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034977.D	1		04/07/23 18:31	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
75-71-8	Dichlorodifluoromethane	1.00	U	0.14	1.00	ug/L
74-87-3	Chloromethane	1.00	U	0.25	1.00	ug/L
75-01-4	Vinyl Chloride	1.00	U	0.25	1.00	ug/L
74-83-9	Bromomethane	5.00	U	1.60	5.00	ug/L
75-00-3	Chloroethane	1.00	U	0.28	1.00	ug/L
75-69-4	Trichlorofluoromethane	1.00	U	0.13	1.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.00	U	0.21	1.00	ug/L
75-35-4	1,1-Dichloroethene	1.00	U	0.21	1.00	ug/L
67-64-1	Acetone	5.00	U	1.20	5.00	ug/L
75-15-0	Carbon Disulfide	1.00	U	0.27	1.00	ug/L
1634-04-4	Methyl tert-butyl Ether	1.00	U	0.14	1.00	ug/L
79-20-9	Methyl Acetate	1.00	U	0.36	1.00	ug/L
75-09-2	Methylene Chloride	1.00	U	0.50	1.00	ug/L
156-60-5	trans-1,2-Dichloroethene	1.00	U	0.17	1.00	ug/L
75-34-3	1,1-Dichloroethane	1.00	U	0.16	1.00	ug/L
110-82-7	Cyclohexane	5.00	U	1.60	5.00	ug/L
78-93-3	2-Butanone	5.00	U	1.20	5.00	ug/L
56-23-5	Carbon Tetrachloride	1.00	U	0.13	1.00	ug/L
156-59-2	cis-1,2-Dichloroethene	1.00	U	0.20	1.00	ug/L
74-97-5	Bromochloromethane	1.00	U	0.14	1.00	ug/L
67-66-3	Chloroform	1.00	U	0.14	1.00	ug/L
71-55-6	1,1,1-Trichloroethane	1.00	U	0.14	1.00	ug/L
108-87-2	Methylcyclohexane	1.00	U	0.16	1.00	ug/L
71-43-2	Benzene	1.00	U	0.12	1.00	ug/L
107-06-2	1,2-Dichloroethane	1.00	U	0.16	1.00	ug/L
79-01-6	Trichloroethene	1.00	U	0.26	1.00	ug/L
78-87-5	1,2-Dichloropropane	1.00	U	0.15	1.00	ug/L
75-27-4	Bromodichloromethane	1.00	U	0.15	1.00	ug/L
108-10-1	4-Methyl-2-Pentanone	5.00	U	0.74	5.00	ug/L
108-88-3	Toluene	1.00	U	0.14	1.00	ug/L
10061-02-6	t-1,3-Dichloropropene	1.00	U	0.17	1.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.00	U	0.15	1.00	ug/L



## Report of Analysis

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	TRIP-BLANK-2	SDG No.:	O2247
Lab Sample ID:	O2247-15	Matrix:	Water
Analytical Method:	SW8260	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group I
GC Column:	DB-624UI ID: 0.18	Level:	LOW
Prep Method:			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX034977.D	1		04/07/23 18:31	VX040723

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	1.00	U	0.13	1.00	ug/L
591-78-6	2-Hexanone	5.00	U	0.98	5.00	ug/L
124-48-1	Dibromochloromethane	1.00	U	0.15	1.00	ug/L
106-93-4	1,2-Dibromoethane	1.00	U	0.13	1.00	ug/L
127-18-4	Tetrachloroethane	1.00	U	0.17	1.00	ug/L
108-90-7	Chlorobenzene	1.00	U	0.12	1.00	ug/L
100-41-4	Ethyl Benzene	1.00	U	0.13	1.00	ug/L
179601-23-1	m/p-Xylenes	2.00	U	0.31	2.00	ug/L
95-47-6	o-Xylene	1.00	U	0.15	1.00	ug/L
100-42-5	Styrene	1.00	U	0.13	1.00	ug/L
75-25-2	Bromoform	1.00	U	0.15	1.00	ug/L
98-82-8	Isopropylbenzene	1.00	U	0.13	1.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U	0.15	1.00	ug/L
541-73-1	1,3-Dichlorobenzene	1.00	U	0.23	1.00	ug/L
106-46-7	1,4-Dichlorobenzene	1.00	U	0.24	1.00	ug/L
95-50-1	1,2-Dichlorobenzene	1.00	U	0.17	1.00	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.00	U	0.43	1.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	1.00	U	0.43	1.00	ug/L
87-61-6	1,2,3-Trichlorobenzene	1.00	U	0.55	1.00	ug/L
<b>SURROGATES</b>						
17060-07-0	1,2-Dichloroethane-d4	47.7		74 - 125	95%	SPK: 50
1868-53-7	Dibromofluoromethane	47.1		75 - 124	94%	SPK: 50
2037-26-5	Toluene-d8	48.8		86 - 113	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		64 - 133	94%	SPK: 50
<b>INTERNAL STANDARDS</b>						
363-72-4	Pentafluorobenzene	266000	5.55			
540-36-3	1,4-Difluorobenzene	452000	6.763			
3114-55-4	Chlorobenzene-d5	403000	10.055			
3855-82-1	1,4-Dichlorobenzene-d4	176000	12.024			



FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

PK-10S

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2247  
 Matrix: Water Lab Sample ID: O2247-01  
 % Solids:  Date Received: 04/07/2023

Analytical Method: ICP\_AESConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	05/02/2023	1403
7440-36-0	Antimony	60	U	05/02/2023	1403
7440-38-2	Arsenic	10	U	05/02/2023	1403
7440-39-3	Barium	16	J	05/02/2023	1403
7440-41-7	Beryllium	5.0	U	05/02/2023	1403
7440-43-9	Cadmium	5.0	U	05/02/2023	1403
7440-70-2	Calcium	12000		05/02/2023	1403
7440-47-3	Chromium	4.0	J	05/02/2023	1403
7440-48-4	Cobalt	50	U	05/02/2023	1403
7440-50-8	Copper	25	U	05/02/2023	1403
7439-89-6	Iron	42	J	05/02/2023	1403
7439-92-1	Lead	10	U	05/02/2023	1403
7439-95-4	Magnesium	2500	J	05/02/2023	1403
7439-96-5	Manganese	2.6	J	05/02/2023	1403
7440-02-0	Nickel	5.7	J	05/02/2023	1403
7440-09-7	Potassium	5000	U	05/02/2023	1403
7782-49-2	Selenium	35	U	05/02/2023	1403
7440-22-4	Silver	10	U	05/02/2023	1403
7440-23-5	Sodium	4700	J	05/02/2023	1403
7440-28-0	Thallium	25	U	05/02/2023	1403
7440-62-2	Vanadium	50	U	05/02/2023	1403
7440-66-6	Zinc	60	U	05/02/2023	1403
Hardness	Hardness (total)	40		05/02/2023	1403

NOTE: Hardness (total) is reported in mg/L

Comments:

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EPA SAMPLE NO.

PK-10I

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02247  
Matrix: Water Lab Sample ID: 02247-03  
% Solids: Date Received: 04/07/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	05/02/2023	1407
7440-36-0	Antimony	60	U	05/02/2023	1407
7440-38-2	Arsenic	10	U	05/02/2023	1407
7440-39-3	Barium	63	J	05/02/2023	1407
7440-41-7	Beryllium	5.0	U	05/02/2023	1407
7440-43-9	Cadmium	5.0	U	05/02/2023	1407
7440-70-2	Calcium	45000		05/02/2023	1407
7440-47-3	Chromium	3.9	J	05/02/2023	1407
7440-48-4	Cobalt	45	J	05/02/2023	1407
7440-50-8	Copper	25	U	05/02/2023	1407
7439-89-6	Iron	84	J	05/02/2023	1407
7439-92-1	Lead	10	U	05/02/2023	1407
7439-95-4	Magnesium	12000		05/02/2023	1407
7439-96-5	Manganese	1800		05/02/2023	1407
7440-02-0	Nickel	4.7	J	05/02/2023	1407
7440-09-7	Potassium	18000		05/02/2023	1407
7782-49-2	Selenium	35	U	05/02/2023	1407
7440-22-4	Silver	10	U	05/02/2023	1407
7440-23-5	Sodium	310000		05/02/2023	1407
7440-28-0	Thallium	25	U	05/02/2023	1407
7440-62-2	Vanadium	50	U	05/02/2023	1407
7440-66-6	Zinc	60	U	05/02/2023	1407
Hardness	Hardness (total)	160		05/02/2023	1407

NOTE: Hardness (total) is reported in mg/L

Comments:

MT W/VM

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EPA SAMPLE NO.

PK-10D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2247  
 Matrix: Water Lab Sample ID: O2247-05  
 % Solids:  Date Received: 04/07/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm³): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	05/02/2023	1347
7440-36-0	Antimony	60	U	05/02/2023	1347
7440-38-2	Arsenic	10	U	05/02/2023	1347
7440-39-3	Barium	31	J	05/02/2023	1347
7440-41-7	Beryllium	5.0	U	05/02/2023	1347
7440-43-9	Cadmium	5.0	U	05/02/2023	1347
7440-70-2	Calcium	19000		05/02/2023	1347
7440-47-3	Chromium	2.8	J	05/02/2023	1347
7440-48-4	Cobalt	1.2	J	05/02/2023	1347
7440-50-8	Copper	25	U	05/02/2023	1347
7439-89-6	Iron	38	J	05/02/2023	1347
7439-92-1	Lead	10	U	05/02/2023	1347
7439-95-4	Magnesium	5900		05/02/2023	1347
7439-96-5	Manganese	26		05/02/2023	1347
7440-02-0	Nickel	6.3	J	05/02/2023	1347
7440-09-7	Potassium	680	J	05/02/2023	1347
7782-49-2	Selenium	35	U	05/02/2023	1347
7440-22-4	Silver	10	U	05/02/2023	1347
7440-23-5	Sodium	57000		05/02/2023	1347
7440-28-0	Thallium	25	U	05/02/2023	1347
7440-62-2	Vanadium	50	U	05/02/2023	1347
7440-66-6	Zinc	60	U	05/02/2023	1347
Hardness	Hardness (total)	72		05/02/2023	1347

NOTE: Hardness (total) is reported in mg/L

Comments:

\_\_\_\_\_

MT 6/17/24

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

RW-12I

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: O2247  
 Matrix: Water Lab Sample ID: O2247-11  
 % Solids: Date Received: 04/07/2023

Analytical Method: ICP\_AES

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^3$ ):  $\mu\text{g/L}$ 

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	05/02/2023	1419
7440-36-0	Antimony	60	U	05/02/2023	1419
7440-38-2	Arsenic	10	U	05/02/2023	1419
7440-39-3	Barium	56	J	05/02/2023	1419
7440-41-7	Beryllium	5.0	U	05/02/2023	1419
7440-43-9	Cadmium	5.0	U	05/02/2023	1419
7440-70-2	Calcium	63000		05/02/2023	1419
7440-47-3	Chromium	57		05/02/2023	1419
7440-48-4	Cobalt	1.7	J	05/02/2023	1419
7440-50-8	Copper	19	J	05/02/2023	1419
7439-89-6	Iron	650		05/02/2023	1419
7439-92-1	Lead	10	U	05/02/2023	1419
7439-95-4	Magnesium	32000		05/02/2023	1419
7439-96-5	Manganese	64		05/02/2023	1419
7440-02-0	Nickel	87		05/02/2023	1419
7440-09-7	Potassium	60000		05/02/2023	1419
7782-49-2	Selenium	35	U	05/02/2023	1419
7440-22-4	Silver	10	U	05/02/2023	1419
7440-23-5	Sodium	120000		05/02/2023	1419
7440-28-0	Thallium	25	U	05/02/2023	1419
7440-62-2	Vanadium	50	U	05/02/2023	1419
7440-66-6	Zinc	60	U	05/02/2023	1419
Hardness	Hardness (total)	290		05/02/2023	1419

NOTE: Hardness (total) is reported in mg/L

Comments:

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EPA SAMPLE NO.

RW-12D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. : SDG No.: 02247  
Matrix: Water Lab Sample ID: 02247-13  
% Solids: Date Received: 04/07/2023

Analytical Method: ICP\_AES

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm³): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	200	U	05/02/2023	1424
7440-36-0	Antimony	60	U	05/02/2023	1424
7440-38-2	Arsenic	10	U	05/02/2023	1424
7440-39-3	Barium	52	J	05/02/2023	1424
7440-41-7	Beryllium	5.0	U	05/02/2023	1424
7440-43-9	Cadmium	5.0	U	05/02/2023	1424
7440-70-2	Calcium	50000		05/02/2023	1424
7440-47-3	Chromium	5.1	J	05/02/2023	1424
7440-48-4	Cobalt	50	U	05/02/2023	1424
7440-50-8	Copper	25	U	05/02/2023	1424
7439-89-6	Iron	85	J	05/02/2023	1424
7439-92-1	Lead	10	U	05/02/2023	1424
7439-95-4	Magnesium	15000		05/02/2023	1424
7439-96-5	Manganese	12	J	05/02/2023	1424
7440-02-0	Nickel	9.9	J	05/02/2023	1424
7440-09-7	Potassium	4400	J	05/02/2023	1424
7782-49-2	Selenium	35	U	05/02/2023	1424
7440-22-4	Silver	10	U	05/02/2023	1424
7440-23-5	Sodium	110000		05/02/2023	1424
7440-28-0	Thallium	25	U	05/02/2023	1424
7440-62-2	Vanadium	50	U	05/02/2023	1424
7440-66-6	Zinc	60	U	05/02/2023	1424
Hardness	Hardness (total)	190		05/02/2023	1424

NOTE: Hardness (total) is reported in mg/L

Comments:

MA 6/17/24



EPA SAMPLE NO.

PK-10S

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2247  
 Matrix: Water Lab Sample ID: O2247-01  
 % Solids:  Date Received: 04/07/2023  
 Analytical Method: Hg  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/17/2023	1438

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt 4/17/23*

3

EPA SAMPLE NO.

PK-10I

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-03  
 % Solids:  Date Received: 04/07/2023  
 Analytical Method: Hg  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/17/2023	1440

NOTE: Hardness (total) is reported in mg/L

Comments:

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*MT W/VM*

5

EPA SAMPLE NO.

PK-10D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :                      SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-05  
 % Solids:                      Date Received: 04/07/2023

Analytical Method: Hg

Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/17/2023	1443

NOTE: Hardness (total) is reported in mg/L

Comments: \_\_\_\_\_  
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*Mr W/2/24*

11

EPA SAMPLE NO.

RW-12I

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
Matrix: Water Lab Sample ID: 02247-11  
% Solids:  Date Received: 04/07/2023

Analytical Method: Hg

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/17/2023	1452

NOTE: Hardness (total) is reported in mg/L

Comments:

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*MR W/2/24*

450

13

EPA SAMPLE NO.

RW-12D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-13  
 % Solids:  Date Received: 04/07/2023  
 Analytical Method: Hg  
 Concentration Units (µg/L, mg/L, mg/kg dry weight, µg, or µg/cm²): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.20	U	04/17/2023	1454

NOTE: Hardness (total) is reported in mg/L

Comments:

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*MT W/V/M*















EPA SAMPLE NO.

PK-10S

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-01  
 % Solids:  Date Received: 04/07/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	4.2	J	04/12/2023	1217

NOTE: Hardness (total) is reported in  $\text{mg/L}$

Comments:

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*NT 6/12/24*

3

EPA SAMPLE NO.

PK-10I

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-03  
 % Solids:  Date Received: 04/07/2023  
 Analytical Method: CN  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	5.8	J	04/12/2023	1217

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt 4/12/23*

5

EPA SAMPLE NO.

PK-10D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
 Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
 Matrix: Water Lab Sample ID: 02247-05  
 % Solids:  Date Received: 04/07/2023  
 Analytical Method: CN  
 Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ):  $\mu\text{g/L}$

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	3.7	J	04/12/2023	1239

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt w/v/v*

EPA SAMPLE NO.

RW-12I

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: 02247  
Matrix: Water Lab Sample ID: 02247-11  
% Solids:  Date Received: 04/07/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	15		04/12/2023	1244

NOTE: Hardness (total) is reported in mg/L

Comments:

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*mt 4/24*

13

EPA SAMPLE NO.

RW-12D

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

Lab Name: Chemtech Consulting Group Contract: 68HERH20D0011  
Lab Code: CHM Case No.: Syosset Landfi MA No. :  SDG No.: O2247  
Matrix: Water Lab Sample ID: O2247-13  
% Solids:  Date Received: 04/07/2023

Analytical Method: CN

Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): ug/L

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	10		04/12/2023	1244

NOTE: Hardness (total) is reported in mg/L

Comments:

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WT 6/17/24



**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 09:07
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10S	SDG No.:	O2247
Lab Sample ID:	O2247-01	Matrix:	Water
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	7.40		I	1.00	2.00	mg/L		04/17/23 12:35	SM 2320 B-11
Ammonia as N	0.10	U	I	0.045	0.10	mg/L	04/12/23 10:15	04/12/23 14:52	SM 4500-NH3 B plus G-11
Bromide	2.00	U	I	0.27	2.00	mg/L		04/07/23 17:23	300.0
<del>Chloride</del>	<del>9.00</del>	<del>OR</del>	<del>I</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/07/23 17:23</del>	<del>300.0</del>
Nitrate	4.70		I	0.084	0.50	mg/L		04/07/23 17:23	300.0
Sulfate	21.6		I	0.55	3.00	mg/L		04/07/23 17:23	300.0
BOD5	2.00	U	I	0.17	2.00	mg/L		04/07/23 18:00	SM 5210 B-16
COD	10.0	U	I	2.52	10.0	mg/L		04/14/23 13:18	SM 5220 D-11
Apparent Color	5.00	U	I	5.00	5.00	cu		04/07/23 16:45	SM 2120 B-11
Phenolics	0.050	U	I	0.011	0.050	mg/L	04/17/23 09:15	04/17/23 12:51	9065
TDS	1.00	J	I	1.00	10.0	mg/L		04/09/23 14:30	SM 2540 C-15
TKN	0.50	U	I	0.13	0.50	mg/L	04/13/23 08:30	04/13/23 15:34	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	1.00		I	0.34	1.00	mg/L		04/13/23 11:39	SM 5310 B-14

Comments: Apparent color result reported at pH 6.13

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 09:07
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10SDL	SDG No.:	O2247
Lab Sample ID:	O2247-01DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	8.60	D	2	0.22	1.20	mg/L		04/11/23 12:31	300.0

Comments: \_\_\_\_\_

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 12:24
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10I	SDG No.:	O2247
Lab Sample ID:	O2247-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	135		1	1.00	2.00	mg/L		04/17/23 10:39	SM 2320 B-11
<del>Ammonia as N</del>	<del>7.60</del>	<del>OR</del>	<del>1</del>	<del>0.045</del>	<del>0.10</del>	<del>mg/L</del>	<del>04/12/23 10:15</del>	<del>04/12/23 14:53</del>	<del>SM 4500-NH3</del> B plus G-11
Bromide	1.10	J	1	0.27	2.00	mg/L		04/07/23 17:54	300.0
<del>Chloride</del>	<del>456</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/07/23 17:54</del>	<del>300.0</del>
Nitrate	0.50	U	1	0.084	0.50	mg/L		04/07/23 17:54	300.0
<del>Sulfate</del>	<del>44.3</del>	<del>OR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>04/07/23 17:54</del>	<del>300.0</del>
BOD5	2.00	U	1	0.17	2.00	mg/L		04/07/23 18:00	SM 5210 B-16
COD	5.97	J	1	2.52	10.0	mg/L		04/14/23 13:18	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		04/07/23 16:55	SM 2120 B-11
Phenolics	0.29		1	0.011	0.050	mg/L	04/17/23 09:15	04/17/23 12:51	9065
TDS	435		1	1.00	10.0	mg/L		04/09/23 14:30	SM 2540 C-15
TKN	7.00		1	0.13	0.50	mg/L	04/13/23 08:30	04/13/23 16:28	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	3.00		1	0.34	1.00	mg/L		04/13/23 12:04	SM 5310 B-14

Comments: Apparent color result reported at pH 6.87

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 12:24
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10IDL	SDG No.:	O2247
Lab Sample ID:	O2247-03DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	7.20	D	5	0.23	0.50	mg/L	04/12/23 10:15	04/12/23 15:34	SM 4500-NH3 B plus G-11
<del>Chloride</del>	<del>571</del>	<del>OR</del>	<del>2</del>	<del>0.22</del>	<del>1.20</del>	<del>mg/L</del>	<del>04/11/23 13:03</del>	<del>04/11/23 13:03</del>	<del>300.0</del>
Sulfate	37.3	✓	2	1.10	6.00	mg/L		04/11/23 13:03	300.0

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 12:24
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10IDL2	SDG No.:	O2247
Lab Sample ID:	O2247-03DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	506	<del>P</del>	100	11.0	60.0	mg/L		04/11/23 13:34	300.0

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Comments: \_\_\_\_\_

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 10:56
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10D	SDG No.:	O2247
Lab Sample ID:	O2247-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	22.3		1	1.00	2.00	mg/L		04/17/23 10:48	SM 2320 B-11
Ammonia as N	0.10	U	1	0.045	0.10	mg/L	04/12/23 10:15	04/12/23 14:53	SM 4500-NH3 B plus G-11
Bromide	2.00	U	1	0.27	2.00	mg/L		04/07/23 18:26	300.0
<del>Chloride</del>	<del>143</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/07/23 18:26</del>	<del>300.0</del>
<del>Nitrate</del>	<del>7.00</del>	<del>OR</del>	<del>1</del>	<del>0.084</del>	<del>0.50</del>	<del>mg/L</del>		<del>04/07/23 18:26</del>	<del>300.0</del>
Sulfate	26.8		1	0.55	3.00	mg/L		04/07/23 18:26	300.0
BOD5	2.00	U	1	0.17	2.00	mg/L		04/07/23 18:00	SM 5210 B-16
COD	3.96	J	1	2.52	10.0	mg/L		04/14/23 13:19	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		04/07/23 17:00	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/17/23 09:15	04/17/23 12:51	9065
TDS	249		1	1.00	10.0	mg/L		04/09/23 14:30	SM 2540 C-15
TKN	0.50	U	1	0.13	0.50	mg/L	04/13/23 08:30	04/13/23 15:34	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	1.30		1	0.34	1.00	mg/L		04/13/23 12:28	SM 5310 B-14

Comments: Apparent color result reported at pH 6.25

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 10:56
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10DDL	SDG No.:	O2247
Lab Sample ID:	O2247-05DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
<del>Chloride</del>	<del>133</del>	<del>OR</del>	<del>2</del>	<del>0.22</del>	<del>1.20</del>	<del>mg/L</del>	<del></del>	<del>04/11/23 14:06</del>	<del>300.0</del>
Nitrate	6.60	J HD	2	0.17	1.00	mg/L		04/11/23 14:06	300.0

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Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 10:56
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	PK-10DDL2	SDG No.:	O2247
Lab Sample ID:	O2247-05DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	99.9	<del>P</del>	50	5.50	30.0	mg/L		04/11/23 14:37	300.0

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Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 14:13
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-121	SDG No.:	O2247
Lab Sample ID:	O2247-11	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	568		1	1.00	2.00	mg/L		04/17/23 10:53	SM 2320 B-11
<del>Ammonia as N</del>	<del>34.6</del>	<del>OR</del>	<del>1</del>	<del>0.045</del>	<del>0.10</del>	<del>mg/L</del>	<del>04/12/23 10:15</del>	<del>04/12/23 15:00</del>	<del>SM 4500-NH3</del> B plus G-11
Bromide	1.90	J	1	0.27	2.00	mg/L		04/07/23 20:01	300.0
<del>Chloride</del>	<del>202</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/07/23 20:01</del>	<del>300.0</del>
Nitrate	0.50	U	1	0.084	0.50	mg/L		04/07/23 20:01	300.0
<del>Sulfate</del>	<del>107</del>	<del>OR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>04/07/23 20:01</del>	<del>300.0</del>
BOD5	2.00	U	1	0.17	2.00	mg/L		04/07/23 18:00	SM 5210 B-16
COD	35.0		1	2.52	10.0	mg/L		04/14/23 13:22	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		04/07/23 17:05	SM 2120 B-11
Phenolics	0.048	J	1	0.011	0.050	mg/L	04/17/23 09:15	04/17/23 12:51	9065
TDS	756		1	1.00	10.0	mg/L		04/09/23 14:30	SM 2540 C-15
<del>TKN</del>	<del>29.1</del>	<del>OR</del>	<del>1</del>	<del>0.13</del>	<del>0.50</del>	<del>mg/L</del>	<del>04/13/23 08:30</del>	<del>04/13/23 15:43</del>	<del>SM4500-N Org</del> C-11 plus NH3 B plus G-11
TOC	13.3		1	0.34	1.00	mg/L		04/13/23 14:14	SM 5310 B-14

Comments: Apparent color result reported at pH 7.06

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 14:13
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12IDL	SDG No.:	O2247
Lab Sample ID:	O2247-11DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	62.1	<del>✓</del>	50	2.30	5.00	mg/L	04/12/23 10:15	04/12/23 15:34	SM 4500-NH3 B plus G-11
<del>Chloride</del>	<del>150</del>	<del>OR</del>	<del>10</del>	<del>1.10</del>	<del>6.00</del>	<del>mg/L</del>	<del>04/11/23 15:09</del>	<del>04/11/23 15:09</del>	<del>300.0</del>
Sulfate	90.2	<del>✓</del>	10	5.50	30.0	mg/L		04/11/23 15:09	300.0
TKN	39.1	<del>✓</del>	5	0.65	2.50	mg/L	04/13/23 08:30	04/13/23 16:28	SM4500-N Org C-11 plus NH3 B plus G-11

Comments:

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- LOD = Limit of Detection
- D = Dilution
- Q = indicates LCS control criteria did not meet requirements
- H = Sample Analysis Out Of Hold Time

- J = Estimated Value
- B = Analyte Found in Associated Method Blank
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- OR = Over Range
- N = Spiked sample recovery not within control limits

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**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 14:13
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12IDL2	SDG No.:	O2247
Lab Sample ID:	O2247-11DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	136	<del>D</del>	50	5.50	30.0	mg/L		04/11/23 15:41	300.0

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Comments:

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 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
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 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

*MS 6/2/24*

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 16:18
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12D	SDG No.:	O2247
Lab Sample ID:	O2247-13	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	68.9		1	1.00	2.00	mg/L		04/17/23 10:58	SM 2320 B-11
<del>Ammonia as N</del>	<del>5.00</del>	<del>OR</del>	<del>1</del>	<del>0.045</del>	<del>0.10</del>	<del>mg/L</del>	<del>04/12/23 10:15</del>	<del>04/12/23 15:00</del>	<del>SM 4500-NH3</del> B plus G-11
Bromide	1.10	J	1	0.27	2.00	mg/L		04/07/23 20:33	300.0
<del>Chloride</del>	<del>208</del>	<del>OR</del>	<del>1</del>	<del>0.11</del>	<del>0.60</del>	<del>mg/L</del>		<del>04/07/23 20:33</del>	<del>300.0</del>
<del>Nitrate</del>	<del>10.2</del>	<del>OR</del>	<del>1</del>	<del>0.084</del>	<del>0.50</del>	<del>mg/L</del>		<del>04/07/23 20:33</del>	<del>300.0</del>
<del>Sulfate</del>	<del>204</del>	<del>OR</del>	<del>1</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>		<del>04/07/23 20:33</del>	<del>300.0</del>
BOD5	38.8		1	0.17	2.00	mg/L		04/07/23 18:00	SM 5210 B-16
COD	5.97	J	1	2.52	10.0	mg/L		04/14/23 13:22	SM 5220 D-11
Apparent Color	5.00	U	1	5.00	5.00	cu		04/07/23 17:10	SM 2120 B-11
Phenolics	0.050	U	1	0.011	0.050	mg/L	04/17/23 09:15	04/17/23 12:51	9065
TDS	675		1	1.00	10.0	mg/L		04/09/23 14:30	SM 2540 C-15
TKN	3.20		1	0.13	0.50	mg/L	04/13/23 08:30	04/13/23 15:43	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	4.30		1	0.34	1.00	mg/L		04/13/23 14:40	SM 5310 B-14

Comments: Apparent color result reported at pH 6.77

U = Not Detected  
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 LOD = Limit of Detection  
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J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 16:18
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12DDL	SDG No.:	O2247
Lab Sample ID:	O2247-13DL	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	4.70	<del>✓</del>	5	0.23	0.50	mg/L	04/12/23 10:15	04/12/23 15:34	SM 4500-NH3 B plus G-11
<del>Chloride</del>	<del>195</del>	<del>OR</del>	<del>5</del>	<del>0.55</del>	<del>3.00</del>	<del>mg/L</del>	<del></del>	<del>04/11/23 16:14</del>	<del>300.0</del>
Nitrate	9.20	<del>5</del> <del>HH</del>	5	0.42	2.50	mg/L		04/11/23 16:14	300.0
Sulfate	149	<del>✓</del>	5	2.80	15.0	mg/L		04/11/23 16:14	300.0

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 16:18
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12DDL2	SDG No.:	O2247
Lab Sample ID:	O2247-13DL2	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
<del>Chloride</del>	<del>175</del>	<del>OR</del>	<del>10</del>	<del>1.10</del>	<del>6.00</del>	<del>mg/L</del>		<del>04/11/23 17:50</del>	<del>300.0</del>

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Comments:

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 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 D = Dilution  
 Q = indicates LCS control criteria did not meet requirements  
 H = Sample Analysis Out Of Hold Time

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
 E = Indicates the reported value is estimated because of the presence of interference.  
 OR = Over Range  
 N = Spiked sample recovery not within control limits

*MA W/224*

**Report of Analysis**

Client:	Lockwood, Kessler & Bartlett, Inc.	Date Collected:	04/06/23 16:18
Project:	Syosset Landfill 2023	Date Received:	04/07/23
Client Sample ID:	RW-12DDL3	SDG No.:	O2247
Lab Sample ID:	O2247-13DL3	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	151	D	50	5.50	30.0	mg/L		04/11/23 18:21	300.0

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

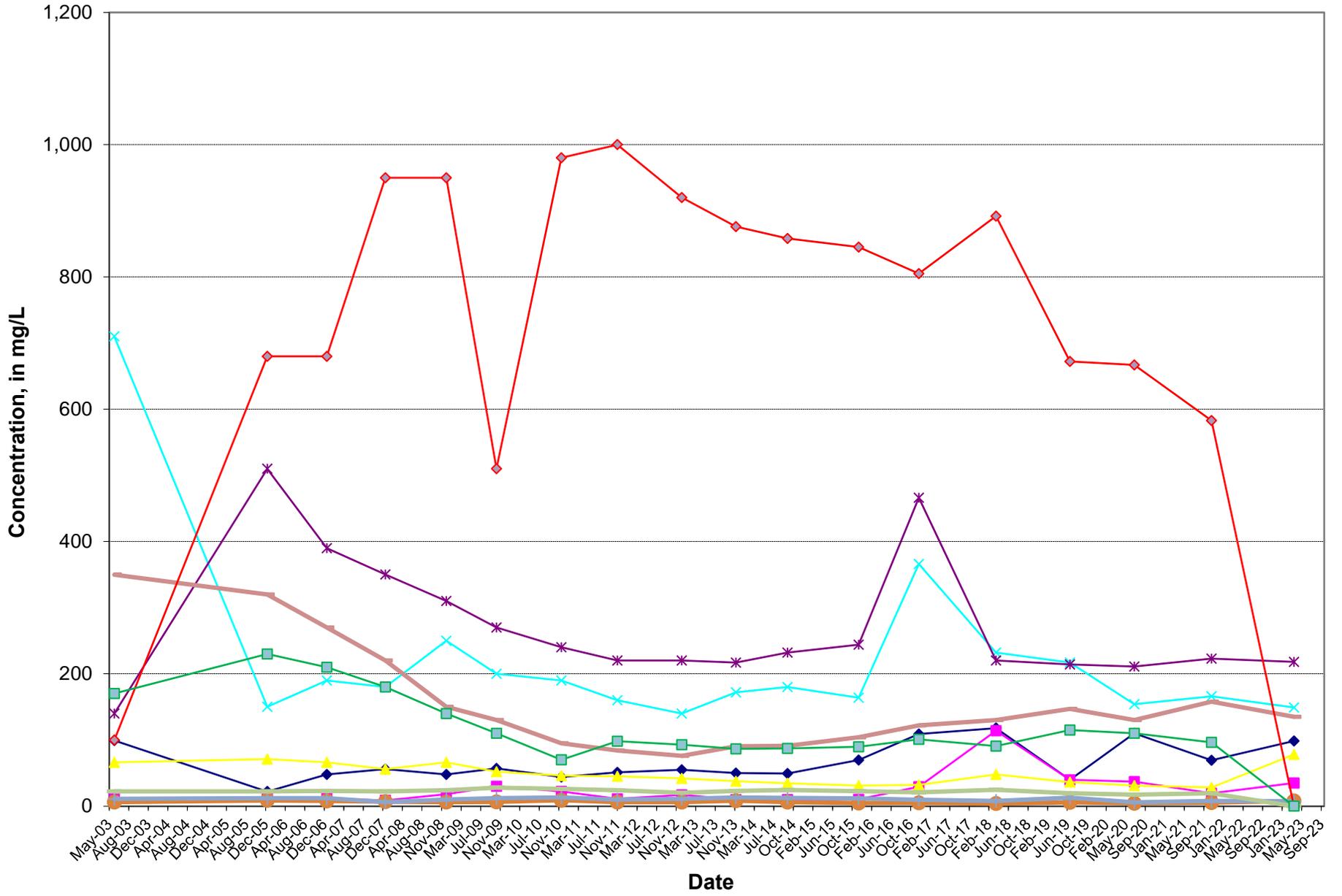
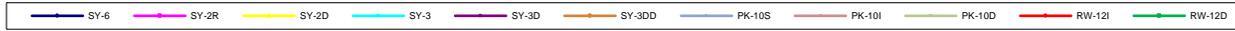
OR = Over Range

N = Spiked sample recovery not within control limits

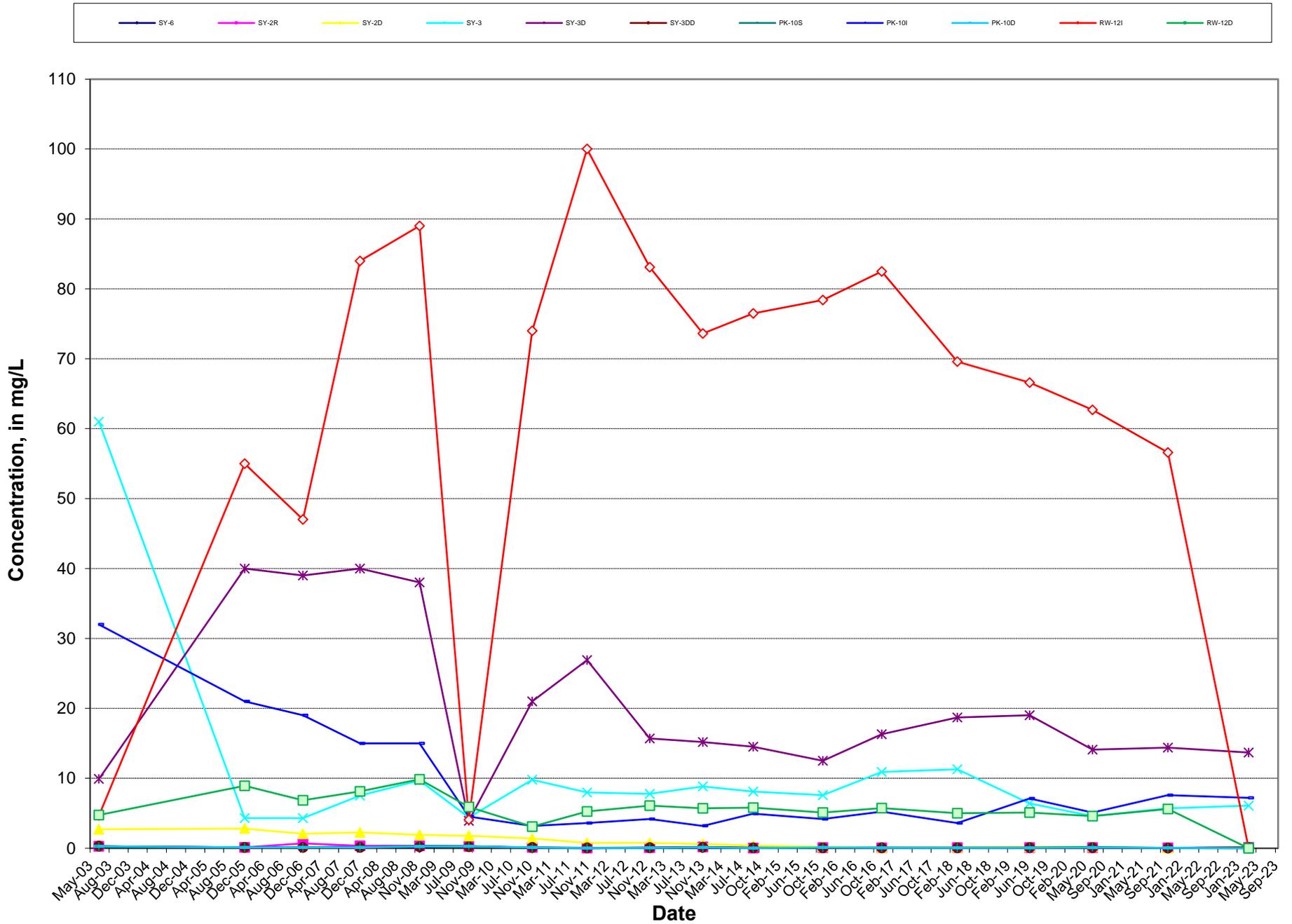
## **APPENDIX C**

### **Trend Analysis Charts**

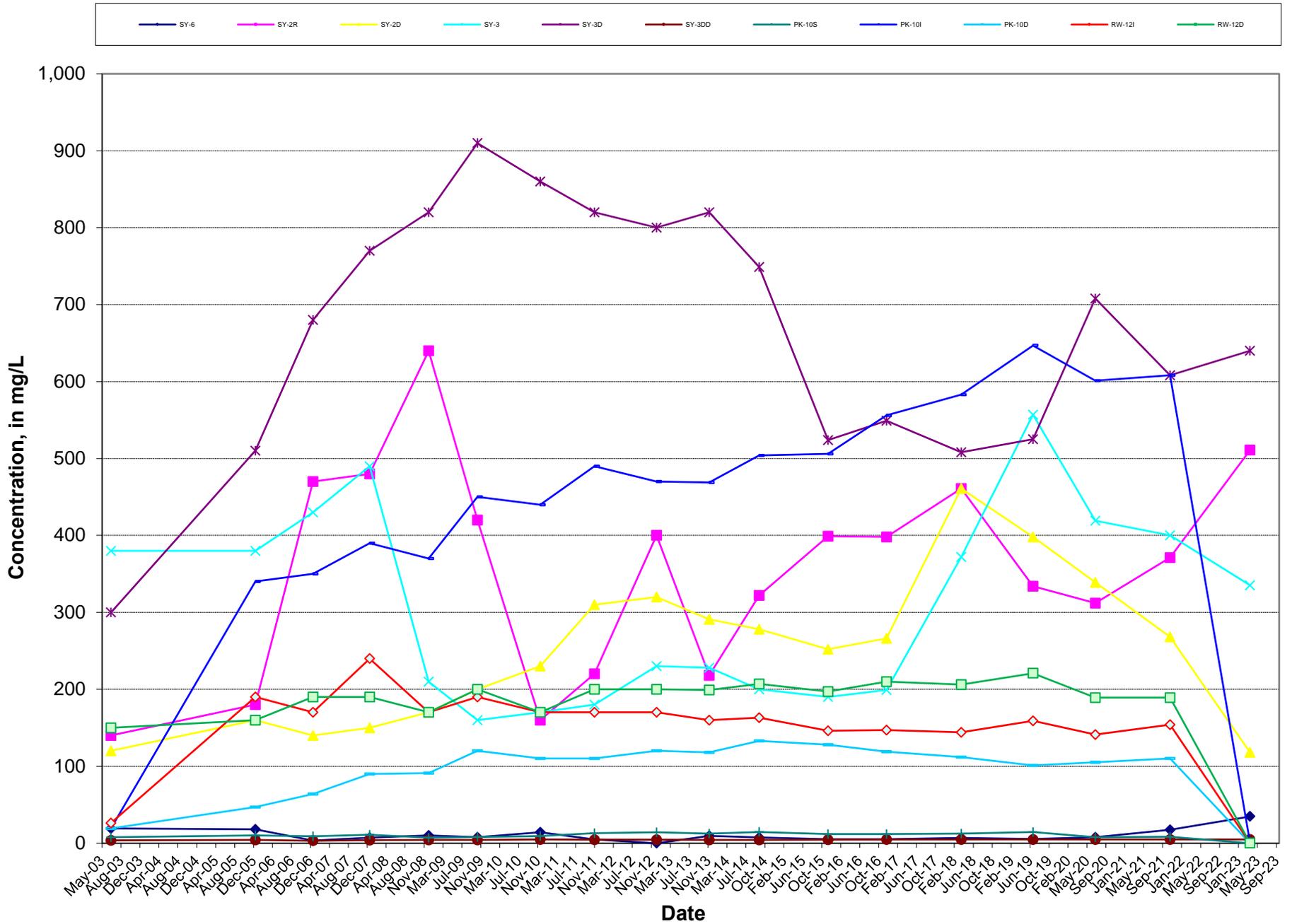
# Post-Closure Alkalinity Concentrations in Syosset Landfill Ground Water-Monitoring Wells



## Post-Closure Ammonia Concentrations in Syosset Landfill Ground Water-Monitoring Wells

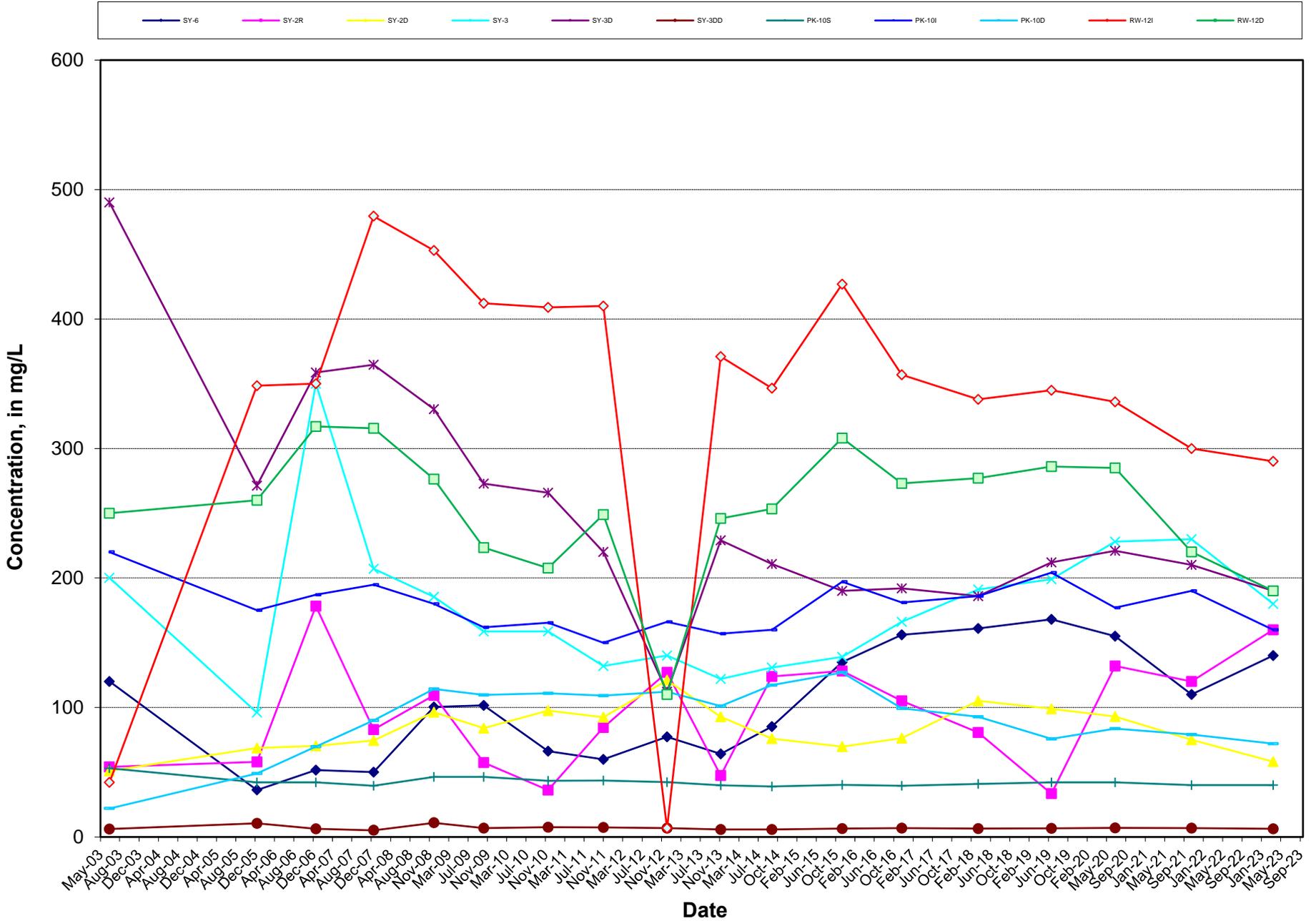


## Post-Closure Chloride Concentrations in Syosset Landfill Ground Water-Monitoring Wells

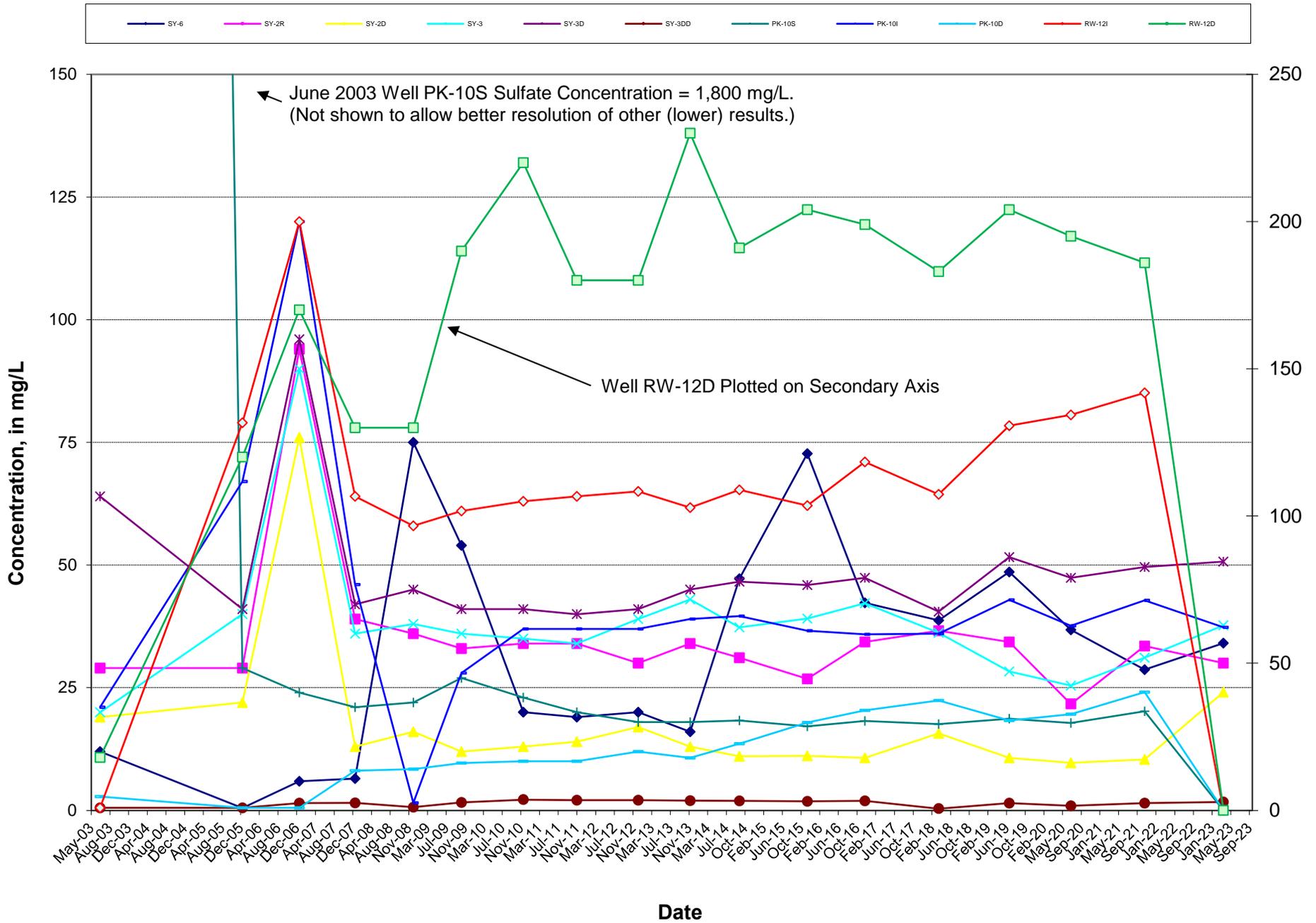




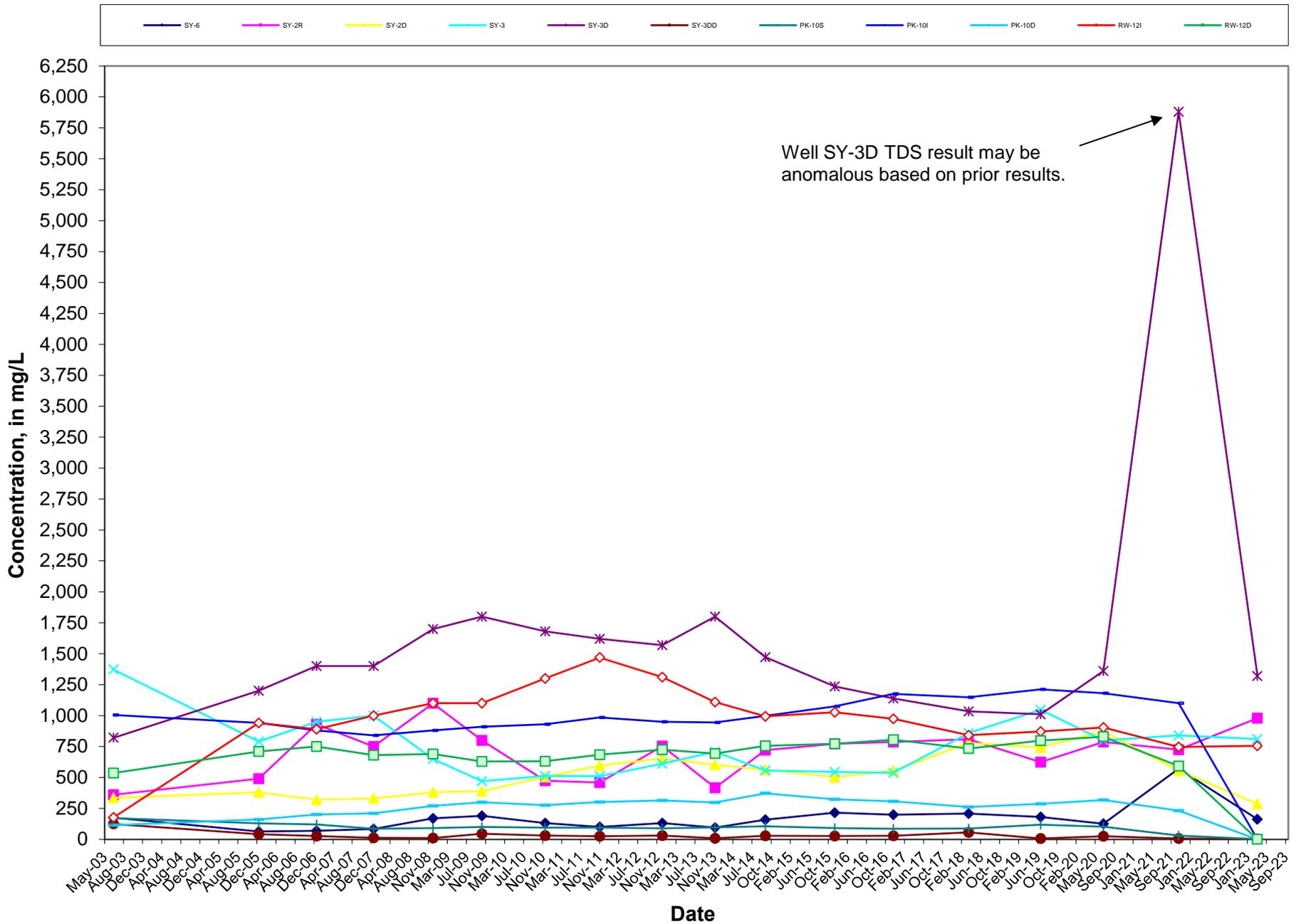
## Post-Closure Hardness Concentrations in Syosset Landfill Ground Water-Monitoring Wells



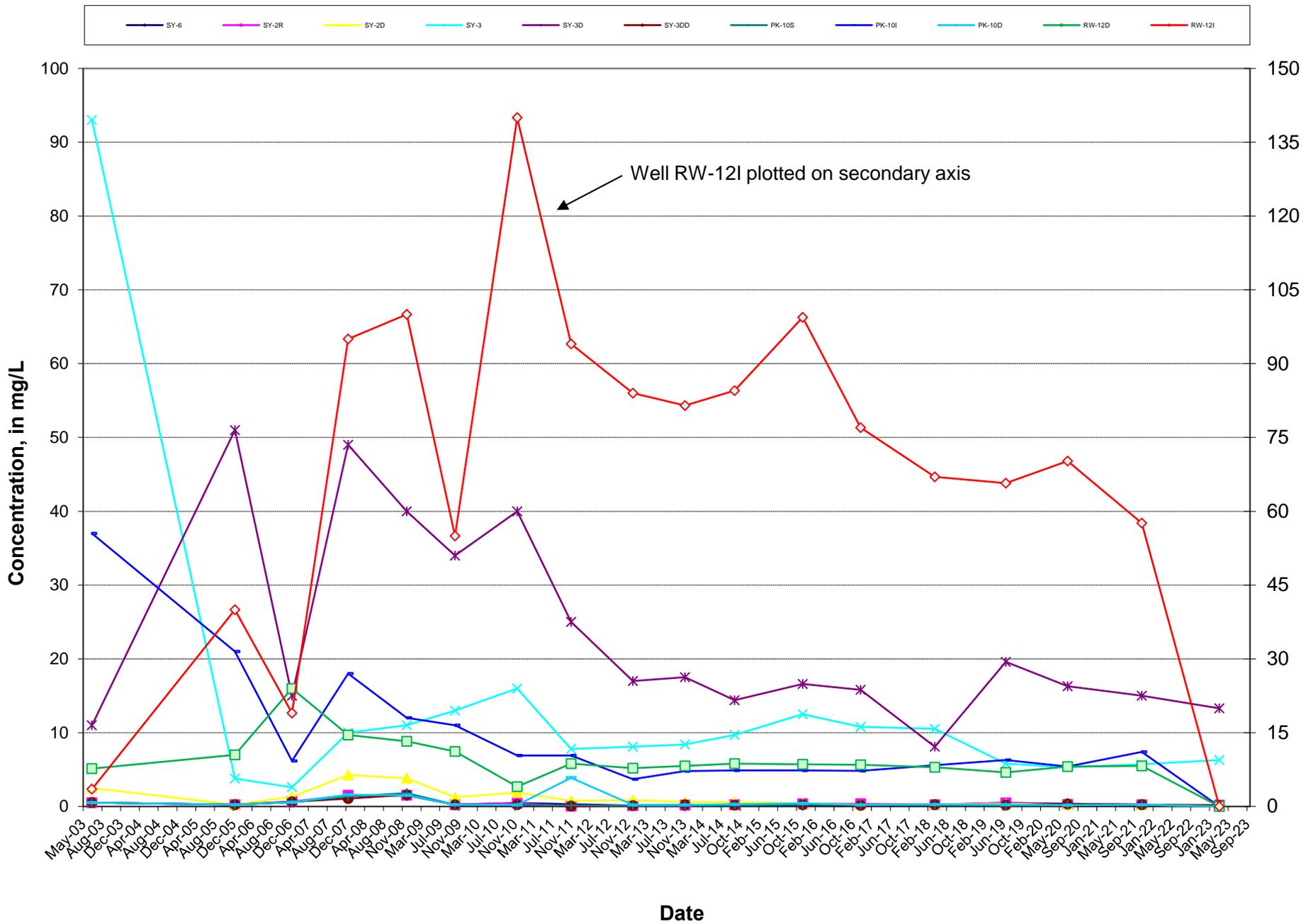
## Post-Closure Sulfate Concentrations in Syosset Landfill Ground Water-Monitoring Wells



## Post-Closure TDS Concentrations in Syosset Landfill Ground Water-Monitoring Wells



### Post-Closure TKN Concentrations in Syosset Landfill Ground Water-Monitoring Wells



## Post-Closure TOC Concentrations in Syosset Landfill Ground Water-Monitoring Wells

