SYOSSET LANDFILL

2015 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 2016

LOCKWOOD
KESSLER &
BARTLETT, INC.
SYOSSET, NEW YORK 11791

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VOLUME 2 OF 2
GROUND WATER-MONITORING PROGRAM

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SUMMARY REPORT

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INTRODUCTION

The Town of Oyster Bay (Town) is required to perform annual 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 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 significant 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, thirteen of the wells are located onsite, along the upgradient (south) boundary, within, and along the downgradient (north) boundary of the Landfill. The other eight wells are located offsite, downgradient of the Landfill, in three clusters. The wells are screened in either the shallow, intermediate or deep zone of the Magothy Aquifer, which is the uppermost aquifer. The overlying Upper Glacial Formation is unsaturated beneath the Landfill.

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 2015 annual ground water-monitoring round, which was performed on November 18th, and December 3rd, 4th and 7th. The scope of work for this monitoring round followed Section 4.0 of the O&M Manual, and incorporated the recommendations in the 2014 ground water-monitoring round report.

Sections 2.0 through 4.0 of this Report summarize the results of monitoring well inspections, water-level measurements and ground-water sampling, respectively. Section 5.0 compares the 2015 results to the previous annual post-closure monitoring results obtained since 2003, and to the 1988 OU-1 RI and 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.

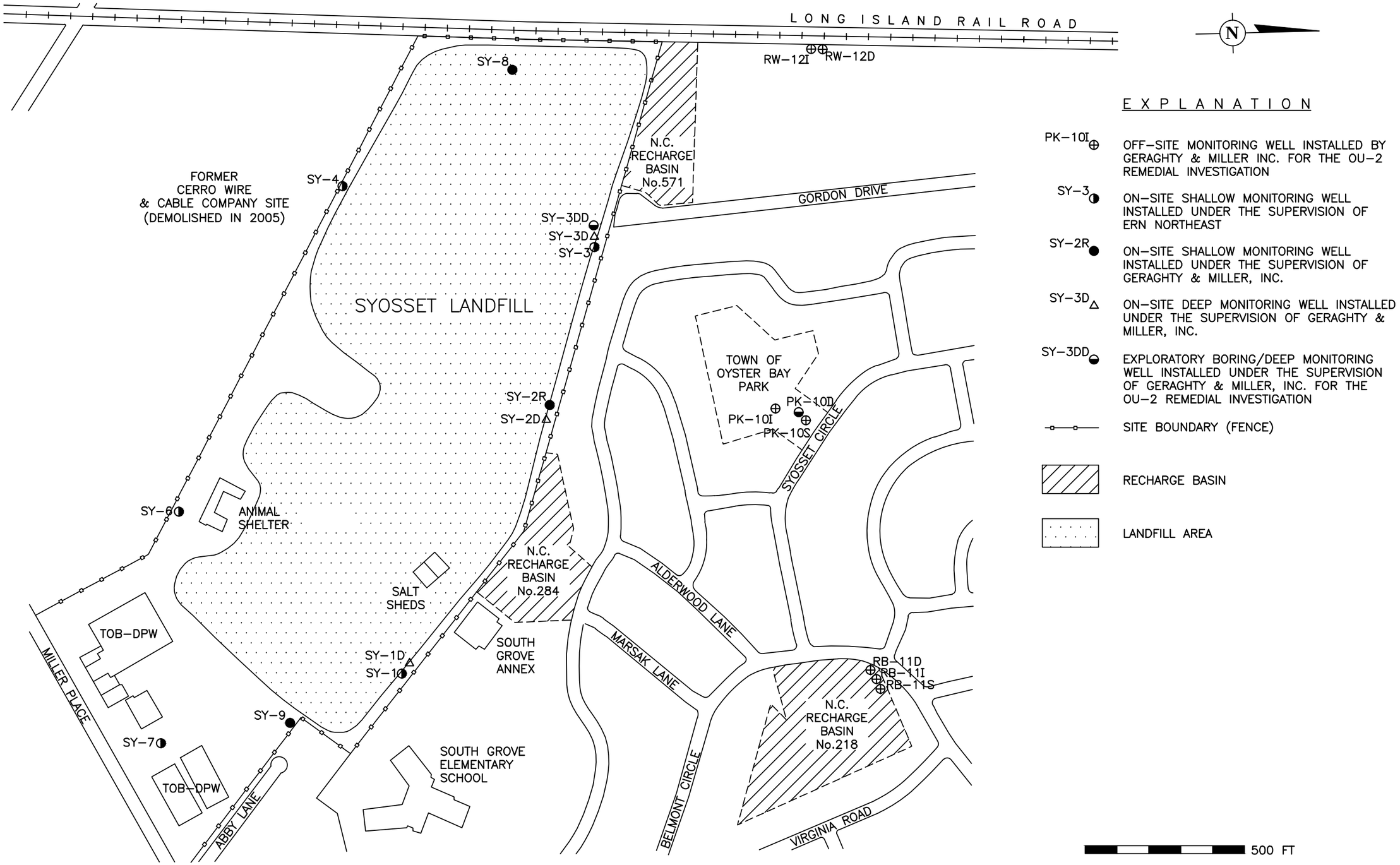


FIGURE 1

GROUND WATER - MONITORING WELL LOCATION PLAN
SYOSSET LANDFILL, SYOSSET, NY

LKB

SECTION 2

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

Prior to performing the 2015 ground water-monitoring round, the 20 existing monitoring wells were located and inspected. All were found to be in usable condition, and no significant modifications or repairs were required prior to monitoring. The inspection information for each existing ground water-monitoring well was recorded on a Well Inspection Checklist form, copies of which are presented in Appendix A.

SECTION 3

RESULTS OF TASK 2 – WATER-LEVEL MEASUREMENT

The 2015 synoptic round of water-level measurements was performed on November 18th. Measurements were made to the nearest 0.01-feet utilizing an electronic water-level meter. Water-level measurements were obtained from all 20 site monitoring wells.

The 2015 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 2015 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. Moreover, based on the ground water-flow directions shown in Figure 2, downgradient Well Cluster RW-12 appears to be located sidegradient to, rather than directly downgradient of, the Landfill.

The converging ground water-flow pattern 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 trends 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 2015 (1.74 feet) by the distance between the two wells (1,975 feet), is 0.0009. This gradient similar to the gradients observed in 2013 and 2014, and during the pre-2011 annual post-closure monitoring rounds, and therefore appears to represent typical conditions. In contrast, in 2011 and 2012, lower horizontal hydraulic gradients 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 these years.

Table 1
Summary of Water-Level Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Well No.	MP Elev.	MP Description	WL Depth	WL Elev.	Vertical Gradient (ft/ft)	
On-Site Wells:						
SY-1	198.48	Top of 2-inch steel casing.	115.70	82.78	0.0026	(SY-1 / SY-1D)
SY-1D	197.02	Top of 4-inch PVC cap.	114.39	82.63		
SY-2R	190.86	Top of 4-inch PVC casing.	108.71	82.15	0.0031	(SY-2R / SY-2D)
SY-2D	190.91	Top of 3-inch PVC casing.	108.99	81.92		
SY-3	193.96	Top of 2-inch steel casing.	111.74	82.22	0.0102	(SY-3 / SY-3D)
SY-3D	194.47	Top of 3-inch PVC casing.	112.80	81.67	0.0011	(SY-3D / SY-3DD)
SY-3DD	193.95	Top of 2-inch PVC casing.	112.64	81.31		
SY-4	192.39	Top of 2-inch steel casing.	109.24	83.15		
SY-6	186.94	Top of 2-inch steel casing.	103.74	83.20		
SY-7	197.46	Top of 2-inch steel casing.	113.82	83.64		
SY-8	197.94	Top of 4-inch PVC cap.	115.38	82.56		
SY-9	202.41	Top of 4-inch PVC casing.	119.30	83.11		
Off-Site Wells:						
PK-10S	188.73	Top of 4-inch PVC casing.	107.27	81.46	0.0022	(PK-10S/PK-10I)
PK-10I	187.10	Top of 4-inch PVC casing.	106.10	81.00	0.0002	(PK-10I/PK-10D)
PK-10D	188.25	Top of 4-inch PVC casing.	107.28	80.97		
RW-12I	197.32	Top of 4-inch PVC casing.	116.62	80.70	0.0008	(RW-12I/RW-12D)
RW-12D	197.29	Top of 4-inch PVC casing.	116.70	80.59		
RB-11S	189.91	Top of 4-inch PVC cap.	107.96	81.95	0.0045	(RB-11S/RB-11I)
RB-11I	190.32	Top of 4-inch PVC cap.	109.33	80.99	-0.0012	(RB-11I/RB-11D)
RB-11D	190.60	Top of 4-inch PVC cap.	109.44	81.16		

Notes:

Water-level data collected on November 18, 2015.
MP - Measuring Point.
`

Table 2
Summary of Construction Details for Monitoring Wells Installed at and Near the Syosset Landfill
Syosset Landfill 2014 Annual Post-Closure Ground Water-Monitoring Report
(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
SY-3DD	**12/9/92**	**2**	**540**	**530 - 540**	**517 - 540**	**512 - 517 (f)**	**2 - 512**	**0**	**194.23**	**PVC, stainless steel**
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 permanant 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.

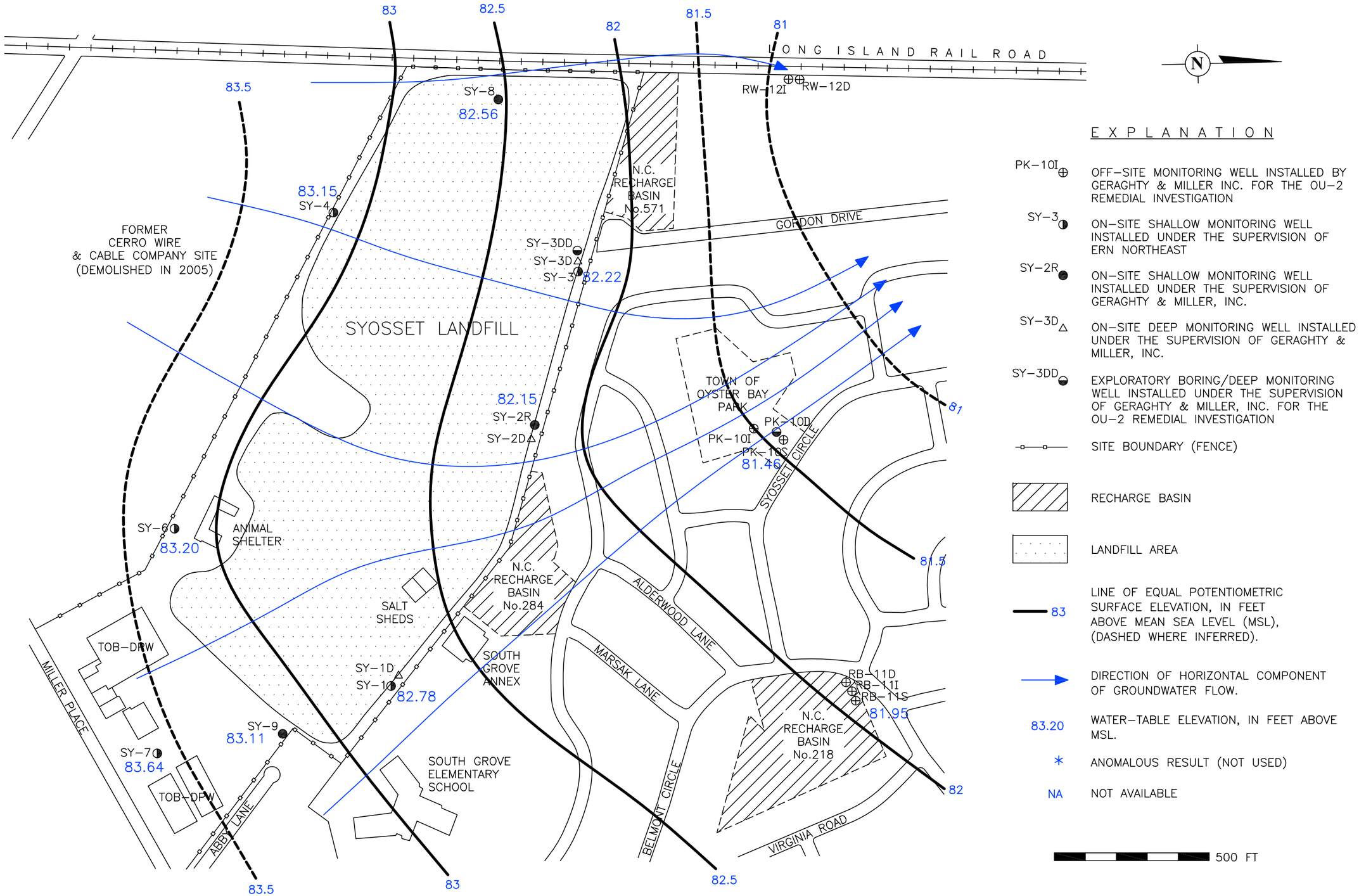
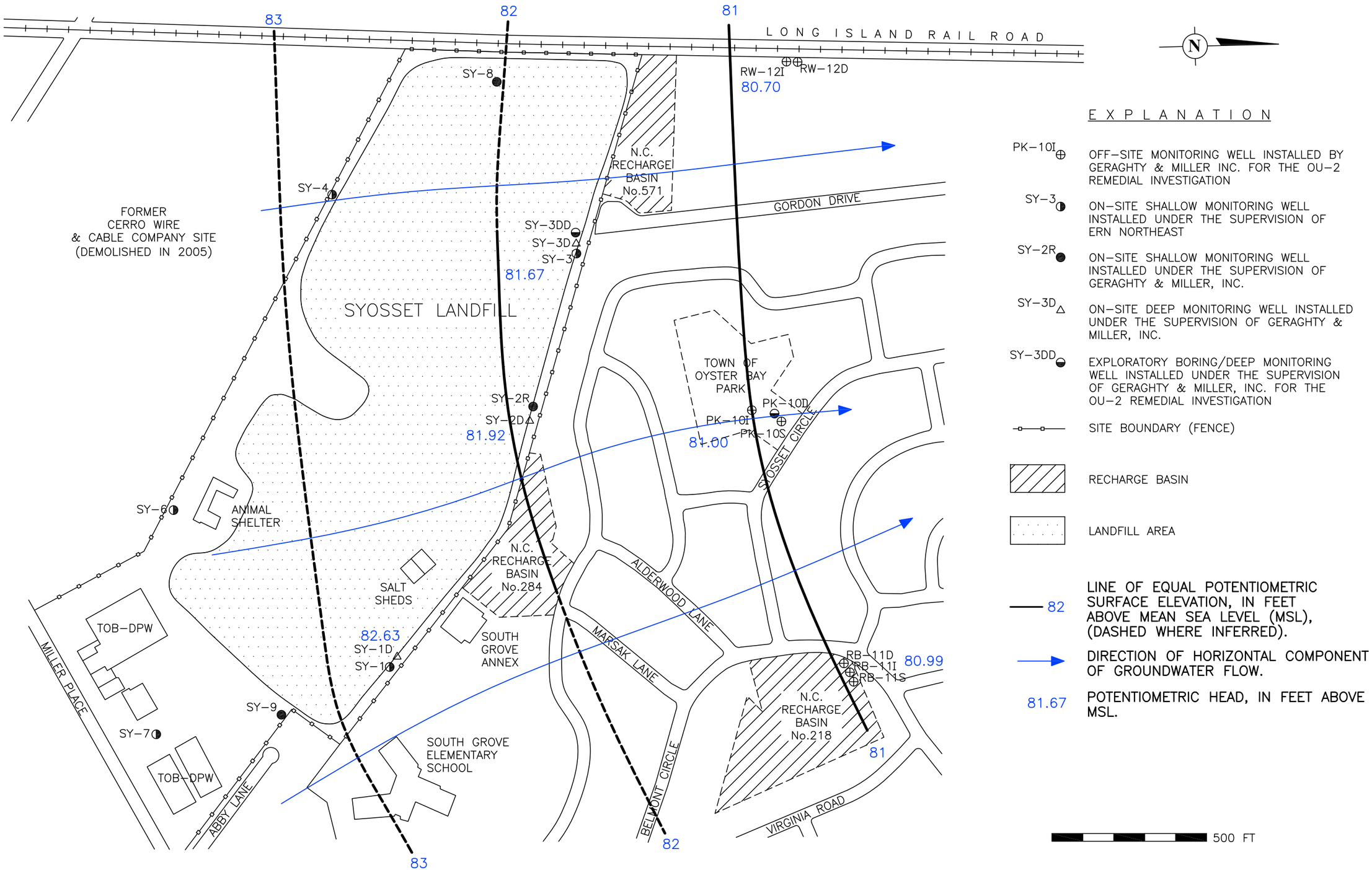


FIGURE 2

POTENTIOMETRIC SURFACE OF THE SHALLOW ZONE OF THE MAGOTHY AQUIFER ON NOVEMBER 18, 2015
SYOSSET LANDFILL, SYOSSET, NY



EXPLANATION

PK-10I ⊕ OFF-SITE MONITORING WELL INSTALLED BY GERAGHTY & MILLER INC. FOR THE OU-2 REMEDIAL INVESTIGATION

SY-3 ◑ ON-SITE SHALLOW MONITORING WELL INSTALLED UNDER THE SUPERVISION OF ERN 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

82 LINE OF EQUAL POTENTIOMETRIC SURFACE ELEVATION, IN FEET ABOVE MEAN SEA LEVEL (MSL), (DASHED WHERE INFERRED).

DIRECTION OF HORIZONTAL COMPONENT OF GROUNDWATER FLOW.

81.67 POTENTIOMETRIC HEAD, IN FEET ABOVE MSL.

500 FT

FIGURE 3

LKB

POTENTIOMETRIC SURFACE OF THE INTERMEDIATE ZONE OF THE MAGOTHY AQUIFER ON NOVEMBER 18, 2015
SYOSSET LANDFILL, SYOSSET, NY

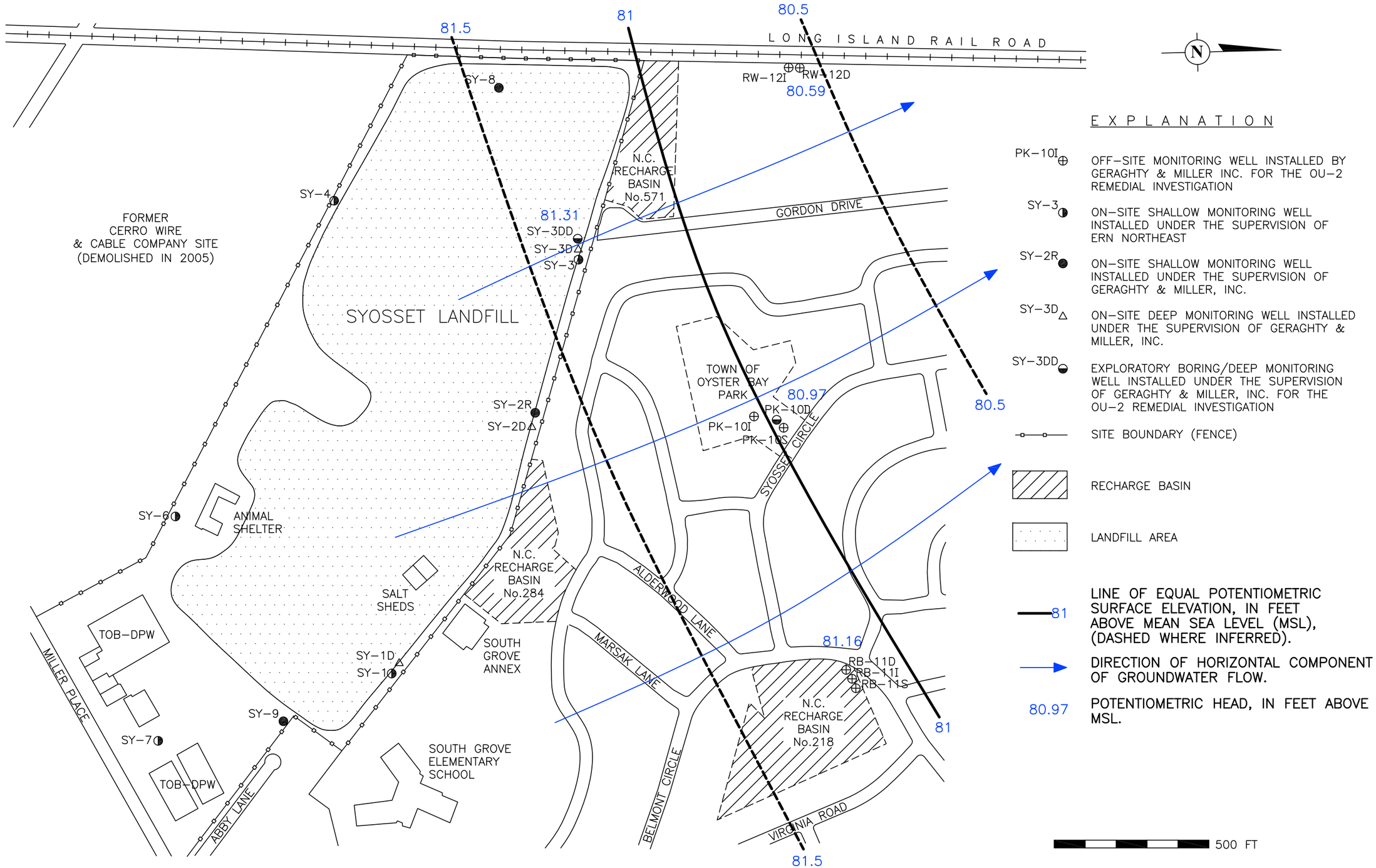


FIGURE 4

DEEP POTENTIOMETRIC SURFACE ZONE OF THE MAGOTHY AQUIFER ON NOVEMBER 18, 2015
SYOSSET LANDFILL, SYOSSET, NY

3.1.2 Intermediate Zone

As shown in Figure 3, based on the 2015 data, horizontal ground water-flow directions in the intermediate zone of the Magothy Aquifer are from south-southeast to north-northwest beneath, and downgradient of, 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 is observed in the shallow zone of the aquifer.

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 (1.63 feet) and the distance between the wells (1,400 feet), is 0.001, which is similar to, but slightly higher than, the shallow zone gradient.

3.1.3 Deep Zone

As shown in Figure 4, based on the 2015 data, the horizontal ground water-flow direction in the deep zone of the Magothy Aquifer is also 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 aquifer was not noted 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 (0.72 feet) and the distance between the wells (900 feet), is approximately 0.0008, which is slightly lower than the horizontal 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 or downward. Vertical hydraulic gradients calculated using the 2015 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 hydraulic gradients predominate, and that the highest-magnitude downward vertical hydraulic gradients occur between:

- the shallow and intermediate zones of the Magothy Aquifer,
- at the on-site, downgradient well clusters, and
- at off-site, downgradient Well Cluster RB-11.

Vertical hydraulic gradients are negligible or upward (0.0002, 0.0008 and -0.0012, respectively) between the intermediate and deep zones of the Magothy Aquifer at off-

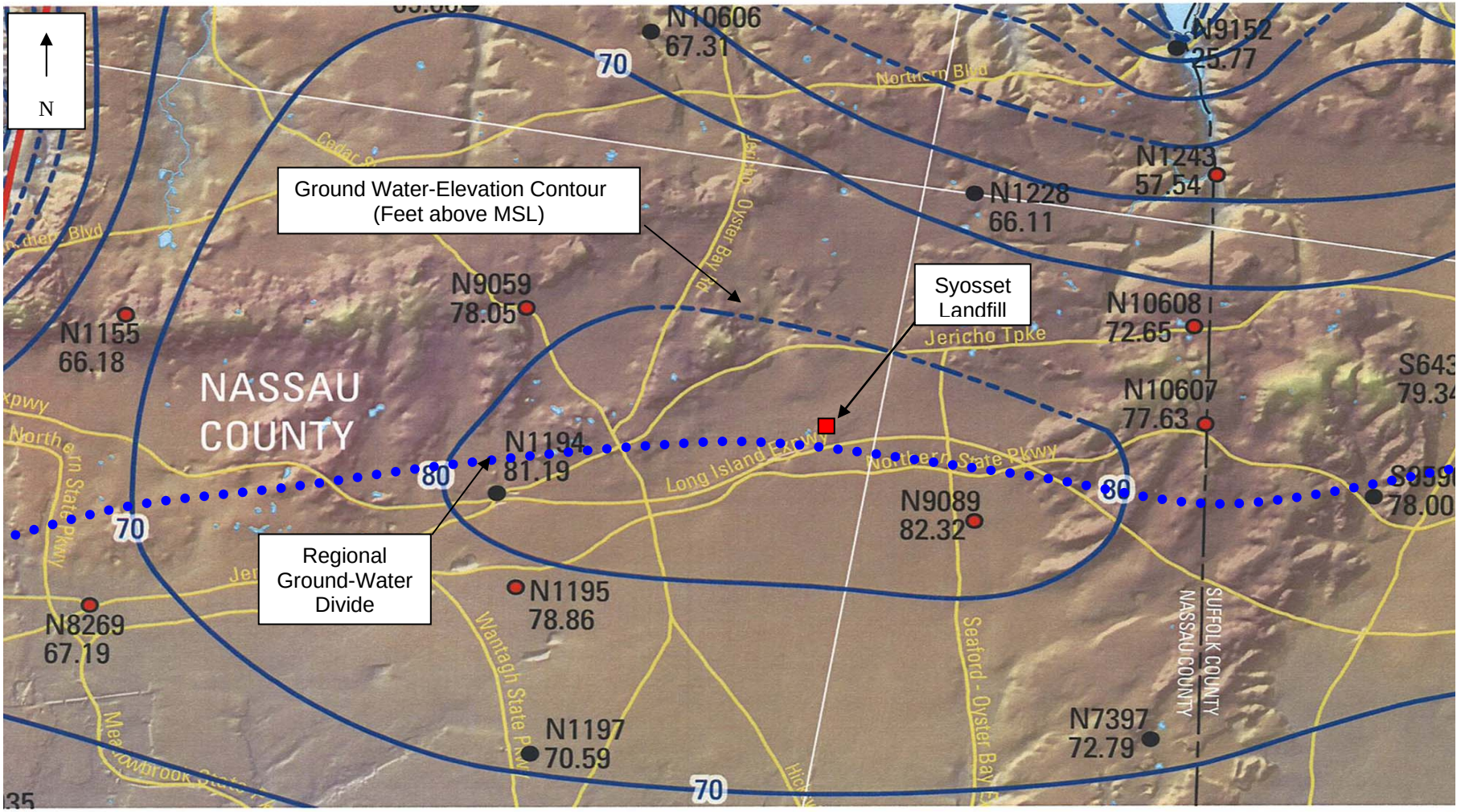
site, downgradient Well Clusters PK-10, RW-12 and RB-11. The lower/negative vertical gradient observed between the intermediate zone and deep zone off-site, downgradient wells are attributed to the influence of the buried glacial valley located downgradient of the Landfill.

The predominance of downward 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 (0.0045) to the horizontal gradient of the shallow zone of the Magothy Aquifer (0.0009) indicates that it is five 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 strong 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

The negligible vertical hydraulic gradients between the intermediate and deep zone wells at off-site, downgradient Well Clusters PK-10, RW-12 and RB-11 indicate that ground water-flow directions between these zones at these three locations are primarily horizontal, rather than downward. As noted above, these vertical gradient variations are attributed to the influence of a buried glacial valley. 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 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 immediately downgradient of the western portion of the Landfill. This finding explains the converging ground water-flow patterns in the shallow and intermediate zones of the Magothy Aquifer beneath and downgradient of the Landfill, and the negligible vertical hydraulic gradients between the intermediate and deep zone wells at the three downgradient off-site well clusters.



Source: Sheet 1 of USGS Scientific Investigations Map 3066, showing water table-elevation contours during March-April 2006.

FIGURE 5

LOCATION OF SYOSSET LANDFILL
RELATIVE TO REGIONAL GROUND-WATER DIVIDE

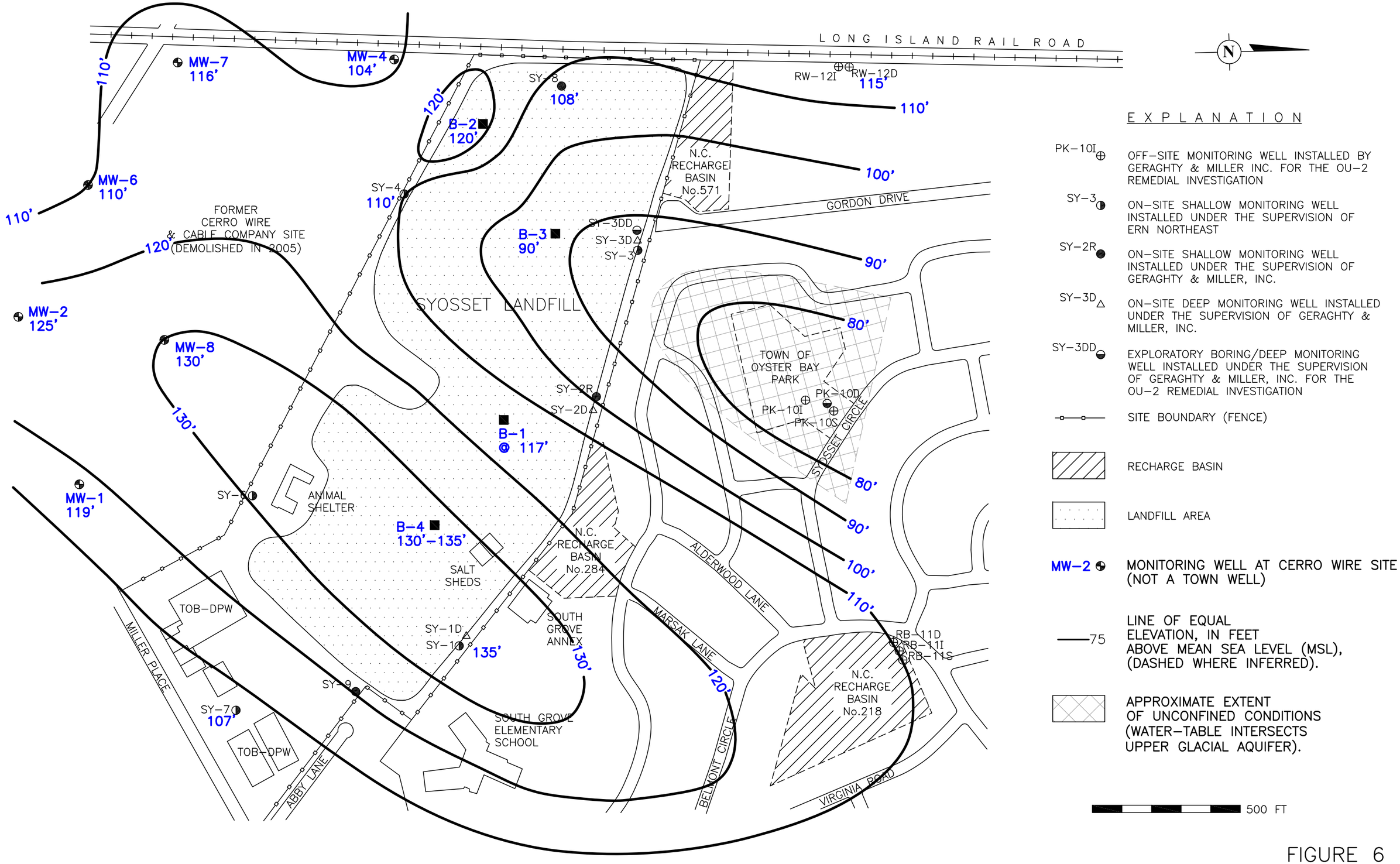


FIGURE 6

LKB

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

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 contamination that is 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 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, and is presently vacant land. The changes at the Cerro Wire site in 2005 have resulted in increased recharge directly upgradient of the Landfill and could potentially result in contamination from that site migrating north beneath the Landfill.

SECTION 4

RESULTS OF TASK 3 – GROUND-WATER MONITORING

The 2015 ground water-quality monitoring round was performed on December 3rd, 4th and 7th 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 purge water from off-site wells located downgradient of the Landfill was collected and disposed of at a licensed facility. Daily 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 samples were analyzed for the following parameters:

- USEPA Target Compound List (TCL) of Volatile Organic Compounds (VOCs),
- New York State Department of Environmental Conservation (NYSDEC) Part 360 Baseline Field Parameters, and Leachate Indicator Parameters, and
- Total and Dissolved concentrations of the USEPA Target Analyte List (TAL) inorganic parameters, and 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. Laboratory analyses were performed by CHEMTECH of Mountainside, New Jersey. The results were validated by Environmental Data Services, Inc. of Williamsburg, VA.

The field parameter readings and validated laboratory results are summarized in Tables 3 through 6. The monitoring results are compared to NYSDEC Part 703 Ambient Water Quality Standards and Guidelines for potable (Class GA) ground water and the Federal MCL for arsenic, which is more stringent than the State standard. 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. The final readings are provided in Table 3. Review of Table 3 indicates noticeable differences for certain field

Table 3
Summary of Field Parameter Monitoring Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Parameter	Units	Water[1] Quality Standard	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
Temperature	°C	--	15.60	14.9	15.6	17.2	17.7	15.6	15.1	16.0	15.4	15.4	14.7
Conductivity	mS/cm	--	0.336	1.43	0.98	1.13	2.45	0.036	0.139	2.06	0.576	2.28	1.34
DO	mg/L	--	5.83	3.49	0.52	0.21	0.26	9.12	4.60	0.50	0.83	0.30	0.33
pH	SU	6-5-8.5	**5.98**	**4.80**	**5.89**	6.52	6.60	**5.24**	**4.99**	**5.91**	**5.31**	6.58	**5.80**
Eh	pHmV	--	41.4	100	40.6	6.2	1.2	76.4	89.6	39.1	71.7	2.6	45.2
ORP	mV	--	136	187	149	-70.4	-65.5	163	114	141	161	96.4	123
Field Observations	NA	--	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor
Turbididty	NTU	5	4.82	3.03	4.21	2.20	1.58	1.20	1.20	0.54	0.96	0.50	0.47

Notes:

1 = NYSDEC Part 703 Ambient Water Quality Standards or Guidance Value (GV) for Class GA (Potable) ground water.
°C = Degrees Celcius.
mS/cm = microSiemens per centimeter.
milligrams per Liter = milligrams per Liter.
SU = Standard Units.
pHmV = pH in milliVolts.
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.

parameters in certain downgradient wells, relative to Upgradient Well SY-6, which may be attributed to the Landfill and/or other sources. 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.
SY-2D	Higher conductivity; lower DO.
SY-3	Higher temperature and conductivity lower DO and Eh; negative ORP.
SY-3D	Higher temperature and conductivity; lower DO and Eh; negative ORP.
PK-10I	Higher conductivity; lower DO.
PK-10D	Higher conductivity; lower DO.
RW-12I	Higher conductivity; lower DO and Eh.
RW-12D	Higher conductivity; lower DO.

Most of these differences, while noticeable, actually represent relatively minor ground water-quality impacts; and most occurred in the on-site downgradient wells. Overall, these findings are consistent with previous years' field parameter results. No significant potentially Landfill-related differences were noted for Wells SY-3DD or PK-10S.

Standards exist for two of the field parameters – pH and turbidity. The pH of most samples was below the 6.5-standard unit range minimum, but these results are attributed to naturally-occurring low-pH ground water-quality conditions on Long Island. The turbidity of all samples was less than the 5-NTU limit. Overall, turbidity was slightly lower in the off-site downgradient wells relative to the upgradient well and on-site downgradient wells.

4.2 Results of Volatile Organic Compound (VOC) Analyses

The 2015 VOC results are summarized in Table 4. As shown in Table 4, VOCs were detected in Upgradient Well SY-6, but were limited to a low, estimated concentration of one VOC (toluene at 0.5 ug/L). Regarding the on-site downgradient wells, VOCs were not detected at On-Site Downgradient Well Cluster SY-2. VOCs were detected at On-Site Downgradient Well Cluster SY-3, but were limited to low, primarily estimated concentrations of two to three VOCs in each well. All of these detections were lower than their respective Class GA ground-water standard or guidance value, as applicable.

Table 4
Summary of Volatile Organic Compound (VOC) Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water[1] Quality Standard	Upgradient Well	Downgradient Wells										
				On-Site						Off-Site				
			SY-6	SY-2R	SY-2D	SY-5[2]	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
1,1,1-Trichloroethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2,2-Tetrachloroethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane	ug/L	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichlorotrifluoroethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.65 J	2.9	**5.5**
1,1-Dichloroethene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2,3-Trichlorobenzene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2,4-Trichlorobenzene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dibromoethane	ug/L	--	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,2-Dichlorobenzene	ug/L	3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.28 J	<0.2	**5.6**	**6.7**
1,2-Dichloroethane	ug/L	0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.7 J
1,2-Dichloropropane	ug/L	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,3-Dichlorobenzene	ug/L	3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.0	2.8
1,4-Dichlorobenzene	ug/L	3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.82 J	<0.2	**8.1**	**9.8**
1,4-Dioxane	ug/L	--	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone	ug/L	50[GV]	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
2-Hexanone	ug/L	50[GV]	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
4-Methyl-2-pentanone	ug/L	--	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acetone	ug/L	50[GV]	<1	<1	<1	<1	<1	<1	<1	<1	<2.2	<1	<1.9	<1
Benzene	ug/L	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.69 J	0.41 J
Bromochloromethane	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	<0.5
Bromodichloromethane	ug/L	50[GV]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromoform	ug/L	50[GV]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromomethane	ug/L	5	<0.2	<0.2 J	<0.2 J	<0.2 J	<0.2	<0.2 J	<0.2	<0.2 J	<0.2 J	<0.2 J	<0.2 J	<0.2 J
Carbon disulfide	ug/L	60[GV]	<0.2	<0.2	<0.2	<0.2	0.39 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbon tetrachloride	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorobenzene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	0.28 J	<0.2	<0.2	3.2	0.24 J	**15.6**	**24.9**
Chloroethane	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	<0.5
Chloroform	ug/L	7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.37 J	<0.2	<0.2	3.1	<0.2	3.9
Chloromethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	,<0.2	<0.2	<0.2	<0.2
cis-1,2-Dichloroethene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.6	5.0
cis-1,3-Dichloropropene	ug/L	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyclohexane	ug/L	--	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2 J	<0.2 J
Dibromochloromethane	ug/L	50[GV]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dichlorodifluoromethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethylbenzene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Isopropylbenzene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
m&p-xylenes	ug/L	10*	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Methyl acetate	ug/L	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl tert-butyl ether	ug/L	10[GV]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylcyclohexane	ug/L	--	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methylene chloride	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	1.3	1.3	1.1	<0.2	<0.2	<0.2	<0.2
o-xylene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Styrene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tetrachloroethene	ug/L	5	<0.5	<0.5	<0.5	<0.5	0.32 J	<0.5	0.36 J	<0.2	<0.2	0.28 J	1.4	0.83 J
Toluene	ug/L	5	0.5 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,2-Dichloroethene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
trans-1,3-Dichloropropene	ug/L	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Trichloroethene	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.98 J	0.7 J
Trichlorofluoromethane	ug/L	5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vinyl chloride	ug/L	2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.1	2.0
No. of Target VOCs Detected[3]:	out of 52	--	01/52	0/52	0/52	0/52	2/52	2/52	3/52	1/52	3/52	4/52	10/52	12/52
Total VOC Concentration[4]:	ug/L	--	0.5 J				0.71 J	1.58 J	2.03 J	1.1	4.3 J	4.27 J	41.0	63.2

Notes:
ug/L = micrograms per Liter.
1 = NYSDEC Part 703 Ambient Water Quality Standards or Guidance Value (GV) for Class GA (Potable) ground water.
2 = Duplicate sample collected from Well SY-2D.
3 = m- and p-xylene counted as one VOC, total excludes total xylenes.
4 = Based on all target VOCs detected, including estimated concentrations.
J = Estimated concentration.
R = Result qualified as rejected by data validator.
TIC = Tentatively Identified Compound (not a Target Analyte included in analytical method).
Bold and Underlined = Exceeds ground water-quality standard or guidance value.
* = Based on 5-ug/L limit for eash isomer.
ND = None detected.
-- = No standard or guidance value.

Moreover, total VOC concentrations at On-Site Well Cluster SY-3 increase slightly with depth, which suggests they could be due to regional low-level ground-water contamination rather than a release from the Landfill.

At Off-Site Downgradient Well Cluster PK-10, VOCs were also detected in all three wells but were also limited to low, primarily estimated concentrations of one to four VOCs in each well. These detections were also all lower than their respective Class GA ground-water standard or guidance value, as applicable.

At Off-Site Downgradient Well Cluster RW-12, a number of chlorinated solvents and aromatic hydrocarbons were again detected in both wells. For the most part, the same VOCs were detected in each well, however the highest concentration of most of the VOCs occurred in the deeper well (RW-12D). Total VOC concentrations in these two wells were 41.0 ug/L and 63.2 ug/L, respectively. These results represent increases of approximately 14 percent and 81 percent, respectively, relative to last year's results but are consistent with the historical results for these wells.

However, consistent with last year's results the concentrations of most of the VOCs detected in Wells RW-12I and RW-D are lower than their respective Class GA ground-water standard or guidance value. Specifically, only four VOCs (chlorobenzene, 1,2-dichlorobenzene and 1,4-dichlorobenzene in both wells, and 1,1-dichloroethene in Well RW-12D only) were detected at concentrations higher than their Class GA ground-water standards. Moreover, the magnitudes of these exceedances were relatively low.

In summary, the VOC results from the 2015 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, primarily estimated concentrations of two to three VOCs at Well Cluster SY-3 only. Moreover, the fact that the VOCs detected at off-site downgradient Well Cluster RW-12 are not present in the on-site downgradient wells 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 directly downgradient of, the Landfill.

4.3 Results of NYSDEC Part 360 Leachate Indicator Analyses

The leachate indicator parameters analyzed for included alkalinity, ammonia, BOD_5 (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).

As shown in Table 5, compared to Upgradient Well SY-6, the concentrations of every leachate indicator parameter except bromide, nitrate, total phenols and sulfate were noticeably higher in On-Site Downgradient Wells SY-3 and/or SY-3D, which monitor the shallow and intermediate zones of the Magothy Aquifer, respectively, at the downgradient Landfill boundary. Elevated levels of leachate-related contaminants were

Table 5
Summary of Leachate Indicator Parameter Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water[1] Quality Standard	Upgradient Well SY-6	Downgradient Wells										
				On-Site						Off-Site				
				SY-2R	SY-2D	SY-5[2]	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
Alkalinity	mg/L	--	69.8	10.2	31.1	32.2	164	244	4.56	11.6	104	22.5	845	89.8
Ammonia	mg/L	2	0.113	0.093 J	0.224	0.182	**7.6**	**12.5**	0.066 J	0.063 J	**4.18**	0.13	**78.4**	**5.09**
BOD5	mg/L	--	<2 J	<2	<2	<2	<2 J	10.5	<2 J	<2 J	<2 J	<2 J	16.2	4.56
Bromide	mg/L	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloride	mg/L	250	5.14 J	**399**	**252**	**256**	190 J	**524**	4.5 J	11.8	**506**	128	146	197
COD	mg/L	--	3.03 J	4.97 J	4 J	4 J	11.8	18.5	<5	<5	7.88	<5	52.5	9.82
Color	cu	15	10	0	5	0	**200**	**400**	5 J	5	5	10	10	<5
Hardness, Total	mg/L	--	135	128	69.7	70.7	139	190	6.36 J	40.2	197	127	427	308
Nitrate	mg/L	10	1.64 J	1.12	0.901	0.839	<0.113 J	<0.113	0.743 J	3	<0.113	3.57	<0.113	9.76
Phenols, Total	mg/L	0.001	**0.024 J**	**0.013 J**	**0.012 J**	<0.05	**0.018 J**	**0.012 J**	<0.05 J	**0.01 J**	<0.05	**0.01 J**	**0.013 J**	<0.05
Sulfate	mg/L	250	72.7	26.8 J	11.1 J	10.4 J	39.1	45.9 J	1.83	17.1 J	36.6 J	17.9 J	62.1 J	204 J
TDS	mg/L	500	215	**773**	**503**	495	**545**	**1,236**	27	90	**1,074**	324	**1,027**	**773**
TKN	mg/L	--	0.177 J	0.355 J	0.429 J	0.949	12.5	16.6	<0.5	0.251 J	4.9	0.432 J	99.4	5.72
TOC	mg/L	--	2.18	1.53	1.05	0.955	3.65	5.04	0.705	0.567	2.43	1.37	19.9	4.78

Notes:

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

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

mg/L = milligrams per Liter.

cu = color units.

J = Estimated concentration.

BOD5 = Biological oxygen demand, 5-day.

COD

TDS = Total dissolved solids.

TKN = Total Kjeldhal nitrogen.

TOC = Total organic carbon.

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

not detected in Well SY-3DD, which monitors the deep zone of the Magothy Aquifer at the downgradient Landfill boundary. At On-Site Downgradient Well Cluster SY-2, only chloride and TDS were detected in both wells at concentrations significantly higher than in the upgradient well.

Comparison of the leachate parameter results for the upgradient and on-site downgradient wells to the Class GA ground-water standards and guidelines indicates that Landfill-related exceedances in these wells were limited to: chloride and TDS in Wells SY-2R and SY-2D; ammonia, color and TDS in Wells SY-3 and SY-3D; and chloride in Well SY-3D. Exceedances for total phenols also occurred in these four wells but they are not Landfill-related because a higher total phenol concentration occurred in the upgradient well. No exceedances occurred in On-Site Downgradient Well SY-3DD.

Based on comparison of the leachate indicator parameter results for the on-site and off-site wells, the majority of the parameters detected at elevated concentrations in the on-site downgradient wells are detected at similar concentrations in Off-Site Downgradient Well PK-10I, indicating Landfill-related impacts in this well. However, this comparison also indicates that certain parameters (e.g., alkalinity, ammonia, BOD, COD, hardness, nitrate, sulfate, TKN and TOC) were detected at higher concentrations one or both wells at Well Cluster RW-12 than in the on-site downgradient wells. Moreover, at least one parameter (e.g., chloride) that was detected at relatively high concentrations in most on-site downgradient wells and Downgradient Off-Site 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 indicator parameters detected at Well Cluster RW-12 may not be Landfill-related.

Comparison of the leachate indicator parameter results for the off-site downgradient wells to the Class GA ground-water standards indicates that exceedances are limited to ammonia, chloride and TDS in Well PK-10I; and ammonia and TDS in Wells RW-12I and RW-12D. Exceedances for total phenols also occurred in Wells PK-10S, PK-10D and RW-12I, but the concentrations in these wells are lower than the concentration in the background well. Therefore, they are attributed to background ground-water quality.

Taken as a whole, the 2015 leachate indicator parameter results indicate that the Landfill continues to be a relatively minor source of the Part 360 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 parameters, 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 parameters. The results are summarized in Table 6, and the RCRA and PPL metals are identified with asterisks.

Table 6
Summary of Total and Dissolved Metals Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Analyte	Units	Water[1] Quality Standard	Upgradient Well	Downgradient Wells										
				On-Site						Off-Site				
			SY-6	SY-2R	SY-2D	SY-5[2]	SY-3	SY-3D	SY-3DD	PK-10S	PK-10I	PK-10D	RW-12I	RW-12D
TOTAL METALS RESULTS														
Aluminum	ug/L	-	23.3	413	31.1 J	54.4	<200	<200	<200	55.5 J	<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	<10	<10	<10	**47.5 J**	<22.5	<10	<10	<10	2.4 J	<10	3.4 J
Barium*	ug/L	1,000	109 J	181 J	72 J	73.4 J	132 J	169 J	<200	16 J	67.9 J	50.1 J	77.5 J	81.8 J
Beryllium*	ug/L	3[GV]	<5	**9.2**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium*	ug/L	5	<5	<5	<5	<5	0.8 J	0.85 J	<5	<5	<5	<5	<5	<5
Calcium	ug/L	-	37,800	35,900	19,100	19,500	32,500	49,200	1,500 J	11,700	53,400	33,300	90,100	80,000
Chromium*	ug/L	50	1.3 J	3.3 J	<10	<10	<10	<10	1.3 J	4.6 J	<10	**61.5**	<10	<10
Cobalt	ug/L	-	<50	55.5	<50	<50	<50	12 J	<50	<50	52.4	<50	<50	<50
Copper*	ug/L	200	131	<25	<25	<25	<25	<25	<25	<25	4.5 J	<25	<25	<25
Cyanide	ug/L	200	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	ug/L	300	**537**	141	68.8 J	58 J	**28,400**	**20,500**	<100	141	38.4 J	**473**	77.9 J	<100
Lead*	ug/L	25	<10	<10	2.8 J	<10	2.7 J	<10	2.3 J	<10	<10	<10	2.3 J	<10
Magnesium	ug/L	35,000[GV]	9,800	9,250	5,340	5,350	14,000	16,200	634 J	2,660 J	15,500	10,600	**49,100**	26,200
Manganese	ug/L	300	61.3	100	**1,200**	**1,220**	**3,690**	**842**	<15	8.7 J	**2,230**	29.9	64.7	18.6
Mercury*	ug/L	0.7	<0.2	<0.2	<0.2	<0.2	<0.44	<0.2	<0.2	<0.2	<0.2	**1.7**	<0.2	<0.2
Nickel*	ug/L	100	9.7 J	**127**	<40	<40	<40	<40	<40	17.1 J	<40	39 J	8.6 J	<40
Potassium	ug/L	-	<5,000	4,200 J	7,190	7,390	14,600	26,800	<5,000	1,010 J	20,900	1,330 J	98,600	6,210
Selenium*	ug/L	10	<35	<35	<35	<35	**10.3 J**	<35	<35	<35	<35	4.1 J	<35	<35
Silver*	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	ug/L	20,000	8,280	**224,000**	**148,000**	**151,000**	**120,000**	**379,000**	3,420 J	6,340	**335,000**	**59,200**	**177,000**	**155,000**
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[GV]	**3,120**	<198	<60	<60	<60	<60	33 J	<60	<60	<60	<60	<60
DISSOLVED METALS RESULTS														
Aluminum	ug/L	-	<200	353	<200	<200	<200	<200	<200	97.1 J	<200	20.5 J	<200	<200
Antimony*	ug/L	3	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60	<60
Arsenic*	ug/L	10**	<10	<10	<10	<10	**42.3 J**	<25.5	<10	<10	<10	<10	3.4 J	<10
Barium*	ug/L	1,000	108 J	172 J	73.7 J	73.1 J	113 J	168 J	<200	16.9 J	68.4 J	48.5 J	82.5 J	76.3 J
Beryllium*	ug/L	3[GV]	<5	**8.4**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium*	ug/L	5	<5	<5	<5	<5	0.57 J	0.8 J	<5	<5	<5	<5	<5	<5
Calcium	ug/L	-	37,600	34,600	19,600	19,200	32,800	49,300	1,530 J	13,400	53,700	33,000	80,200	89,800
Chromium*	ug/L	50	<10	1.7 J	<10	<10	<10	<10	<10	6 J	<10	2 J	<10	<10
Cobalt	ug/L	-	<50	52.3	<50	<50	<50	12 J	<50	<50	53	<50	<50	<50
Copper*	ug/L	200	123	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Iron	ug/L	300	**367**	<100	28.1 J	33.1 J	**26,300**	**20,300**	<100	63.6 J	41.5 J	22.8 J	<100	85.5 J
Lead*	ug/L	25	<10	<10	3.4 J	<10	<10	3.4 J	2.9 J	<10	<10	2.4 J	<10	<10
Magnesium	ug/L	35,000[GV]	9,770	8,760	5,420	5,370	14,200	16,300	620 J	2,900 J	15,600	10,600	26,300	**48,800**
Manganese	ug/L	300	57.4	90	**1,200**	**1,200**	**3,640**	**841**	<15	10.7 J	**2,230**	27.7	19.2	64.6
Mercury*	ug/L	0.7	<0.2	<0.2	<0.2	<0.2	<0.21	<0.2	<0.2	<0.2	0.11 J	**1.6**	0.079 J	0.07 J
Nickel*	ug/L	100	8.9 J	**120**	<40	<40	<40	<40	<40	29.6 J	3.1 J	36.2 J	<40	8.5 J
Potassium	ug/L	-	<5,000	4,110 J	7,430	7,370	14,800	26,700	<5,000	844 J	21,000	1,390 J	6,410	97,000
Selenium*	ug/L	10	<35	4.5 J	<35	<35	<35	<35	<35	<35	<35	6.3 J	6.4 J	<35
Silver*	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Sodium	ug/L	20,000	8,360	**221,000**	**151,000**	**150,000**	**121,000**	**378,000**	3,480 J	7,070	**337,000**	**59,800**	**157,000**	**176,000**
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[GV]	**2,880**	<222	<60	<60	<60	<60	<60	<74.6	<60	<60	<60	<60

Notes:
ug/L = micrograms per Liter.
1 = NYSDEC Part 703 Ambient Water Quality Standard or Guidance Value (GV) for Class GA (Potable) ground water.
2 = Duplicate sample collected from Well SY-2D.
J = Estimated concentration.
Bold and Underlined = Exceeds ground water-quality standard or guidance value.
* = RCRA/PPL metal.
** = USEPA MCL, revised downward from 50 ug/L effective January 2006. NYSDEC TOGS 1.1.1 Ambient Water Quality Standard is 25 ug/L.

As shown in Table 6, of the 24 TAL parameters analyzed for, five (antimony, cyanide, silver, thallium and vanadium) were not detected. Of the 19 detected TAL parameters, six (aluminum, barium, cadmium, cobalt, copper and lead), were only detected sporadically and/or only at concentrations lower than their respective Class GA ground-water standard or guidance value. The highest concentration of one other parameter, zinc, was detected in the upgradient well. The remaining 12 detected TAL parameters include six RCRA/PPL metals (arsenic, beryllium, chromium, mercury, nickel and selenium), and calcium, iron, magnesium, manganese, potassium and sodium. The results for these 12 parameters are discussed below.

Arsenic was detected in On-Site Downgradient Well SY-3 at estimated total and dissolved concentrations higher than the 10-ug/L federal MCL. Comparison of the total and dissolved results for this well indicates that approximately 89 percent of the arsenic is in dissolved form. The only other detections of arsenic occurred in Off-Site Downgradient Wells PK-10D, RW-12I and RW-12D, and were limited to low, estimated concentrations that are much lower than the federal MCL.

Beryllium was only detected in On-Site Downgradient Well SY-2R, at total and dissolved concentrations approximately three times higher than the 3-ug/L Class GA guidance value. Comparison of the total and dissolved results for this well indicates that approximately 91 percent of the beryllium is in dissolved form.

Chromium was detected in the unfiltered sample from Off-Site Downgradient Well PK-10D at a concentration slightly higher than the 50-ug/L Class GA standard, but was only detected at a very low, estimated concentration in the filtered sample from this well. As such, the chromium exceedance in the filtered sample appears to be sediment-related. Chromium was also detected in the background well and several other downgradient wells, but only at very low, estimated concentrations.

Mercury was detected at a concentration approximately 2.5 times higher than the Class GA ground-water standard in both the unfiltered and filtered samples from Off-Site Downgradient Well PK-10D. Comparison of the total and dissolved mercury results for this well indicates that approximately 94 percent of the mercury is in dissolved form. This detection is attributed to ground water-quality conditions at this location rather than the Landfill because mercury has not been detected in any of the on-site wells, and because elevated levels of contaminants known to be associated with the Landfill were not detected in this well. The presence of mercury at similar concentrations in the stratigraphic equivalent of the Magothy Formation in New Jersey has been well documented in studies by the United States Geological Survey (Refs: USGS Open-File Report 95-475, and USGS Water-Resources Investigations Report 00-4230).

Nickel was detected in On-Site Downgradient Well SY-2R at estimated total and dissolved concentrations approximately 20 percent higher than the 100-ug/L Class GA standard. Comparison of the total and dissolved results for this well indicates that approximately 94 percent of the nickel is in dissolved form. Nickel was also detected in

the background well and off-site downgradient wells, but only at low, estimated concentrations that are much lower than the Class GA standard.

Selenium was detected in the unfiltered sample from On-Site Downgradient Well SY-3 at an estimated concentration that is slightly higher than the 10-ug/L Class GA standard. Selenium was not detected in the filtered sample from this well. Selenium was also detected at low, estimated concentrations in the unfiltered and filtered samples from Off-Site Downgradient Well PK-10D, and in the filtered samples from On-Site Downgradient Well SY-2R and Off-Site Downgradient Well RW-12I. These detections are lower than the Class GA standard.

Calcium, iron, magnesium, manganese, potassium and sodium were each detected in one or more downgradient wells at concentrations notably (e.g., more than two times) higher than in Upgradient Well SY-6. Except for sodium, which had a more widespread occurrence, the highest concentrations of these parameters 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, arsenic was only detected at a significant concentration in one on-site downgradient well. The highest concentrations of iron, manganese and sodium also occurred in on-site downgradient wells, whereas the highest concentrations of calcium, magnesium and potassium occurred in Off-Site Downgradient Well RW-12I. These differences in the results for the on-site downgradient wells and Off-Site Downgradient Well RW-12I suggest that the detections of certain parameters in Well Cluster RW-12 are not Landfill-related. Review of Table 6 also indicates that overall, the TAL parameters were detected at similar, but slightly lower, concentrations in the filtered samples. This indicates that the TAL parameters are primarily present in ground-water in dissolved form.

Taken as a whole, the TAL parameter and 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 the RCRA/PPL metals in 2015 were for arsenic and selenium in Well SY-3, and beryllium and nickel in Well SY-2R. These exceedances appear to be limited to the downgradient landfill boundary as exceedances for these parameters were not detected in the deeper on-site downgradient wells at these two clusters, or in the off-site downgradient wells.

SECTION 5

COMPARISON OF CURRENT MONITORING RESULTS TO PREVIOUS MONITORING RESULTS

The 2015 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 indicator parameters that have historically been detected on a regular basis.

5.1 Temporal Variation in Water-Level Elevations

The 2015 water-level results are compared to post-closure water-level data collected since 2003 in Table 7. Review of Table 7 indicates that in November 2015 water-level elevations were, on average: 5.51 feet higher relative to 2003 data, 3.53 feet higher relative to 2005 data, -1.95 feet lower relative to the 2006 data, -3.21 feet lower relative to the 2007 data, -2.80 feet lower relative to the 2008 data, -1.90 feet lower relative to the 2009 data, -4.48 feet lower relative to the 2010 data, -5.71 feet lower relative to the 2011 data, -3.62 feet lower relative to the 2012 data, -2.24 feet lower relative to the 2013 data, and -1.78 feet lower relative to the 2014 data. These findings are attributed to natural temporal variation in recharge to the aquifer from precipitation, such as the below-normal precipitation that has occurred over the past year, and to the increased recharge directly upgradient of the Landfill in 2005 resulting from the demolition work at the former Cerro Wire property.

Comparison of the current ground water-contour maps (Figures 2, 3 and 4) to previous post-closure ground water-contour maps 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 had been observed in previous years. This difference was attributed to the above-normal infiltration from the hurricanes and nor’easters that occurred earlier in these years

Table 7
Changes in Ground-Water Elevations
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Well Number	2003 WL Elev.	2005 WL Elev.	2006 WL Elev.	2007 WL Elev.	2008 WL Elev.	2009 WL Elev.	2010 WL Elev.	2011 WL Elev.	2012 WL Elev.	2013 WL Elev.	2014 WL Elev.	2015 WL Elev.	Δ Elev. '14 to '15	Δ Elev. '13 to '15	Δ Elev. '12 to '15	Δ Elev. '11 to '15	Δ Elev. '10 to '14	Δ Elev. '09 to '15	Δ Elev. '08 to '15	Δ Elev. '07 to '15	Δ Elev. '06 to '15	Δ Elev. '05 to '15	Δ Elev. '03 to '15
On-Site Wells:																							
SY-1	77.63	79.59	84.87	86.16	85.87	84.63	87.04	88.63	86.20	85.02	84.86	82.78	-2.08	-2.24	-3.42	-5.85	-4.26	-1.85	-3.09	-3.38	-2.09	3.19	5.15
SY-1D	77.16	79.27	84.62	85.87	85.32	84.48	86.94	88.34	86.13	84.89	84.47	82.63	-1.84	-2.26	-3.50	-5.71	-4.31	-1.85	-2.69	-3.24	-1.99	3.36	5.47
SY-2R	76.65	78.62	84.06	85.35	84.73	83.91	86.48	87.95	85.81	84.36	83.95	82.15	-1.80	-2.21	-3.66	-5.80	-4.33	-1.76	-2.58	-3.20	-1.91	3.53	5.50
SY-2D	76.35	78.41	83.31	85.02	84.57	83.61	86.30	87.67	85.60	84.15	83.64	81.92	-1.72	-2.23	-3.68	-5.75	-4.38	-1.69	-2.65	-3.10	-1.39	3.51	5.57
SY-3	76.77	78.46	84.09	85.27	84.85	83.98	86.70	88.16	85.97	84.35	84.10	82.22	-1.88	-2.13	-3.75	-5.94	-4.48	-1.76	-2.63	-3.05	-1.87	3.76	5.45
SY-3D	76.04	77.94	83.53	84.74	84.28	83.46	86.14	87.44	85.47	83.86	83.28	81.67	-1.61	-2.19	-3.80	-5.77	-4.47	-1.79	-2.61	-3.07	-1.86	3.73	5.63
SY-3DD	75.43	77.67	83.24	84.41	84.05	83.25	85.91	86.94	85.22	83.59	82.82	81.31	-1.51	-2.28	-3.91	-5.63	-4.60	-1.94	-2.74	-3.10	-1.93	3.64	5.88
SY-4	78.04	79.71	84.80	86.24	85.69	84.91	87.40	90.19	86.79	85.55	85.11	83.15	-1.96	-2.40	-3.64	-7.04	-4.25	-1.76	-2.54	-3.09	-1.65	3.44	5.11
SY-6	77.92	79.98	84.96	86.40	85.88	85.13	87.43	87.84	85.63	85.65	85.16	83.20	-1.96	-2.45	-2.43	-4.64	-4.23	-1.93	-2.68	-3.20	-1.76	3.22	5.28
SY-7	NA	NA	NA	86.83	86.27	85.48	87.71	89.21	86.82	85.91	85.90	83.64	-2.26	-2.27	-3.18	-5.57	-4.07	-1.84	-2.63	-3.19	NA	NA	NA
SY-8	77.34	78.62	84.40	98.91*	85.28	97.62*	87.02	109.06*	86.23	84.55	84.61	82.56	-2.05	-1.99	-3.67	NA	-4.46	NA	-2.72	NA	-1.84	3.94	5.22
SY-9	NA	NA	86.21	87.57	87.16	86.31	88.60	88.73	86.44	85.53	85.13	83.11	-2.02	-2.42	-3.33	-5.62	-5.49	-3.20	-4.05	-4.46	-3.10	NA	NA
Off-Site Wells:																							
PK-10S	75.84	77.95	83.38	84.52	84.12	83.24	85.98	87.20	85.31	83.7	83.22	81.46	-1.76	-2.24	-3.85	-5.74	-4.52	-1.78	-2.66	-3.06	-1.92	3.51	5.62
PK-10I	75.31	77.47	83.01	84.12	83.78	82.89	85.57	86.69	84.88	83.27	82.67	81.00	-1.67	-2.27	-3.88	-5.69	-4.57	-1.89	-2.78	-3.12	-2.01	3.53	5.69
PK-10D	75.32	77.45	83.04	84.10	83.72	82.86	85.55	86.63	84.86	83.25	82.57	80.97	-1.60	-2.28	-3.89	-5.66	-4.58	-1.89	-2.75	-3.13	-2.07	3.52	5.65
RW-12I	74.99	77.07	82.57	83.65	83.32	82.5	85.28	86.32	84.64	82.90	82.21	80.70	-1.51	-2.20	-3.94	-5.62	-4.58	-1.80	-2.62	-2.95	-1.87	3.63	5.71
RW-12D	74.66	76.76	82.46	83.57	83.29	82.46	85.25	86.27	84.58	82.82	82.06	80.59	-1.47	-2.23	-3.99	-5.68	-4.66	-1.87	-2.70	-2.98	-1.87	3.83	5.93
RB-11S	76.71	78.57	83.85	85.16	85.28	83.78	86.33	87.65	85.4	84.04	83.91	81.95	-1.96	-2.09	-3.45	-5.70	-4.38	-1.83	-3.33	-3.21	-1.90	3.38	5.24
RB-11I	NA	77.58	82.88	84.20	83.82	82.84	85.48	86.61	84.74	83.22	82.56	80.99	-1.57	-2.23	-3.75	-5.62	-4.49	-1.85	-2.83	-3.21	-1.89	3.41	NA
RB-11D	75.55	77.74	83.26	84.34	83.95	83.07	85.64	86.67	84.87	83.32	82.6	81.16	-1.44	-2.16	-3.71	-5.51	-4.48	-1.91	-2.79	-3.18	-2.10	3.42	5.61
												Averages:	-1.78	-2.24	-3.62	-5.71	-4.48	-1.90	-2.80	-3.21	-1.95	3.53	5.51

Notes:

WL Elev. - Water-level elevation, in feet above Mean Sea Level.
Δ Elev. - Change in water-level elevation, in feet.
* - These water-level data for Well SY-8 appear to be anomalous, and were not used.
NA - Not available.

5.2 Temporal Variation in Ground-Water Quality

The 2015 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, but that 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 ground water-flow directions, the elevated levels of certain VOCs, leachate indicators and inorganic parameters 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 not detected in 2015. 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 2015 total VOC results are compared to previous results in Table 8. Review of Table 8 indicates that relative to 2014, total VOC concentrations were slightly higher in every well except On-Site Downgradient Wells SY-2R and SY-2D, but still consistent with prior results. Also, at each well cluster where VOCs were detected, total VOC concentrations increased with depth. The increases relative to 2014 and increasing trends with depth may reflect decreased aquifer recharge, and its associated dilution, as precipitation has been below-average since the 2014 monitoring round. However 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 has occurred in an on-site well since 2003.

The 2015 exceedances for leachate indicator parameters are compared to previous exceedances in Table 9. Review of Table 9 indicates that these exceedances were very similar to last year, except for the significant increase in the number of exceedances for phenols this year. Overall, the parameters for which exceedances are noted have been stable or decreasing over time in every well. This finding indicates that, with respect to exceedances of the ground-water standards and guidance values for leachate-indicator parameters, ground water-quality conditions downgradient of the Landfill been relatively consistent since 1993. Moreover, Table 9 demonstrates that the Landfill is not a significant source of Part 360 leachate-indicator parameters at concentrations exceeding the Class GA ground water-quality standards or guidance values.

With respect to metals/inorganic parameters, the exceedances noted in the <u>filtered</u> 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 vs. 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 results for the filtered samples are compared.

Table 8
Comparison of Current Total VOC Results to Previous Results
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

Well Number	Dec. 1993	Jul. 2003	Dec. 2005	Dec. 2006	Dec. 2007	Dec. 2008	Nov. 2009	Dec. 2010	Nov. 2011	Dec. 2012	Dec. 2013	Sept. 2014	Dec. 2015
	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results	Total VOC Results
Upgradient Well													
SY-6	0.0	3.6	1.2	1.4	0.0	0.0	0.65	0.5	1.8	0.4	0.0	0.0	0.5
On-Site Downgradient Wells													
SY-2R	0.6	3.6	0.0	0.2	0.0	4.2	0.0	0.0	0.0	0.0	0.72	0.0	0.0
SY-2D	7.9	2.8	4.9	3.9	2.1	1.5	0.0	0.0	0.3	0.0	0.2 / 0.0*	0.0	0.0
SY-3	10.7	23.9	0.7	1.6	5.5	74	1.3	1.8	4.5 / 0.8*	0.0	1.26	0.0	0.74
SY-3D	11.4	20.9	6	3.8	3.9	2.2	1.9	8.0	2.9	0.7 / 0.0*	0.42	0.0	1.58
SY-3DD	0.0	10	0.0	0.6	0.0	0.0	1.9	11.2	2.9	0.44	0.0	0.0	2.03
Off-Site Downgradient Wells													
PK-10S	13.9	218	0.3	0.5	0.0	102	0.5	0.0	0.0	0.0	0.0	0.0	1.1
PK-10I	15.6	33.4	17	15	11	13.6	7.7	5.3	3.4	2.7	4.34	2.2	4.3
PK-10D	6.5	21.8	1.8	2.0	3.1	10.2	5.1	5.4	4.4	3.9	1.69	2.7	4.27
RW-12I	260	154	134	88	72.6	72.2	62.4	66.4	53.1	69.5	62.5	30.7	41.0
RW-12D	31.9	200	111	73	65.8	87.6	60.8	41.3	64.0	80.5	64.4	34.8	63.2

Notes:

Results are in units of ug/L.
Totals include estimated concentrations, totals for 2003-2010 include TICs.
* = Results for duplicate sample.

Table 9
Comparison of Current Leachate Indicator Parameter Exceedances to Previous Exccedances
Syosset Landfill 2015 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
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
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
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
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
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
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
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
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
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
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 Phenols and TDS	Ammonia Bromide Phenols and TDS	Ammonia Bromide and TDS	Ammonia, Color, 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 Pheniols and TDS	Ammonia and TDS	Ammonia, Phenols and TDS	Ammonia and TDS

Notes:
* = Not Landfill-related.

Table 10
Comparison of Filtered Sample Inorganic Parameter Exceedances to Previous Exceedances
Syosset Landfill 2015 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
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
On-Site Downgradient Wells													
SY-2R	Iron and Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium and Thalliun	Sodium	Antimony and Sodium	Sodium	Sodium	Sodium	Beryllium, Nickel 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
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	Arsenic, 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
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	Thallium
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
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
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
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
RW-12D	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium	Sodium

Notes:

* = Not Landfill-related.

The 2003 iron results were qualified as rejected by data validator. 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.

Review of Table 10 indicates that the overall distribution of exceedances for dissolved metals/inorganic parameters is similar for all 12 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 the other metals/inorganic parameters at concentrations exceeding the Class GA ground-water standards and guidance values.

The mercury detected in Well PK-10D in 2015 is not Landfill-related because mercury was not detected in any of the on-site wells, and in general parameters known to be associated with the Landfill are not detected at elevated concentrations in Well PK-10D. Moreover, as noted previously, mercury is known to occur throughout the stratigraphic equivalent of the Magothy Formation in New Jersey based on a study by the United States Geological Survey.

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 eight NYSDEC Part 360 leachate indicator parameters that have been detected on a relatively consistent basis during the post-closure monitoring rounds. A series of eight graphs showing the trends for each parameter in all wells from 2003 through 2015 is provided in Appendix C. The 2003 through 2015 results for these eight parameters are summarized in Table 11. The earlier results from the 1988 OU-1 RI ground water-monitoring events and the 1993 OU-2 RI ground water-monitoring events, if available for a parameter and/or well, are also included 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 property) 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 2015 trend graphs in Appendix C, and the Long-Term Trend Summary in Table 11, indicates that over the long-term, the majority of the parameters in the majority of the wells have a flat or decreasing trends. In fact, only Well RW-12I has more parameters with increasing trends than flat and decreasing trends over the long-term. This distinction is further indication that ground water-quality conditions at this off-site downgradient location are not Landfill-related.

Review of the Trend Since 2005 Summary in Table 11 shows that since 2005, every well has more parameters with flat or decreasing trends than increasing 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 property in 2005 have dissipated, as predicted in the 2008 Report, and ground-water quality conditions downgradient of the Landfill continue to stable or improving over time.

Table 11
Trend Analysis Summary for Selected Part 360 Leachate Indicator Parameters
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

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
Alkalinity											
OU1 RI 5/2/1988	72	26	270	880	1,300	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	66	26	280	890	1,200	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	195	39	100	716	1,180	14	23	404	25	167	74
OU2 RI 12/1/1993	202	35	82	727	1,020	9.6	24	419	18	162	80
6/26/2003	99	11	66	710	140	6.0	11	350	22	100	170
12/27/2005	22	13	71	150	510	8.8	12	320	22	680	230
12/27/2006	48	12	66	190	390	7.8	12	270	23	680	210
12/21/2007	56	8.8	56	180	350	6.6	6.0	220	22	950	180
12/29/2008	48	18	66	250	310	6.0	10	150	24	950	140
11/3/2009	57	30	52	200	270	6.32	12	130	28	510	110
12/6/2010	44	22	46	190	240	8.64	13	95	26	980	70
11/15/2011	51	11	45	160	220	5.9	10	84	24	1,000	98
12/13/2012	55	17	42	140	220	6	11	76	20	920	93
11/11/2013	50.1	9.84	37.7	172	217	8.24	13.3	90.3	22.7	876	86.5
9/24/2014	49.1	9.92	34.6	180	232	6.16	12.2	91	24.2	858	87.3
12/4/2015	69.8	10.2	31.1	164	244	4.56	11.6	104	22.5	845	89.8
Long-Term Trend:	Dec.	Dec.	Dec.	Dec.	Dec.	Flat	Dec.	Dec.	Flat	Inc.	Flat
Trend Since 2005:	Flat	Flat	Dec.	Flat	Dec.	Flat	Flat	Dec.	Flat	Inc.	Dec.
Ammonia											
OU1 RI 5/2/1988	<0.05	<0.05	18	91	130	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	<0.05	<0.05	17	90	130	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	0.06	<0.04	4.9	68	146	<0.04	0.35	39	<0.04	16	<0.04
OU2 RI 12/1/1993	0.09	0.26	7.0	123	84	<0.04	0.05	38	<0.04	15	0.11
6/26/2003	0.29	0.26	2.7	61	9.9	0.3	0.2	32	0.26	4.7	4.8
12/27/2005	<0.20	<0.20	2.8	4.3	40	<0.20	<0.20	21	<0.20	55	8.9
12/27/2006	<0.20	0.70	2.1	4.3	39	<0.20	<0.20	19	<0.20	47	6.8
12/21/2007	0.23	0.33	2.2	7.5	40	<0.20	<0.20	15	<0.20	84	8.1
12/29/2008	<0.20	0.33	1.9	9.7	38	0.20	0.35	15	0.24	89	9.9
11/3/2009	0.27	0.29	1.77	4.38	3.92	0.20	0.30	4.51	0.27	4.08	5.90
12/6/2010	0.05	0.1	1.4	9.8	21	0.12	0.04	3.2	0.12	74	3.1
11/15/2011	<0.03	<0.03	0.74	7.96	26.9	0.051	<0.03	3.58	<0.03	100	5.26
12/13/2012	0.07	0.091	0.751	7.78	15.7	0.09	<0.05	4.17	0.049	83.1	6.1
11/11/2013	0.073	0.188	0.604	8.84	15.2	0.15	0.075	3.2	0.12	73.6	5.7
9/24/2014	0.062 J	<0.05	0.378	8.1	14.5	0.042 J	<0.05	4.93	<0.05	76.5	5.79
12/4/2015	0.113	0.093 J	0.224	7.6	12.5	0.066 J	0.063 J	4.18	0.13	78.4	5.09
Long-Term Trend:	Flat	Flat	Dec.	Dec.	Dec.	Flat	Flat	Dec.	Flat	Inc.	Flat
Trend Since 2005:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
Chloride											
OU1 RI 5/2/1988	30	52	220	99	340	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
OU2 RI 11/2/1993	43	449	108	136	269	4.2	15	291	14	106	122
OU2 RI 12/1/1993	34	613	97	176	265	4.5	14	287	14.2	118	139
6/26/2003	19	140	120	380	300	3.5	7.8	19	19	26	150
12/27/2005	18	180	160	380	510	4.1	10	340	47	190	160
12/27/2006	3.4	470	140	430	680	3.3	8.9	350	64	170	190
12/21/2007	7.2	480	150	490	770	3.9	11	390	90	240	190
12/29/2008	10	640	170	210	820	4.3	7.2	370	91	170	170
11/3/2009	7.8	420	200	160	910	4.1	7.9	450	120	190	200
12/6/2010	14	160	230	170	860	4.71	9.09	440	110	170	170
11/15/2011	4.7	220	310	180	820	4.5	13	490	110	170	200
12/13/2012	12	400	320	230	800	4.6	14	470	120	170	200
11/11/2013	9.54	218	291	228	820	4.15	12.5	469	118	160	199
9/24/2014	7.47	322	278	200	749	4.22	14.6	504	133	163	207
12/4/2015	5.14	399	252	190	524	4.5	11.8	506	128	146	197
Long-Term Trend:	Dec.	Flat	Inc.	Flat	Inc.	Flat	Flat	Inc.	Inc.	Flat	Inc.
Trend Since 2005:	Flat	Dec.	Inc.	Dec.	Flat	Flat	Flat	Inc.	Inc.	Dec.	Flat
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	123.8	75.9	130.7	210.7	5.73	38.9	160	117.2	346.6	253.3
12/4/2015	135	128	69.7	139	190	6.36 J	40.2	197	127	427	308
Long-Term Trend:	Dec.	Flat	Flat	Dec.	Dec.	Flat	Dec.	Dec.	Inc.	Inc.	Flat
Trend Since 2005:	Inc.	Flat	Flat	Dec.	Dec.	Flat	Flat	Inc.	Inc.	Dec.	Dec.

Table 11
Trend Analysis Summary for Selected Part 360 Leachate Indicator Parameters
Syosset Landfill 2015 Annual Post-Closure Ground Water-Monitoring Report

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
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	<1.0	1,800	21	2.8	<1.00	18
12/27/2005	<1.0	29	22	40	41	<1.0	29	67	<1.0	79	120
12/27/2006	5.9	94	76	90	96	1.5	24	120	<25	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
Long-Term Trend:	Flat	Dec.	Dec.	Flat	Flat	Flat	Dec.	Dec.	Flat	Flat	Inc.
Trend Since 2005:	Inc.	Flat	Flat	Flat	Flat	Flat	Flat	Dec.	Flat	Flat	Inc.
Total Dissolved Solids (TDS)											
OU1 RI 5/2/1988	210	210	670	820	1,400	N/A	N/A	N/A	N/A	N/A	N/A
OU1 RI 6/6/1988	180	230	630	830	1,400	N/A	N/A	N/A	N/A	N/A	N/A
OU2 RI 11/2/1993	287	861	282	726	1,240	44	162	918	87	345	320
OU2 RI 12/1/1993	323	850	299	757	1,400	54	181	1,020	85	408	511
6/26/2003	175	360	334	1,373	821	125	172	1,004	114	177	536
12/27/2005	64	490	380	790	1,200	42	130	940	160	940	710
12/27/2006	69	930	320	950	1,400	26	120	880	200	890	750
12/21/2007	83	750	330	1,000	1,400	11	85	840	210	1,000	680
12/29/2008	170	1,100	380	650	1,700	10	90	880	270	1,100	690
11/3/2009	190	800	390	470	1,800	44	100	910	300	1,100	630
12/6/2010	131	474	505	512	1,680	30	95	930	275	1,300	631
11/15/2011	99	458	596	511	1,620	24	95	985	301	1,470	684
12/10/2012	131	753	653	611	1,570	31	89	950	314	1,310	725
11/11/2013	94	417	602	708	1,800	9	96	944	298	1,110	694
9/24/2014	158	720	564	556	1,472	29	105	997	372	994	756
12/4/2015	215	773	503	545	1,236	27	90	1,074	324	1,027	773
Long-Term Trend:	Dec.	Flat	Inc.	Dec.	Inc.	Dec.	Dec.	Flat	Inc.	Inc.	Inc.
Trend Since 2005:	Inc.	Dec.	Inc.	Dec.	Inc.	Flat	Flat	Inc.	Inc.	Inc.	Inc.
Total Kjeldhal Nitrogen											
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
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
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
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
6/26/2003	<1.00	<1.00	2.49	93	11	<1.00	<1.00	37	<1.00	3.53	5.12
12/27/2005	<0.50	<0.50	<0.50	3.8	51	<0.50	<0.500	21	<0.500	40	7
12/27/2006	0.57	0.66	1.32	2.61	15	0.63	0.56	6.16	0.59	19	16
12/21/2007	1.5	1.5	4.3	10	49	1.1	1.4	18	1.6	95	9.7
12/29/2008	1.5	1.5	3.8	11	40	1.6	1.8	12	1.51	100	8.82
11/3/2009	<0.50	<0.50	1.25	13	34	<0.50	<0.50	11	<0.50	55	7.45
12/6/2010	0.486	0.5	1.9	16	40	0.2	0.2	6.9	0.222	140	2.7
11/15/2011	0.307	<0.1	0.758	7.8	25	<0.1	0.1	3.9	0.096	94	5.8
12/13/2012	<0.25	<0.25	0.86	8.1	17	0.1	0.1	3.7	0.22	84	5.2
11/11/2013	0.102	0.181	0.608	8.4	17.5	0.243	<0.25	4.8	0.224	81.5	5.5
9/24/2014	0.208 J	0.23 J	0.588	9.7	14.4	0.172 J	0.152 J	4.89	0.296 J	84.5	5.79
12/4/2015	0.177 J	0.355 J	0.429 J	12.5	16.6	<0.5	0.251 J	4.9	0.432 J	99.4	5.72
Long-Term Trend:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Dec.	Flat	Inc.	Flat
Trend Since 2005:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Inc.	Flat
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	`
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
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
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
6/26/2003	1.24	0.74	1.05	17	3.19	<0.40	<0.40	5.17	<0.40	1.27	6.73
12/27/2005	8.88	1.03	1.31	2.61	9.72	<0.40	0.603	5.21	0.58	17	8.43
12/27/2006	<0.40	0.5	0.459	2.43	6.51	<0.40	<0.40	3.65	<0.40	16	7.27
12/21/2007	0.75	1.13	0.88	2.63	6.13	<0.40	0.438	3.18	0.527	3.83	8.14
12/29/2008	1.49	1.21	1.08	3.55	6.4	<0.40	0.701	2.63	0.885	4.34	7.23
11/3/2009	2.81	2.13	1.55	7.09	9.57	<0.40	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
11/15/2012	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 J	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
Long-Term Trend:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Dec,	Inc.	Flat	Dec.
Trend Since 2005:	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
Long-Term Trend Summary											
Total Flat	4	6	3	4	3	7	4	1	4	3	4
Total Dec.	4	2	3	4	3	1	4	6	0	0	1
Total Inc.	0	0	2	0	2	0	0	1	4	5	3
Trend Since 2005 Summary											
Total Flat	5	6	5	5	5	8	8	4	5	3	4
Total Dec.	0	2	1	3	2	0	0	1	0	2	2
Total Inc.	3	0	2	0	1	0	0	3	3	3	2

Notes:

All results are in units of milligrams per Liter (mg/L).
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).
J = Result qualitified as estimated by data validator.

SECTION 6

CONCLUSIONS AND RECOMENDATIONS

Based on the above results from the 2015 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 the other TAL inorganic parameters at concentrations exceeding the Class GA ground-water standards and guidance values.

3. Although arsenic was detected in On-Site Downgradient Well SY-3 at concentrations exceeding the federal MCL, the fact that arsenic was not detected in the deeper on-site downgradient wells at this cluster (Wells SY-3D and SY-3DD) and was only detected at very low, estimated concentrations in two deep off-site downgradient wells (Wells PK-10D and RW-12D) indicates that off-site impacts are negligible.

4. Exceedances for beryllium and nickel occurred in Well SY-2R in 2015. However, both were relatively low in magnitude, and the limit for beryllium is a guidance value rather than an actual standard. Beryllium was not detected in the other wells, and nickel detections in the other wells were limited to very low, estimated concentrations in three off-site downgradient wells.

5. 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, indicating that the selected remedy has been effective in mitigating ground water-quality impacts associated with the Landfill.

6. Based on the distribution of contaminants in ground water and ground water-flow directions, the majority of the contaminants detected in Well Cluster RW-12 do not appear to be related to the Landfill. This conclusion is consistent with the conclusions of previous post-closure monitoring reports and the OU-2 RI Report.

7. Taken as a whole, the results of the 2015 ground water-monitoring round continue to support the de-listing of the Landfill from the NPL, which occurred on April 28, 2005.

8. Ground water-quality conditions in the upgradient well and on-site downgradient wells have returned to their previous stable or improving trends, indicating that ground-water conditions have equilibrated following the increase in recharge directly upgradient of the Landfill associated with demolition work at the adjacent former Cerro Wire property in 2005.

Based on the above information, LKB recommends that the following work items be implemented during the 2016 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 future development and related construction activities at the former Cerro Wire property which may increase recharge directly upgradient of the Landfill.

APPENDIX A

Completed Well Inspection Checklist Forms

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-1
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☐	☒	Lock Rusted Open Position
4. Steel Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☐	☒	No Cap
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	On inside of lid

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	115.70’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-1D
DATE: 11/18/15
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

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

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	114.39' (Partial Obstruction @ 95')

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-2R
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☐	☒	Lock rusted open
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
6. Remarks on Integrity of Casing	OK
Depth to Water from Top of PVC	108.71’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-2D
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	Casing lid missing
Lock – Intact	☐	☒	No Lock
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☐	☒	Top missing, No Cover
8. Well is Clearly Marked	☐	☒	Needs to be re-labeled

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	Hole in Cap (cover by tape)
5. Depth to Water from Top of PVC	108.99’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-3
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

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

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	111.74’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-3D
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☐	☒	Lock missing
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☐	☒	
6. PVC Cap Vented Properly	☐	☒	No Cap
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	Inside of Lid

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	112.80’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-3DD
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☐	☒	Casing lid hinge broken
Lock – Intact	☐	☒	Not locked
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☐	☒	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☐	☒	Casing lid hinge broken
8. Well is Clearly Marked	☒	☐	

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	112.64’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-4
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under rip-rap)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Lock rusted open
4. Steel Casing (Stick-up) Straight	☐	☒	Casing is bent slightly
5. Designated Leveling Point Clearly Marked	☐	☒	No room on steel
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	On Cap

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	109.24’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-6
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

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

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	103.74’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-7
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☐	☒	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	Road sand in curb box
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☐	☒	Not used, flush mount
Lock – Intact	☐	☒	Lid sitting on ring
4. Steel Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☐	☒	No room
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	

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	113.82’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-8
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under veg/soil)
Cracked	☐	☒	
Missing	☒	☐	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	Intact, but lower than PVC
Lock – Intact	☐	☒	Cannot lock
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK
5. Depth to Water from Top of PVC	115.38’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. SY-9
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	(Presumed, under new soil)
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☐	☒	No Lock
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☐	☒	New Casing Extension
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	

CHECKLIST FOR INSPECTION OF INSIDE OF EXISTING WELLS

1. Bottom of Well from Top of PVC Casing	N/A
2. Stick-Up	OK (New Extension)
3. Bottom of Well Below Grade	N/A
4. Remarks on Integrity of Casing	OK (New Casing)
5. Depth to Water from Top of PVC	119.30’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. PK-10S
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	Not marked, closest to road

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	107.27’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. PK-10I
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☐	☒	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	Closest to ball court

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	106.10’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. PK-10D
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	No bolts
4. PVC Casing (Stick-up) Straight	☐	☒	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	

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	107.28’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. RW-12I
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☒	☐	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☐	☒	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	

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	Water in casing to top of stick up
5. Depth to Water from Top of PVC	116.62’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. RW-12D
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	

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	116.70’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. RB-11S
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	

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	106.00’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. RB-11I
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☒	☐	

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	107.76’

SYOSSET LANDFILL
POST-CLOSURE MONITORING AND MAINTENANCE PROGRAM

2015 GROUNDWATER MONITORING WELL INSPECTION CHECKLIST

WELL NO. RB-11D
DATE: 11/18/2015
PERSONNEL: J. Gerlach & R. Chen

CHECKLIST FOR INSPECTION OF OUTSIDE OF EXISTING WELLS

	Yes	No	Remarks
1. Cement Seal			
Intact	☒	☐	
Cracked	☐	☒	
Missing	☐	☒	
2. Ponding of Water Around Cement Seal	☐	☒	
3. Protective Steel Pipe & Lock (if used)			
Pipe – Intact	☒	☐	
Lock – Intact	☒	☐	Bolted
4. PVC Casing (Stick-up) Straight	☒	☐	
5. Designated Leveling Point Clearly Marked	☒	☐	
6. PVC Cap Vented Properly	☒	☐	
7. Well is Protected	☒	☐	
8. Well is Clearly Marked	☐	☒	

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	108.00’

APPENDIX B

Validated Laboratory Results

ENVIRONMENTAL
Data Services, Inc.

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

Client: Lockwood, Kessler, & Bartlett, Syosset, New York
SDG: G4646
Laboratory: ChemTech, Mountainside, New Jersey
Site: Syosset Landfill, Syosset, New York
Date: January 22, 2016

VOCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	PK-10S	G4646-01	Water
2	PK-10D	G4646-02	Water
3	PK-10I	G4646-03	Water
3DL	PK-10IDL	G4646-03DL	Water
4	RW-12D	G4646-04	Water
5	RW-12I	G4646-05	Water
6	TRIPBLANK	G4646-06	Water

Total & Dissolved Metals			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1T	PK-10S	G4646-01	Water
1TMS	PK-10SMS	G4646-01MS	Water
1TDUP	PK-10SDUP	G4646-01DUP	Water
2T	PK-10D	G4646-02	Water
3T	PK-10I	G4646-03	Water
4T	RW-12D	G4646-04	Water
5T	RW-12I	G4646-05	Water
7D	PK-10S	G4646-07	Water
8D	PK-10D	G4646-08	Water
9D	PK-10I	G4646-09	Water
10D	RW-12D	G4646-10	Water
11D	RW-12I	G4646-11	Water

Wet Chemistry			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	PK-10S	G4646-01	Water
1MS	PK-10SMS	G4646-01MS	Water
1DUP	PK-10SDUP	G4646-01DUP	Water
2	PK-10D	G4646-02	Water
2DL*	PK-10DDL	G4646-02DL	Water
3	PK-10I	G4646-03	Water
3DL**	PK-10IDL	G4646-03DL	Water
4	RW-12D	G4646-04	Water
4DL1†	RW-12D	G4646-04	Water
4DL2*	RW-12D	G4646-04	Water

Wet Chemistry			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
5	RW-12I	G4646-05	Water
5DLβ	RW-12I	G4646-05	Water

* - Chloride ** - Ammonia/Chloride † - Ammonia, Chloride, Sulfate β - Ammonia/Chloride/TKN
MS/DUP – Ammonia/Bromide/Chloride/Nitrate/Sulfate/Cyanide/Phenolics

A Data Usability Summary Review was performed on the analytical data for ten water samples and one aqueous trip blank sample collected December 3, 2015 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Contract Laboratory Program SOW for Organics and Inorganic Analyses"* and *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"* and the *"Standard Methods for the Examination of Water and Wastewater"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW846 8260C
Metals/Mercury	USEPA CLP Method ISM01.3
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
Cyanide	USEPA CLP Method ISM01.3_CN
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 Data Review, and the site QAPP as follows:

- The USEPA "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008;
- The USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010;
- and the reviewer's professional judgment.

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectroscopy (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Inorganics

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

Overall Usability Issues:

There were no rejections of data.

Overall the data is 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 exceedences of QC criteria.

Volatile Organics 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 following table presents compounds that exceeded 25 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
12/08/15	Bromomethane	32.8	J/UJ	1-5

Method Blank

- The method blanks were free of contamination.

Field Blank

- The field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELDBLANK (SDG G4699)	Chloromethane	1.2	None	All ND
	Acetone	3.8	None	
TRIPBLANK	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

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

- A MS/MSD sample was not collected.

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 detected.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Total & Dissolved Metals & Hardness

Holding Times

- All samples were prepared and analyzed within 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).

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
PB87131BL	Mercury	0.088	U	1, 3, 4, 5, 7
PB87112BL	Copper	4.8	U	2, 4, 5, 7, 8, 9, 10, 11

Field Blank

- The field blanks are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELDBLANK (SDG G4699)	Thallium	2.9	U	8, 9
	Zinc	30.7	U	2, 3, 5, 7-11

ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Matrix Spike/Duplicate (MS/DUP) Recoveries

- The MS/DUP samples exhibited acceptable %R and RPD values.

ICP Serial Dilution

- ICP serial dilution percent differences (%D) were within acceptance limits.

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, Cyanide, Phenolics, TDS, TKN, TOC

Holding Times

- All samples were prepared and analyzed within the recommended time for each analysis with the exception of the following. Positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ).

Sample ID	Compound	Holding Time Exceedance	Qualifier
1, 2, 3	BOD5	Yes	J/UJ

Initial and Continuing Calibration

- All %R criteria were met.

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
FIELDBLANK (SDG G4699)	Alkalinity	0.4	None	None for Wet Chemistry parameters
	Chloride	0.138	None	
	Phenolics	0.016	None	
	TDS	5	None	
	TOC	0.261	None	

Matrix Spike/Duplicate (MS/DUP) Recoveries

- The following table presents MS/DUP samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS Sample ID	Compound	MS %R/RPD	Qualifier	Affected Samples
1	Chloride	-453%/OK	None	4X Rule
	Sulfate	78%/OK	J/UJ	All Samples

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Compound Quantitation

- EDS sample ID #s 2, 3, 4, and 5 exhibited high concentrations of ammonia as N, chloride, sulfate, and/or TKN and were flagged (OR) for over the calibration range by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 1/26/16

Nancy Weaver
Senior Chemist

Data Qualifiers

U	=	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
UJ	=	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
J	=	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
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.
R	=	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
NJ	=	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10S	SDG No.:	G4646
Lab Sample ID:	G4646-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029409.D	1		12/08/15 18:20	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1.1		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10S	SDG No.:	G4646
Lab Sample ID:	G4646-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029409.D	1		12/08/15 18:20	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		69 - 133		90%	SPK: 50
2037-26-5	Toluene-d8	45.6		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		58 - 135		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	695886	7.75				
540-36-3	1,4-Difluorobenzene	1136930	8.68				
3114-55-4	Chlorobenzene-d5	981325	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	389214	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10D	SDG No.:	G4646
Lab Sample ID:	G4646-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029410.D	1		12/08/15 18:47	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.65	J	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	3.1		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10D	SDG No.:	G4646
Lab Sample ID:	G4646-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029410.D	1		12/08/15 18:47	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.28	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.24	J	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	44.6		65 - 126		89%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.2		58 - 135		84%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	668396	7.75				
540-36-3	1,4-Difluorobenzene	1088410	8.68				
3114-55-4	Chlorobenzene-d5	932576	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	346764	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10I	SDG No.:	G4646
Lab Sample ID:	G4646-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029411.D	1		12/08/15 19:15	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10I	SDG No.:	G4646
Lab Sample ID:	G4646-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029411.D	1		12/08/15 19:15	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	3.2		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.82	J	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.28	J	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.8		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	45.5		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.4		58 - 135		85%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	616992	7.75				
540-36-3	1,4-Difluorobenzene	989531	8.68				
3114-55-4	Chlorobenzene-d5	838996	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	303876	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12D	SDG No.:	G4646
Lab Sample ID:	G4646-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029412.D	1		12/08/15 19:42	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	2		0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	5.5		0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	5		0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	3.9		0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.41	J	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.7	J	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.7	J	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12D	SDG No.:	G4646
Lab Sample ID:	G4646-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029412.D	1		12/08/15 19:42	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.83	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	24.9		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	2.8		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	9.8		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	6.7		0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.6		61 - 141		101%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	45.2		65 - 126		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.9		58 - 135		86%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	648562	7.75				
540-36-3	1,4-Difluorobenzene	1041560	8.68				
3114-55-4	Chlorobenzene-d5	887449	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	330445	13.47				
TENTATIVE IDENTIFIED COMPOUNDS							
95-49-8	2-Chlorotoluene	1.3	J			12.79	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12I	SDG No.:	G4646
Lab Sample ID:	G4646-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029413.D	1		12/08/15 20:10	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	1.1		0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	2.9		0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	2.6		0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.69	J	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.98	J	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12I	SDG No.:	G4646
Lab Sample ID:	G4646-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029413.D	1		12/08/15 20:10	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	1.4		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	15.6		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	2		0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	8.1		0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	5.6		0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	51.2		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	48.1		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	45.6		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.7		58 - 135		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	634804	7.75				
540-36-3	1,4-Difluorobenzene	1010600	8.68				
3114-55-4	Chlorobenzene-d5	869027	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	327773	13.47				
TENTATIVE IDENTIFIED COMPOUNDS							
95-49-8	2-Chlorotoluene	0.74	J			12.79	ug/L
135-98-8	sec-Butylbenzene	0.36	J			13.29	ug/L

MW 1/22/16

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4646
Lab Sample ID:	G4646-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029516.D	1		12/11/15 12:43	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4646
Lab Sample ID:	G4646-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029516.D	1		12/11/15 12:43	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.3		61 - 141		91%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	50.1		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.4		58 - 135		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	745100	7.75				
540-36-3	1,4-Difluorobenzene	1295190	8.68				
3114-55-4	Chlorobenzene-d5	1148060	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	437143	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10S	SDG No.:	G4646
Lab Sample ID:	G4646-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	55.5	J	1	19.9	100	200	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-39-3	Barium	16	J	1	16	100	200	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-70-2	Calcium	11700		1	416	2500	5000	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-47-3	Chromium	4.6	J	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
Hardness	Hardness, Total	40.2		1	2.6	16.5	33.1	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7439-89-6	Iron	141		1	17.7	50.0	100	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7439-95-4	Magnesium	2660	J	1	378	2500	5000	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7439-96-5	Manganese	8.7	J	1	1.4	7.5	15	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7439-97-6	Mercury	0.2 ~~0.074~~ U J		1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:44:(	ISM01.3_HG
7440-02-0	Nickel	17.1	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-09-7	Potassium	1010	J	1	414	2500	5000	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-23-5	Sodium	6340		1	477	2500	5000	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/10/15 14:08:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

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

MW 12/22/16

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10D	SDG No.:	G4646
Lab Sample ID:	G4646-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-38-2	Arsenic	2.4	J	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-39-3	Barium	50.1	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-70-2	Calcium	33300		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-47-3	Chromium	61.5		1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-50-8	Copper	25 ~~8.9~~ U	~~J~~	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
Hardness	Hardness, Total	127		1	2.6	16.5	33.1	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7439-89-6	Iron	473		1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7439-95-4	Magnesium	10600		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7439-96-5	Manganese	29.9		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7439-97-6	Mercury	1.7		1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:47:(	ISM01.3_HG
7440-02-0	Nickel	39	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-09-7	Potassium	1330	J	1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7782-49-2	Selenium	4.1	J	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-23-5	Sodium	59200		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~13~~ U	~~J~~	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:03:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

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

MW 1/22/16

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

3T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10I	SDG No.:	G4646
Lab Sample ID:	G4646-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-39-3	Barium	67.9	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-70-2	Calcium	53400		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-48-4	Cobalt	52.4		1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-50-8	Copper	4.5	J	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
Hardness	Hardness, Total	197		1	2.6	16.5	33.1	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7439-89-6	Iron	38.4	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7439-95-4	Magnesium	15500		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7439-96-5	Manganese	2230		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7439-97-6	Mercury	0.2 ~~0.1~~	U ~~J~~	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:53:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-09-7	Potassium	20900		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-23-5	Sodium	335000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~22.9~~	U ~~J~~	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:07:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
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OR = Over Range
N =Spiked sample recovery not within control limits

MW 1/22/16

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4T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12D	SDG No.:	G4646
Lab Sample ID:	G4646-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-38-2	Arsenic	3.4	J	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-39-3	Barium	81.8	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-70-2	Calcium	80000		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-50-8	Copper	25 ~~5.5~~ u	~~J~~	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
Hardness	Hardness, Total	308		1	2.6	16.5	33.1	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7439-95-4	Magnesium	26200		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7439-96-5	Manganese	18.6		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7439-97-6	Mercury	0.2 ~~0.082~~ u	~~J~~	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:55:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-09-7	Potassium	6210		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-23-5	Sodium	155000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:11:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

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

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12I	SDG No.:	G4646
Lab Sample ID:	G4646-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-39-3	Barium	77.5	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-70-2	Calcium	90100		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-50-8	Copper 25	~~9.8~~ u	~~J~~	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
Hardness	Hardness, Total	427		1	2.6	16.5	33.1	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7439-89-6	Iron	77.9	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7439-92-1	Lead	2.3	J	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7439-95-4	Magnesium	49100		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7439-96-5	Manganese	64.7		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7439-97-6	Mercury 0.2	~~0.09~~ u	~~J~~	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:57:(	ISM01.3_HG
7440-02-0	Nickel	8.6	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-09-7	Potassium	98600		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-23-5	Sodium	177000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3
7440-66-6	Zinc 60	~~28.5~~ u	~~J~~	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:15:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

J = Estimated Value
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OR = Over Range
N =Spiked sample recovery not within control limits

MW122116

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7D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10S	SDG No.:	G4646
Lab Sample ID:	G4646-07	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	97.1	J	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-39-3	Barium	16.9	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-70-2	Calcium	13400		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-47-3	Chromium	6	J	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-50-8	Copper	25 ~~6.9~~ U ~~J~~		1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7439-89-6	Iron	63.6	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7439-95-4	Magnesium	2900	J	1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7439-96-5	Manganese	10.7	J	1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7439-97-6	Mercury	0.2 ~~0.069~~ U ~~J~~		1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 18:59:(	ISM01.3_HG
7440-02-0	Nickel	29.6	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-09-7	Potassium	844	J	1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-23-5	Sodium	7070		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3
7440-66-6	Zinc	74.6 U		1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:19:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
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8D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10D	SDG No.:	G4646
Lab Sample ID:	G4646-08	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	20.5	J	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-39-3	Barium	48.5	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-70-2	Calcium	33000		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-47-3	Chromium	2	J	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-50-8	Copper	25 ~~9.5~~ u	J	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7439-89-6	Iron	22.8	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7439-92-1	Lead	2.4	J	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7439-95-4	Magnesium	10600		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7439-96-5	Manganese	27.7		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7439-97-6	Mercury	1.6		1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 19:01:(	ISM01.3_HG
7440-02-0	Nickel	36.2	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-09-7	Potassium	1390	J	1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7782-49-2	Selenium	6.3	J	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-23-5	Sodium	59800		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~3~~ u	J	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~20.9~~ u	J	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:37:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
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MW 11/22/16

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9D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10I	SDG No.:	G4646
Lab Sample ID:	G4646-09	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-39-3	Barium	68.4	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-70-2	Calcium	53700		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-48-4	Cobalt	53		1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-50-8	Copper	25 ~~3.6~~ U	~~J~~	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7439-89-6	Iron	41.5	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7439-95-4	Magnesium	15600		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7439-96-5	Manganese	2230		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7439-97-6	Mercury	0.11	J	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 19:04:(	ISM01.3_HG
7440-02-0	Nickel	3.1	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-09-7	Potassium	21000		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-23-5	Sodium	337000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~1.9~~ U	~~J~~	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~25.1~~ U	~~J~~	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:41:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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10D

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12D	SDG No.:	G4646
Lab Sample ID:	G4646-10	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-38-2	Arsenic	3.4	J	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-39-3	Barium	82.5	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-70-2	Calcium	80200		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-50-8	Copper 25	~~4.7~~ u	~~J~~	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7439-95-4	Magnesium	26300		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7439-96-5	Manganese	19.2		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7439-97-6	Mercury	0.079	J	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 19:06:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-09-7	Potassium	6410		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7782-49-2	Selenium	6.4	J	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-23-5	Sodium	157000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3
7440-66-6	Zinc 60	~~10.4~~ u	~~J~~	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:45:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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NM 12/22/16

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11D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12I	SDG No.:	G4646
Lab Sample ID:	G4646-11	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-39-3	Barium	76.3	J	1	16	100	200	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-70-2	Calcium	89800		1	416	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-50-8	Copper	25 ~~10.1~~ u	J	1	3.4	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7439-89-6	Iron	85.5	J	1	17.7	50.0	100	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7439-95-4	Magnesium	48800		1	378	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7439-96-5	Manganese	64.6		1	1.4	7.5	15	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7439-97-6	Mercury	0.07	J	1	0.05	0.1	0.2	ug/L	12/07/15 14:58	12/08/15 19:08:(	ISM01.3_HG
7440-02-0	Nickel	8.5	J	1	2.9	20.0	40	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-09-7	Potassium	97000		1	414	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-23-5	Sodium	176000		1	477	2500	5000	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~28.1~~ u	J	1	8.3	30.0	60	ug/L	12/07/15 09:00	12/08/15 16:49:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
LOQ = Limit of Quantitation
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MW 12/22/16

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 07:45
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10S	SDG No.:	G4646
Lab Sample ID:	G4646-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	11.6		1	0.4	1	2	mg/L		12/04/15 16:24	SM2320 B
Ammonia as N	0.063	J	1	0.034	0.05	0.1	mg/L	12/07/15 15:44	12/09/15 11:43	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/04/15 11:30	300
Chloride	11.8		1	0.075	0.075	0.15	mg/L		12/04/15 11:30	300
Nitrate	3		1	0.027	0.057	0.113	mg/L		12/04/15 11:30	300
Sulfate	17.1 J		1	0.132	0.375	0.75	mg/L		12/04/15 11:30	300
BOD5	2 UJ	~~HU~~	1	2	2	2	mg/L		12/04/15 12:30	SM5210 B
COD	5	U	1	2.43	2.5	5	mg/L		12/11/15 15:56	SM5220 D
Color	5		1	5	5	5	cu		12/04/15 11:32	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/04/15 15:40	12/08/15 14:28	ISM01.3_CN
Phenolics	0.01	J	1	0.01	0.025	0.05	mg/L	12/04/15 16:02	12/10/15 17:01	9065
TDS	90		1	0.031	5	10	mg/L		12/07/15 16:32	SM2540C
TKN	0.251	J	1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	0.567		1	0.08	0.25	0.5	mg/L		12/10/15 10:55	SM5310B

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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2

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 09:30
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10D	SDG No.:	G4646
Lab Sample ID:	G4646-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	22.5		1	0.4	1	2	mg/L		12/04/15 16:27	SM2320 B
Ammonia as N	0.13		1	0.034	0.05	0.1	mg/L	12/07/15 15:44	12/09/15 12:32	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/04/15 12:00	300
Chloride	128 ~~173~~	~~OR~~	20	1.5	~~0.075~~	~~0.075~~ 1.5	~~0.15~~ 3	mg/L	12/04/15 12:00	300
Nitrate	3.57		1	0.027	0.057	0.113	mg/L		12/04/15 12:00	300
Sulfate	17.9 J		1	0.132	0.375	0.75	mg/L		12/04/15 12:00	300
BOD5	2 UJ	~~HU~~	1	2	2	2	mg/L		12/04/15 12:30	SM5210 B
COD	5	U	1	2.43	2.5	5	mg/L		12/11/15 15:56	SM5220 D
Color	10		1	5	5	5	cu		12/04/15 11:40	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/04/15 15:40	12/08/15 14:28	ISM01.3_CN
Phenolics	0.01	J	1	0.01	0.025	0.05	mg/L	12/04/15 16:02	12/10/15 17:01	9065
TDS	324		1	0.031	5	10	mg/L		12/07/15 16:32	SM2540C
TKN	0.432	J	1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	1.37		1	0.08	0.25	0.5	mg/L		12/10/15 11:33	SM5310B

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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2DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 09:30
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10DDL	SDG No.:	G4646
Lab Sample ID:	G4646-02DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	128	D	20	1.5	1.5	3	mg/L		12/04/15 16:46	300

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

MW 12/22/16

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3

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 10:45
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10I	SDG No.:	G4646
Lab Sample ID:	G4646-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	104		1	0.4	1	2	mg/L		12/04/15 16:33	SM2320 B
Ammonia as N	4.18 ~~4.3~~	~~OR~~ 5 ~~1~~		~~0.034~~ 0.17	0.05 0.25	~~0.1~~ 0.5	mg/L	12/07/15 15:44	12/09/15 11:43	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/04/15 13:30	300
Chloride	506 ~~762~~	~~OR~~ 100 ~~1~~		~~0.075~~ 7.5	~~0.075~~ 7.5	~~0.15~~ 15	mg/L		12/04/15 13:30	300
Nitrate	0.113	U	1	0.027	0.057	0.113	mg/L		12/04/15 13:30	300
Sulfate	36.6 J		1	0.132	0.375	0.75	mg/L		12/04/15 13:30	300
BOD5	2 UJ	~~HU~~	1	2	2	2	mg/L		12/04/15 12:30	SM5210 B
COD	7.88		1	2.43	2.5	5	mg/L		12/11/15 15:56	SM5220 D
Color	5		1	5	5	5	cu		12/04/15 11:44	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/04/15 15:40	12/08/15 14:28	ISM01.3_CN
Phenolics	0.05	U	1	0.01	0.025	0.05	mg/L	12/04/15 16:02	12/10/15 17:01	9065
TDS	1074		1	0.031	5	10	mg/L		12/07/15 16:32	SM2540C
TKN	4.9		1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	2.43		1	0.08	0.25	0.5	mg/L		12/10/15 11:52	SM5310B

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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3DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 10:45
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	PK-10IDL	SDG No.:	G4646
Lab Sample ID:	G4646-03DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	4.18	D	5	0.17	0.25	0.5	mg/L	12/07/15 15:44	12/09/15 12:32	SM4500-NH3
Chloride	506	D	100	7.5	7.5	15	mg/L		12/04/15 17:16	300

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

MW 11/22/16

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4

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12D	SDG No.:	G4646
Lab Sample ID:	G4646-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	89.8		1	0.4	1	2	mg/L		12/04/15 16:36	SM2320 B
Ammonia as N	5.09 ~~5.74~~	~~OR~~ 5	~~1~~	~~0.034~~ 0.17	~~0.05~~ 0.25	~~0.1~~ 0.5	mg/L	12/07/15 15:44	12/09/15 11:53	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/04/15 14:00	300
Chloride	197 ~~274~~	~~OR~~ 20	~~1~~	~~0.075~~ 1.5	~~0.075~~ 1.5	~~0.15~~ 3	mg/L		12/04/15 14:00	300
Nitrate	9.76		1	0.027	0.057	0.113	mg/L		12/04/15 14:00	300
Sulfate	204 ~~221 J~~	OR 5	~~1~~	~~0.132~~ 0.66	~~0.375~~ 1.875	~~0.75~~ 3.75	mg/L		12/04/15 14:00	300
BOD5	4.56		1	2	2	2	mg/L		12/04/15 12:30	SM5210 B
COD	9.82		1	2.43	2.5	5	mg/L		12/11/15 15:56	SM5220 D
Color	5	U	1	5	5	5	cu		12/04/15 11:48	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/04/15 15:40	12/08/15 14:28	ISM01.3_CN
Phenolics	0.05	U	1	0.01	0.025	0.05	mg/L	12/04/15 16:02	12/10/15 17:11	9065
TDS	773		1	0.031	5	10	mg/L		12/07/15 16:32	SM2540C
TKN	5.72		1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	4.78		1	0.08	0.25	0.5	mg/L		12/10/15 12:10	SM5310B

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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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

MW 12/22/16

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4 DL1

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12DDL	SDG No.:	G4646
Lab Sample ID:	G4646-04DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	5.09	D	5	0.17	0.25	0.5	mg/L	12/07/15 15:44	12/09/15 12:32	SM4500-NH3
Chloride	197 ~~233~~	OR	20	~~8.5~~	~~0.375~~	~~0.375~~ 1.5 ~~0.75~~ 3	mg/L		12/04/15 18:16	300
Sulfate	204 J	D	5	0.66	1.875	3.75	mg/L		12/04/15 18:16	300

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

11/22/15

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4DL2

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12DDL2	SDG No.:	G4646
Lab Sample ID:	G4646-04DL2	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	197	D	20	1.5	1.5	3	mg/L		12/04/15 18:46	300

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

MW 12/22/16

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5

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 14:15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12I	SDG No.:	G4646
Lab Sample ID:	G4646-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	845		1	0.4	1	2	mg/L		12/04/15 16:40	SM2320 B
Ammonia as N 78.4	~~53.9~~	~~OR~~ 50 ~~1~~		~~0.034~~ 1.7	~~0.05~~ 2.5	~~0.1~~ 5	mg/L	12/07/15 15:44	12/09/11:53	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/04/15 14:30	300
Chloride 146	~~189~~	~~OR~~ 20 ~~1~~		~~0.075~~ 1.5	~~0.075~~ 1.5	~~0.15~~ 3	mg/L		12/04/15 14:30	300
Nitrate	0.113	U	1	0.027	0.057	0.113	mg/L		12/04/15 14:30	300
Sulfate	62.1 J		1	0.132	0.375	0.75	mg/L		12/04/15 14:30	300
BOD5	16.2		1	2	2	2	mg/L		12/04/15 12:30	SM5210 B
COD	52.5		1	2.43	2.5	5	mg/L		12/11/15 15:57	SM5220 D
Color	10		1	5	5	5	cu		12/04/15 11:51	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/04/15 15:40	12/08/15 14:32	ISM01.3_CN
Phenolics	0.013	J	1	0.01	0.025	0.05	mg/L	12/04/15 16:02	12/10/15 17:11	9065
TDS	1027		1	0.031	5	10	mg/L		12/07/15 16:32	SM2540C
TKN 99.4	~~42.1~~	~~OR~~ 10 ~~1~~		~~0.096~~ 0.96	~~0.25~~ 2.5	~~0.5~~ 5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	19.9		2	0.16	0.5	1	mg/L		12/10/15 19:37	SM5310B

Comments:

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MDL = Method Detection Limit
LOD = Limit of Detection
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H = Sample Analysis Out Of Hold Time

J = Estimated Value
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N =Spiked sample recovery not within control limits

MW12216

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50L

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/03/15 14:15
Project:	Syosset Landfill 2015	Date Received:	12/04/15
Client Sample ID:	RW-12IDL	SDG No.:	G4646
Lab Sample ID:	G4646-05DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	78.4	D	50	1.7	2.5	5	mg/L	12/07/15 15:44	12/09/15 12:32	SM4500-NH3
Chloride	146	D	20	1.5	1.5	3	mg/L		12/04/15 19:16	300
TKN	99.4	D	10	0.96	2.5	5	mg/L	12/08/15 11:14	12/09/15 15:56	SM4500-N Org B or C

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
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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

MW 1/22/16

ENVIRONMENTAL
Data Services, Inc.

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

Client: Lockwood, Kessler, & Bartlett, Syosset, New York
SDG: G4682
Laboratory: ChemTech, Mountainside, New Jersey
Site: Syosset Landfill, Syosset, New York
Date: January 22, 2016

VOCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-5	G4682-01	Water
2	SY-2R	G4682-02	Water
3MS	SY-2RMS	G4682-03MS	Water
4MSD	SY-2RMSD	G4682-04MSD	Water
5	SY-2D	G4682-05	Water
6	SY-3D	G4682-06	Water
7	TRIPBLANK	G4682-07	Water

Total & Dissolved Metals			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1T	SY-5	G4682-01	Water
2T	SY-2R	G4682-02	Water
3TMS	SY-2RMS	G4682-03MS	Water
4TMSD	SY-2RMSD	G4682-04MSD	Water
5T	SY-2D	G4682-05	Water
6T	SY-3D	G4682-06	Water
8D	SY-5	G4682-08	Water
9D	SY-2R	G4682-09	Water
10DMS	SY-2RMS	G4682-10MS	Water
11DMSD	SY-2RMSD	G4682-11MSD	Water
12D	SY-2D	G4682-12	Water
13D	SY-3D	G4682- 13	Water

Wet Chemistry			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-5	G4682-01	Water
1DL*	SY-5DL	G4682-01DL	Water
2	SY-2R	G4682-02	Water
2DL*	SY-2RDL	G4682-02DL	Water
3MS	SY-2RMS	G4682-03MS	Water
4DUP	SY-2RMSD	G4682-04MSD	Water
5	SY-2D	G4682-05	Water
5DL*	SY-2DDL	G4682-05DL	Water

Wet Chemistry			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
6	SY-3D	G4682-06	Water
6DL†	SY-3DDL	G4682-06DL	Water

* - Chloride † - Ammonia, Chloride, TKN MS/DUP -All analyses except alkalinity, BOD5, Color, TDS

A Data Usability Summary Review was performed on the analytical data for eight water samples and one aqueous trip blank sample collected December 4, 2015 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Contract Laboratory Program SOW for Organics and Inorganic Analyses"* and *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"* and the *"Standard Methods for the Examination of Water and Wastewater"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW846 8260C
Metals/Mercury	USEPA CLP Method ISM01.3
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
Cyanide	USEPA CLP Method ISM01.3_CN
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 Data Review, and the site QAPP as follows:

- The USEPA "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008;
- The USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010;
- and the reviewer's professional judgment.

Organics

- Holding times and sample preservation
- Gas Chromatography/Mass Spectroscopy (GC/MS) Tuning
- Initial and continuing calibration summaries
- Method blank and field blank contamination
- Surrogate Spike recoveries

- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Internal standard area and retention time summary forms
- Compound Quantitation
- Tentatively Identified Compounds (TICs)
- Field Duplicate sample precision

Inorganics

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

Overall Usability Issues:

There were no rejections of data.

Overall the data is 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 exceedences of QC criteria.

Volatile Organics 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 following table presents compounds that exceeded 25 percent deviation (%D) and/or RRF values <0.05 in the continuing calibration (CCAL). A low RRF indicates poor instrument sensitivity for these compounds. Positive results for these compounds in the affected samples are considered estimated and qualified (J). Non-detect results for these compounds in the affected samples are rejected (R) and are unusable for project objectives. A high %D may indicate a potential high or low bias. All results for these compounds in affected samples are considered estimated and qualified (J/UJ).

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
12/08/15	Bromomethane	32.8%	J/UJ	1, 2, 5, 6

Method Blank

- The method blanks were free of contamination.

Field Blank

- The field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
TRIPBLANK	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

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

- The MS/MSD sample exhibited acceptable %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 detected.

Field Duplicate Sample Precision

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

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

Total & Dissolved Metals & Hardness

Holding Times

- All samples were prepared and analyzed within 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).

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
PB87165BL	Arsenic	2.6	U	1, 6, 13

Field Blank

- The field blanks are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELDBLANK (SDG G4699)	Thallium	2.9	U	6, 8, 13
	Zinc	30.7	U	1, 5, 6, 8, 9

ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Matrix Spike/Duplicate (MS/DUP) Recoveries

- The following table presents MS/DUP samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/DUP Sample ID	Compound	MS %R/RPD	Qualifier	Affected Samples
9	Arsenic	127%/OK	None	All Associated ND

ICP Serial Dilution

- ICP serial dilution percent differences (%D) were within acceptance limits.

Compound Quantitation

- All criteria were met.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. For a high RPD >50% for water samples, results are considered estimated and qualified (J). A high %RPD may indicate a potential bias due to poor laboratory instrument precision.

Metals & Hardness				
Compound	SY-5 ug/L	SY-2D ug/L	RPD	Qualifier
Aluminum	54.4	31.1	55%	None - <5X LOQ
Barium	73.4	72	2%	None
Calcium	19500	19100	2%	
Total Hardness	70.7	69.7	1%	
Iron	58	68.8	17%	
Lead	10U	2.8	NC	
Magnesium	5350	5340	0%	

Metals & Hardness				
Compound	SY-5 ug/L	SY-2D ug/L	RPD	Qualifier
Manganese	1220	1200	2%	None
Potassium	7390	7190	3%	
Sodium	151000	148000	2%	

Metals & Hardness (Dissolved)				
Compound	SY-5 ug/L	SY-2D ug/L	RPD	Qualifier
Barium	73.1	73.7	1%	None
Calcium	19200	19600	2%	
Iron	33.1	28.1	16%	
Lead	10U	3.4	NC	
Magnesium	5370	5420	1%	
Manganese	1200	1200	0%	
Potassium	7370	7430	1%	
Sodium	150000	151000	1%	

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

Holding Times

- All samples were analyzed within the recommended holding times 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 results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
FIELDBLANK (SDG G4699)	Alkalinity	0.4	None	None for Wet Chemistry parameters
	Chloride	0.138	None	
	Phenolics	0.016	None	
	TDS	5	None	
	TOC	0.261	None	

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

- The following table presents MS/MSD samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/MSD Sample ID	Compound	MS %R/ MSD %R/RPD	Qualifier	Affected Samples
2	Chloride	-1840%/-1826%/OK	None	4X Rule Applies
	Sulfate	74%/OK/OK	J/UJ	All Samples

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Compound Quantitation

- EDS sample ID #s 1, 2, 5, and 6 exhibited high concentrations of ammonia as N, chloride, and/or TKN and were flagged (OR) for over the calibration range by the laboratory. The samples were diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. For a high RPD >50% for water samples, results are considered estimated and qualified (J). A high %RPD may indicate a potential bias due to poor laboratory instrument precision.

Wet Chemistry				
Compound	SY-5 mg/L	SY-2D mg/L	RPD	Qualifier
Alkalinity	32.2	31.1	3%	None
Ammonia as N	0.182	0.224	21%	
Chloride	256	252	2%	
Nitrate	0.839	0.901	7%	
Sulfate	10.4	11.1	7%	
COD	4	4	0%	
Color	0	5	200%	None for Color
Phenolics	0.05U	0.012	NC	None
TDS	495	503	2%	None
TKN	0.949	0.429	75%	None - <5X RL
TOC	0.955	1.05	9%	None

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 1/26/16

Nancy Weaver
Senior Chemist

Data Qualifiers

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.

UJ = The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).

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.

R = The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5	SDG No.:	G4682
Lab Sample ID:	G4682-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029405.D	1		12/08/15 16:30	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5	SDG No.:	G4682
Lab Sample ID:	G4682-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029405.D	1		12/08/15 16:30	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.7		61 - 141		101%	SPK: 50
1868-53-7	Dibromofluoromethane	45.2		69 - 133		90%	SPK: 50
2037-26-5	Toluene-d8	45.6		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.9		58 - 135		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	710953	7.75				
540-36-3	1,4-Difluorobenzene	1166620	8.68				
3114-55-4	Chlorobenzene-d5	1009390	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	414566	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2R	SDG No.:	G4682
Lab Sample ID:	G4682-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029406.D	1		12/08/15 16:57	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2R	SDG No.:	G4682
Lab Sample ID:	G4682-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029406.D	1		12/08/15 16:57	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.4		61 - 141		101%	SPK: 50
1868-53-7	Dibromofluoromethane	45.3		69 - 133		91%	SPK: 50
2037-26-5	Toluene-d8	45.7		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.7		58 - 135		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	694987	7.75				
540-36-3	1,4-Difluorobenzene	1119940	8.68				
3114-55-4	Chlorobenzene-d5	972660	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	394454	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2D	SDG No.:	G4682
Lab Sample ID:	G4682-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029407.D	1		12/08/15 17:25	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2D	SDG No.:	G4682
Lab Sample ID:	G4682-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029407.D	1		12/08/15 17:25	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.3		61 - 141		101%	SPK: 50
1868-53-7	Dibromofluoromethane	45.5		69 - 133		91%	SPK: 50
2037-26-5	Toluene-d8	45.1		65 - 126		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.5		58 - 135		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	708095	7.75				
540-36-3	1,4-Difluorobenzene	1168020	8.68				
3114-55-4	Chlorobenzene-d5	1021740	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	402340	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3D	SDG No.:	G4682
Lab Sample ID:	G4682-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029408.D	1		12/08/15 17:52	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	UJ ~~U~~	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1.3		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3D	SDG No.:	G4682
Lab Sample ID:	G4682-06	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029408.D	1		12/08/15 17:52	VN120815

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.28	J	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.2		61 - 141		100%	SPK: 50
1868-53-7	Dibromofluoromethane	45.3		69 - 133		91%	SPK: 50
2037-26-5	Toluene-d8	45.6		65 - 126		91%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.3		58 - 135		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	664463	7.75				
540-36-3	1,4-Difluorobenzene	1079920	8.68				
3114-55-4	Chlorobenzene-d5	945717	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	374857	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4682
Lab Sample ID:	G4682-07	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029515.D	1		12/11/15 12:16	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4682
Lab Sample ID:	G4682-07	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029515.D	1		12/11/15 12:16	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	54.5		61 - 141		109%	SPK: 50
1868-53-7	Dibromofluoromethane	56.5		69 - 133		113%	SPK: 50
2037-26-5	Toluene-d8	59.1		65 - 126		118%	SPK: 50
460-00-4	4-Bromofluorobenzene	60.8		58 - 135		122%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	720862	7.75				
540-36-3	1,4-Difluorobenzene	1311540	8.68				
3114-55-4	Chlorobenzene-d5	1197180	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	476748	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5	SDG No.:	G4682
Lab Sample ID:	G4682-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	54.4	J	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-38-2	Arsenic	10 ~~3.6~~	U ~~J~~	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-39-3	Barium	73.4	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-70-2	Calcium	19500		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
Hardness	Hardness, Total	70.7		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7439-89-6	Iron	58	J	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7439-95-4	Magnesium	5350		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7439-96-5	Manganese	1220		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:01:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-09-7	Potassium	7390		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-23-5	Sodium	151000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 15:54:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

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

MW 11/22/16

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

2T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2R	SDG No.:	G4682
Lab Sample ID:	G4682-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	416		1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-39-3	Barium	181	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-41-7	Beryllium	9.2		1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-70-2	Calcium	35900		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-47-3	Chromium	3.3	J	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-48-4	Cobalt	55.5		1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
Hardness	Hardness, Total	128		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7439-89-6	Iron	141		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7439-95-4	Magnesium	9250		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7439-96-5	Manganese	100		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:03:(	ISM01.3_HG
7440-02-0	Nickel	127		1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-09-7	Potassium	4200	J	1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-23-5	Sodium	224000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3
7440-66-6	Zinc	198	u	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 15:58:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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OR = Over Range
N =Spiked sample recovery not within control limits

MW 12/22/15

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5T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2D	SDG No.:	G4682
Lab Sample ID:	G4682-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	31.1	J	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-39-3	Barium	72	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-70-2	Calcium	19100		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
Hardness	Hardness, Total	69.7		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7439-89-6	Iron	68.8	J	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7439-92-1	Lead	2.8	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7439-95-4	Magnesium	5340		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7439-96-5	Manganese	1200		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:09:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-09-7	Potassium	7190		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-23-5	Sodium	148000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~22.7~~ U	✓	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:10:(	EPA ISM01.3

Color Before:	Brown	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
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B = Analyte Found in Associated Method Blank
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OR = Over Range
N =Spiked sample recovery not within control limits

MW 11/22/16

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6T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3D	SDG No.:	G4682
Lab Sample ID:	G4682-06	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-38-2	Arsenic	22.5 u	✗	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-39-3	Barium	169	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-43-9	Cadmium	0.85	J	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-70-2	Calcium	49200		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-48-4	Cobalt	12	J	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
Hardness	Hardness, Total	190		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7439-89-6	Iron	20500		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7439-95-4	Magnesium	16200		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7439-96-5	Manganese	842		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:11:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-09-7	Potassium	26800		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-23-5	Sodium	379000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-28-0	Thallium 25	~~2.1~~ u	✗	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3
7440-66-6	Zinc 60	~~25.6~~ u	✗	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:14:(	EPA ISM01.3

Color Before:	Brown	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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OR = Over Range
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MW 12/22/16

8D

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

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5	SDG No.:	G4682
Lab Sample ID:	G4682-08	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-39-3	Barium	73.1	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-70-2	Calcium	19200		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7439-89-6	Iron	33.1	J	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7439-95-4	Magnesium	5370		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7439-96-5	Manganese	1200		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:13:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-09-7	Potassium	7370		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-23-5	Sodium	150000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~2.2~~ U	~~J~~	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~8.3~~ U	~~J~~	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:18:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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NW 1/22/16

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9D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2R	SDG No.:	G4682
Lab Sample ID:	G4682-09	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	353		1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-38-2	Arsenic	10	U*	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-39-3	Barium	172	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-41-7	Beryllium	8.4		1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-70-2	Calcium	34600		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-47-3	Chromium	1.7	J	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-48-4	Cobalt	52.3		1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7439-95-4	Magnesium	8760		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7439-96-5	Manganese	90		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:15:(	ISM01.3_HG
7440-02-0	Nickel	120		1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-09-7	Potassium	4110	J	1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7782-49-2	Selenium	4.5	J	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-23-5	Sodium	221000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3
7440-66-6	Zinc	222 u		1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:22:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

U = Not Detected
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N =Spiked sample recovery not within control limits

MW 1/22/16

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12D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2D	SDG No.:	G4682
Lab Sample ID:	G4682-12	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-38-2	Arsenic	10	U*	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-39-3	Barium	73.7	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-70-2	Calcium	19600		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7439-89-6	Iron	28.1	J	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7439-92-1	Lead	3.4	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7439-95-4	Magnesium	5420		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7439-96-5	Manganese	1200		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:22:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-09-7	Potassium	7430		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-23-5	Sodium	151000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:14:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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N =Spiked sample recovery not within control limits

NW 12/22/15

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13D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3D	SDG No.:	G4682
Lab Sample ID:	G4682-13	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-38-2	Arsenic	25.5 U	J	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-39-3	Barium	168	J	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-43-9	Cadmium	0.8	J	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-70-2	Calcium	49300		1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-48-4	Cobalt	12	J	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7439-89-6	Iron	20300		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7439-92-1	Lead	3.4	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7439-95-4	Magnesium	16300		1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7439-96-5	Manganese	841		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/14/15 11:16	12/14/15 17:24:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-09-7	Potassium	26700		1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-23-5	Sodium	378000		1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~3.1~~ U	J	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:39:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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MW 12/22/15

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1

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 09:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5	SDG No.:	G4682
Lab Sample ID:	G4682-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	32.2		1	0.4	1	2	mg/L		12/11/15 12:25	SM2320 B
Ammonia as N	0.182		1	0.034	0.05	0.1	mg/L	12/09/15 10:14	12/09/15 13:12	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/05/15 16:00	300
Chloride	256 ~~343~~	~~OR~~	100 ~~17.5~~	~~0.075~~	0 ~~.075~~ 7.5	~~0.15~~ 15	mg/L		12/05/15 16:00	300
Nitrate	0.839		1	0.027	0.057	0.113	mg/L		12/05/15 16:00	300
Sulfate	10.4 J		1	0.132	0.375	0.75	mg/L		12/05/15 16:00	300
BOD5	2	U	1	2	2	2	mg/L		12/05/15 13:30	SM5210 B
COD	4	J	1	2.43	2.5	5	mg/L		12/11/15 15:57	SM5220 D
Color	0		1	5	5	5	cu		12/05/15 13:19	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 12:55	ISM01.3_CN
Phenolics	0.05	U	1	0.01	0.025	0.05	mg/L	12/09/15 10:15	12/10/15 17:11	9065
TDS	495		1	0.031	5	10	mg/L		12/08/15 16:35	SM2540C
TKN	0.949		1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 14:59	SM4500-N Org B or C
TOC	0.955		1	0.08	0.25	0.5	mg/L		12/10/15 15:49	SM5310B

Comments:

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MW 12/22/16

1DL

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 09:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-5DL	SDG No.:	G4682
Lab Sample ID:	G4682-01DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	256	D	100	7.5	7.5	15	mg/L		12/05/15 20:30	300

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
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H = Sample Analysis Out Of Hold Time

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2

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 10:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2R	SDG No.:	G4682
Lab Sample ID:	G4682-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	10.2		1	0.4	1	2	mg/L		12/11/15 12:29	SM2320 B
Ammonia as N	0.093	J	1	0.034	0.05	0.1	mg/L	12/09/15 10:14	12/09/15 13:12	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/05/15 16:30	300
Chloride	~~554~~ 399	~~OR~~	~~1~~ 50	~~0.075~~ 3.75	~~0.075~~ 3.75	~~0.15~~ 7.5	mg/L		12/05/15 16:30	300
Nitrate	1.12		1	0.027	0.057	0.113	mg/L		12/05/15 16:30	300
Sulfate	26.8 J		1	0.132	0.375	0.75	mg/L		12/05/15 16:30	300
BOD5	2	U	1	2	2	2	mg/L		12/05/15 13:30	SM5210 B
COD	4.97	J	1	2.43	2.5	5	mg/L		12/11/15 15:57	SM5220 D
Color	0		1	5	5	5	cu		12/05/15 13:29	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 12:55	ISM01.3_CN
Phenolics	0.013	J	1	0.01	0.025	0.05	mg/L	12/09/15 10:15	12/10/15 17:21	9065
TDS	773		1	0.031	5	10	mg/L		12/08/15 16:35	SM2540C
TKN	0.355	J	1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 15:10	SM4500-N Org B or C
TOC	1.53		1	0.08	0.25	0.5	mg/L		12/10/15 13:23	SM5310B

Comments:

U = Not Detected
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MW 12/22/15

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2DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 10:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2RDL	SDG No.:	G4682
Lab Sample ID:	G4682-02DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	399	D	50	3.75	3.75	7.5	mg/L		12/05/15 21:00	300

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
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N =Spiked sample recovery not within control limits

NW 1/22/16

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5

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 11:45
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2D	SDG No.:	G4682
Lab Sample ID:	G4682-05	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	31.1		1	0.4	1	2	mg/L		12/11/15 12:32	SM2320 B
Ammonia as N	0.224		1	0.034	0.05	0.1	mg/L	12/09/15 10:14	12/09/15 13:13	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/05/15 18:30	300
Chloride	252 ~~354~~	~~OR~~	50 ~~1~~ 3.75	~~0.075~~	~~0.075~~ 3.75	~~0.15~~ 7.5	mg/L		12/05/15 18:30	300
Nitrate	0.901		1	0.027	0.057	0.113	mg/L		12/05/15 18:30	300
Sulfate	11.1 J		1	0.132	0.375	0.75	mg/L		12/05/15 18:30	300
BOD5	2	U	1	2	2	2	mg/L		12/05/15 13:30	SM5210 B
COD	4	J	1	2.43	2.5	5	mg/L		12/11/15 15:59	SM5220 D
Color	5		1	5	5	5	cu		12/05/15 13:33	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 12:55	ISM01.3_CN
Phenolics	0.012	J	1	0.01	0.025	0.05	mg/L	12/09/15 10:15	12/10/15 17:21	9065
TDS	503		1	0.031	5	10	mg/L		12/08/15 16:35	SM2540C
TKN	0.429	J	1	0.096	0.25	0.5	mg/L	12/08/15 11:14	12/09/15 15:10	SM4500-N Org B or C
TOC	1.05		1	0.08	0.25	0.5	mg/L		12/10/15 17:58	SM5310B

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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5DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 11:45
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-2DDL	SDG No.:	G4682
Lab Sample ID:	G4682-05DL	Matrix:	WATER
		% Solid:	0

Use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Chloride	252	D	50	3.75	3.75	7.5	mg/L		12/05/15 21:30	300

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

mw 12/22/16

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6

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3D	SDG No.:	G4682
Lab Sample ID:	G4682-06	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	244		1	0.4	1	2	mg/L		12/11/15 12:35	SM2320 B
Ammonia as N	~~14.7~~ 12.5	~~OR~~	~~10~~ 1	~~0.034~~ 0.34	~~0.05~~ 0.5	~~0.1~~ 1	mg/L	12/09/15 10:14	12/09/15 17:47	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/05/15 19:00	300
Chloride	~~787~~ 524	~~OR~~	~~100~~ 1	~~0.075~~ 75	~~0.075~~ 7.5	~~0.15~~ 15	mg/L		12/05/15 19:00	300
Nitrate	0.113	U	1	0.027	0.057	0.113	mg/L		12/05/15 19:00	300
Sulfate	45.9 J		1	0.132	0.375	0.75	mg/L		12/05/15 19:00	300
BOD5	10.5		1	2	2	2	mg/L		12/05/15 13:30	SM5210 B
COD	18.5		1	2.43	2.5	5	mg/L		12/11/15 16:00	SM5220 D
Color	400		10	50	50	50	cu		12/05/15 13:37	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 13:00	ISM01.3_CN
Phenolics	0.012	J	1	0.01	0.025	0.05	mg/L	12/09/15 10:14	12/10/15 17:21	9065
TDS	1236		1	0.031	5	10	mg/L		12/08/15 16:35	SM2540C
TKN	~~14.8~~ 16.6	~~OR~~	~~2~~ 1	~~0.096~~ 0.192	~~0.25~~ 0.5	~~0.5~~ 1	mg/L	12/08/15 10:14	12/09/15 15:10	SM4500-N Org B or C
TOC	5.04		1	0.08	0.25	0.5	mg/L		12/10/15 19:17	SM5310B

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
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OR = Over Range
N =Spiked sample recovery not within control limits

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6DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/04/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/05/15
Client Sample ID:	SY-3DDL	SDG No.:	G4682
Lab Sample ID:	G4682-06DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ/CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	12.5	D	10	0.34	0.5	1	mg/L	12/09/15 08:00	12/09/15 17:47	SM4500-NH3
Chloride	524	D	100	7.5	7.5	15	mg/L		12/05/15 22:00	300
TKN	16.6	D	2	0.192	0.5	1	mg/L	12/08/15 11:14	12/09/15 15:56	SM4500-N Org B or C

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

ENVIRONMENTAL
Data Services, Inc.

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

Client: Lockwood, Kessler, & Bartlett, Syosset, New York
SDG: G4699
Laboratory: ChemTech, Mountainside, New Jersey
Site: Syosset Landfill, Syosset, New York
Date: January 23, 2016

VOCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-3DD	G4699-01	Water
2	SY-3	G4699-02	Water
3	SY-6	G4699-03	Water
4	FIELDBLANK	G4699-04	Water
5	TRIPBLANK	G4699-05	Water

Total & Dissolved Metals			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1T	SY-3DD	G4699-01	Water
1TMS*	SY-3DDMS	G4699-01MS	Water
2T	SY-3	G4699-02	Water
3T	SY-6	G4699-03	Water
4T	FIELDBLANK	G4699-04	Water
6D	SY-3DD	G4699-06	Water
7D	SY-3	G4699-07	Water
8D	SY-6	G4699-08	Water

** - Mercury Only*

Wet Chemistry			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	SY-3DD	G4699-01	Water
1MSβ	SY-3DDMS	G4699-01MS	Water
2	SY-3	G4699-02	Water
2DL*	SY-3DL	G4699-02DL	Water
3	SY-6	G4699-03	Water
3DL†	SY-6DL	G4699-03DL	Water
4	FIELDBLANK	G4699-04	Water

* - Ammonia, Chloride, TKN † - Sulfate β – Ammonia, TKN, Phenolics

A Data Usability Summary Review was performed on the analytical data for six water samples, one aqueous trip blank sample, and one aqueous field blank sample collected December 7, 2015 by Lockwood, Kessler & Bartlett at the Syosset Landfill in Syosset, New York. The samples were analyzed under Environmental Protection Agency (USEPA) *"Contract Laboratory Program SOW for*

Organics and Inorganic Analyses" and *"Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions"* and the *"Standard Methods for the Examination of Water and Wastewater"*.

Specific method references are as follows:

Analysis	*Method References*
VOCs	USEPA SW846 8260C
Metals/Mercury	USEPA CLP Method ISM01.3
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
Cyanide	USEPA CLP Method ISM01.3_CN
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 Data Review, and the site QAPP as follows:

- The USEPA "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008;
- The USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010;
- and the reviewer's professional judgment.

Organics

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

Inorganics

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

Overall Usability Issues:

There were no rejections of data.

Overall the data is 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 exceedences of QC criteria.

Volatile Organics 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 field QC samples are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELDBLANK	Chloromethane	1.2	None	All ND
	Acetone	3.8	None	
TRIPBLANK	None - ND	-	-	-

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate recoveries.

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

- A MS/MSD sample was not collected.

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 detected.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Total & Dissolved Metals & Hardness

Holding Times

- All samples were prepared and analyzed within 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).

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
PB87190BL	Mercury	0.066	U	2, 7
PB87165BL	Arsenic	2.6	U	6

Field Blank

- The field blanks are summarized below.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FIELDBLANK	Thallium	2.9	U	1, 6
	Zinc	30.7	U	1, 2

ICP Interference Check Sample

- The ICP ICS exhibited acceptable recoveries.

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Matrix Spike/Duplicate (MS/DUP) Recoveries

- The following table presents MS/DUP samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS/DUP Sample ID	Compound	MS %R/RPD	Qualifier	Affected Samples
REFERENCE	Arsenic	127%/OK	J	2, 7

ICP Serial Dilution

- ICP serial dilution percent differences (%D) were within acceptance limits.

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, Cyanide, Phenolics, TDS, TKN, TOC

Holding Times

- All samples were prepared and analyzed within the recommended time for each analysis with the exception of the following. Positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ).

Sample ID	Compound	Holding Time Exceedance	Qualifier
1	Nitrate	Yes	J/UJ
	BOD5	Yes	
	Color	Yes	
2, 3, 4	Nitrate	Yes	J/UJ
	BOD5	Yes	

Initial and Continuing Calibration

- All %R criteria were met.

Method Blank

- The method blanks were free of contamination.

Field Blank

- Field QC results are summarized below.

Blank ID	Compound	Conc. mg/L	Qualifier	Affected Samples
FIELDBLANK	Alkalinity	0.4	None	None for Wet Chemistry parameters
	Chloride	0.138	None	
	Phenolics	0.016	None	
	TDS	5	None	
	TOC	0.261	None	

Matrix Spike/Duplicate (MS/DUP) Recoveries

- The following table presents MS/DUP samples that exhibited percent recoveries (%R) outside the QC limits and/or relative percent differences (RPD) above QC limits. A low %R may indicate a potential low bias while a high %R may indicate a potential high bias. For a low %R, positive results are considered estimated and qualified (J) while non-detects are estimated and qualified (UJ). For a high %R, positive results are considered estimated and qualified (J).

MS Sample ID	Compound	MS %R/RPD	Qualifier	Affected Samples
REFERENCE	Chloride	16%/OK	J/UJ	All Samples
	Phenolics	OK/56	J/UJ	

Laboratory Control Samples

- The LCS sample exhibited acceptable recoveries.

Compound Quantitation

- EDS sample ID #2 exhibited high concentrations of ammonia as N, chloride, and/or TKN and was flagged (OR) for over the calibration range by the laboratory. The sample was diluted and reanalyzed and the dilution results for these compounds should be used for reporting purposes.
- EDS Sample ID #3 exhibited high concentrations of sulfate and was flagged (OR) for over the calibration range by the laboratory. The sample was diluted 2X and reanalyzed and the dilution results for sulfate should be used for reporting purposes.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 1/26/16

Nancy Weaver
Senior Chemist

Data Qualifiers

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.

UJ = The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).

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.

R = The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DD	SDG No.:	G4699
Lab Sample ID:	G4699-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029568.D	1		12/12/15 15:00	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	1.3		0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.37	J	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DD	SDG No.:	G4699
Lab Sample ID:	G4699-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029568.D	1		12/12/15 15:00	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.36	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.3		61 - 141		91%	SPK: 50
1868-53-7	Dibromofluoromethane	49.1		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	49.1		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.7		58 - 135		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	735078	7.75				
540-36-3	1,4-Difluorobenzene	1273010	8.68				
3114-55-4	Chlorobenzene-d5	1070430	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	360154	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3	SDG No.:	G4699
Lab Sample ID:	G4699-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029569.D	1		12/12/15 15:28	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.39	J	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3	SDG No.:	G4699
Lab Sample ID:	G4699-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029569.D	1		12/12/15 15:28	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.32	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.1		61 - 141		92%	SPK: 50
1868-53-7	Dibromofluoromethane	48.6		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	49.1		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.6		58 - 135		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	735369	7.75				
540-36-3	1,4-Difluorobenzene	1278420	8.68				
3114-55-4	Chlorobenzene-d5	1073050	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	365318	13.47				

MW 1/23/16

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6	SDG No.:	G4699
Lab Sample ID:	G4699-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029547.D	1		12/12/15 03:52	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.5	J	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6	SDG No.:	G4699
Lab Sample ID:	G4699-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029547.D	1		12/12/15 03:52	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.4		61 - 141		93%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		69 - 133		99%	SPK: 50
2037-26-5	Toluene-d8	49.2		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.8		58 - 135		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	710682	7.75				
540-36-3	1,4-Difluorobenzene	1231250	8.68				
3114-55-4	Chlorobenzene-d5	1035930	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	353016	13.47				

MW123116

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	FIELDBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029543.D	1		12/12/15 02:02	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	1.2		0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	3.8	J	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	FIELDBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029543.D	1		12/12/15 02:02	VN121115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46		61 - 141		92%	SPK: 50
1868-53-7	Dibromofluoromethane	47.7		69 - 133		95%	SPK: 50
2037-26-5	Toluene-d8	48.9		65 - 126		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		58 - 135		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	734094	7.75				
540-36-3	1,4-Difluorobenzene	1279120	8.68				
3114-55-4	Chlorobenzene-d5	1072610	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	362545	13.47				

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029570.D	1		12/12/15 15:55	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.2	U	0.2	0.2	1	ug/L
74-87-3	Chloromethane	0.2	U	0.2	0.2	1	ug/L
75-01-4	Vinyl Chloride	0.2	U	0.2	0.2	1	ug/L
74-83-9	Bromomethane	0.2	U	0.2	0.2	1	ug/L
75-00-3	Chloroethane	0.5	U	0.2	0.5	1	ug/L
75-69-4	Trichlorofluoromethane	0.2	U	0.2	0.2	1	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.2	U	0.2	0.2	1	ug/L
75-35-4	1,1-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
67-64-1	Acetone	1	U	0.5	1	5	ug/L
75-15-0	Carbon Disulfide	0.2	U	0.2	0.2	1	ug/L
1634-04-4	Methyl tert-butyl Ether	0.5	U	0.35	0.5	1	ug/L
79-20-9	Methyl Acetate	0.5	U	0.2	0.5	1	ug/L
75-09-2	Methylene Chloride	0.2	U	0.2	0.2	1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
75-34-3	1,1-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
110-82-7	Cyclohexane	0.2	U	0.2	0.2	1	ug/L
78-93-3	2-Butanone	2.5	U	1.3	2.5	5	ug/L
56-23-5	Carbon Tetrachloride	0.2	U	0.2	0.2	1	ug/L
156-59-2	cis-1,2-Dichloroethene	0.2	U	0.2	0.2	1	ug/L
74-97-5	Bromochloromethane	0.5	U	0.2	0.5	1	ug/L
67-66-3	Chloroform	0.2	U	0.2	0.2	1	ug/L
71-55-6	1,1,1-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
108-87-2	Methylcyclohexane	0.2	U	0.2	0.2	1	ug/L
71-43-2	Benzene	0.2	U	0.2	0.2	1	ug/L
107-06-2	1,2-Dichloroethane	0.2	U	0.2	0.2	1	ug/L
79-01-6	Trichloroethene	0.2	U	0.2	0.2	1	ug/L
78-87-5	1,2-Dichloropropane	0.2	U	0.2	0.2	1	ug/L
75-27-4	Bromodichloromethane	0.2	U	0.2	0.2	1	ug/L
108-10-1	4-Methyl-2-Pentanone	1	U	1	1	5	ug/L
108-88-3	Toluene	0.2	U	0.2	0.2	1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.2	U	0.2	0.2	1	ug/L

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	TRIPBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOCMS Group1
GC Column:	RXI-624 ID : 0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN029570.D	1		12/12/15 15:55	VN121215

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
79-00-5	1,1,2-Trichloroethane	0.2	U	0.2	0.2	1	ug/L
591-78-6	2-Hexanone	2.5	U	1.9	2.5	5	ug/L
124-48-1	Dibromochloromethane	0.2	U	0.2	0.2	1	ug/L
106-93-4	1,2-Dibromoethane	0.2	U	0.2	0.2	1	ug/L
127-18-4	Tetrachloroethene	0.2	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	0.2	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.2	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.4	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.2	U	0.2	0.2	1	ug/L
100-42-5	Styrene	0.2	U	0.2	0.2	1	ug/L
75-25-2	Bromoform	0.2	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	0.2	U	0.2	0.2	1	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.2	U	0.2	0.2	1	ug/L
541-73-1	1,3-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
106-46-7	1,4-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
95-50-1	1,2-Dichlorobenzene	0.2	U	0.2	0.2	1	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.2	U	0.2	0.2	1	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
87-61-6	1,2,3-Trichlorobenzene	0.2	U	0.2	0.2	1	ug/L
123-91-1	1,4-Dioxane	100	U	100	100	100	ug/L
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.9		61 - 141		90%	SPK: 50
1868-53-7	Dibromofluoromethane	49.2		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	49.5		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	43.3		58 - 135		87%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	721212	7.75				
540-36-3	1,4-Difluorobenzene	1238440	8.68				
3114-55-4	Chlorobenzene-d5	1035680	11.52				
3855-82-1	1,4-Dichlorobenzene-d4	336564	13.47				

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IT

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DD	SDG No.:	G4699
Lab Sample ID:	G4699-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-39-3	Barium	200	U	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-70-2	Calcium	1500	J	1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-47-3	Chromium	1.3	J	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
Hardness	Hardness, Total	6.36	J	1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7439-92-1	Lead	2.3	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7439-95-4	Magnesium	634	J	1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7439-96-5	Manganese	15	U	1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:34:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-09-7	Potassium	5000	U	1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-23-5	Sodium	3420	J	1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~2.8~~ u		1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3
7440-66-6	Zinc	60 ~~33~~ u		1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 16:43:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

J = Estimated Value
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* = 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	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3	SDG No.:	G4699
Lab Sample ID:	G4699-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-38-2	Arsenic	47.5 J	✓	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-39-3	Barium	132	J	1	16	100	200	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-43-9	Cadmium	0.8	J	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-70-2	Calcium	32500		1	416	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
Hardness	Hardness, Total	139		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7439-89-6	Iron	28400		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7439-92-1	Lead	2.7	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7439-95-4	Magnesium	14000		1	378	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7439-96-5	Manganese	3690		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7439-97-6	Mercury	0.44 U		1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:43:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-09-7	Potassium	14600		1	414	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7782-49-2	Selenium	10.3	J	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-23-5	Sodium	120000		1	477	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3
7440-66-6	Zinc 60	~~36.8~~ U	✓	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/22/15 17:42:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
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J = Estimated Value
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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6	SDG No.:	G4699
Lab Sample ID:	G4699-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	23.3	J	1	19.9	100	200	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-39-3	Barium	109	J	1	16	100	200	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-70-2	Calcium	37800		1	416	2500	5000	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-47-3	Chromium	1.3	J	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-50-8	Copper	131		1	3.4	12.5	25	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
Hardness	Hardness, Total	135		1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7439-89-6	Iron	537		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7439-95-4	Magnesium	9800		1	378	2500	5000	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7439-96-5	Manganese	61.3		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:45:(	ISM01.3_HG
7440-02-0	Nickel	9.7	J	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-09-7	Potassium	5000	U	1	414	2500	5000	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-23-5	Sodium	8280		1	477	2500	5000	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3
7440-66-6	Zinc	3210		1	8.3	30.0	60	ug/L	12/09/15 09:30	12/22/15 18:03:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

U = Not Detected
LOQ = Limit of Quantitation
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J = Estimated Value
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OR = Over Range
N =Spiked sample recovery not within control limits

NW 11/23/16

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4T

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	FIELDBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-39-3	Barium	200	U	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-70-2	Calcium	5000	U	1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
Hardness	Hardness, Total	33.1	U	1	2.6	16.5	33.1	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7439-95-4	Magnesium	5000	U	1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7439-96-5	Manganese	15	U	1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:47:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-09-7	Potassium	5000	U	1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-23-5	Sodium	5000	U	1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-28-0	Thallium	2.9	J	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3
7440-66-6	Zinc	30.7	J	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:10:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS TAL+CN				

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

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

MW 1/23/16

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6D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DD	SDG No.:	G4699
Lab Sample ID:	G4699-06	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-38-2	Arsenic	10 ~~3.4~~ U	~~U~~	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-39-3	Barium	200	U	1	16	100	200	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-70-2	Calcium	1530	J	1	416	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7439-89-6	Iron	100	U	1	17.7	50.0	100	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7439-92-1	Lead	2.9	J	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7439-95-4	Magnesium	620	J	1	378	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7439-96-5	Manganese	15	U	1	1.4	7.5	15	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:50:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-09-7	Potassium	5000	U	1	414	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-23-5	Sodium	3480	J	1	477	2500	5000	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-28-0	Thallium	25 ~~1.9~~ U	~~J~~	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/10/15 17:18:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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

J = Estimated Value
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* = 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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7D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3	SDG No.:	G4699
Lab Sample ID:	G4699-07	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-38-2	Arsenic	42.3 J	✓	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-39-3	Barium	133	J	1	16	100	200	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-43-9	Cadmium	0.57	J	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-70-2	Calcium	32800		1	416	2500	5000	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-50-8	Copper	25	U	1	3.4	12.5	25	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7439-89-6	Iron	26300		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7439-95-4	Magnesium	14200		1	378	2500	5000	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7439-96-5	Manganese	3640		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7439-97-6	Mercury	0.21 U		1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:52:(	ISM01.3_HG
7440-02-0	Nickel	40	U	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-09-7	Potassium	14800		1	414	2500	5000	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-23-5	Sodium	121000		1	477	2500	5000	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3
7440-66-6	Zinc	60	U	1	8.3	30.0	60	ug/L	12/09/15 09:30	12/22/15 16:58:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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

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

MW 1/23/16

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8D

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6	SDG No.:	G4699
Lab Sample ID:	G4699-08	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7429-90-5	Aluminum	200	U	1	19.9	100	200	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-36-0	Antimony	60	U	1	6.2	30.0	60	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-38-2	Arsenic	10	U	1	2.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-39-3	Barium	108	J	1	16	100	200	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-41-7	Beryllium	5	U	1	1.5	2.5	5	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-43-9	Cadmium	5	U	1	0.43	2.5	5	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-70-2	Calcium	37600		1	416	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-47-3	Chromium	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-48-4	Cobalt	50	U	1	4	25.0	50	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-50-8	Copper	123		1	3.4	12.5	25	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7439-89-6	Iron	367		1	17.7	50.0	100	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7439-92-1	Lead	10	U	1	2.3	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7439-95-4	Magnesium	9770		1	378	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7439-96-5	Manganese	57.4		1	1.4	7.5	15	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7439-97-6	Mercury	0.2	U	1	0.05	0.1	0.2	ug/L	12/10/15 10:14	12/11/15 10:54:(	ISM01.3_HG
7440-02-0	Nickel	8.9	J	1	2.9	20.0	40	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-09-7	Potassium	5000	U	1	414	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7782-49-2	Selenium	35	U	1	3.7	17.5	35	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-22-4	Silver	10	U	1	1.1	5.0	10	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-23-5	Sodium	8360		1	477	2500	5000	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-28-0	Thallium	25	U	1	1.8	12.5	25	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-62-2	Vanadium	50	U	1	5.3	25.0	50	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3
7440-66-6	Zinc	2880		1	8.3	30.0	60	ug/L	12/09/15 09:30	12/22/15 17:51:(	EPA ISM01.3

Color Before:	Colorless	Clarity Before:	Clear	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	DISSOLVED METALS-TAL				

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

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

MW 12/23/16

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Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 11:00
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DD	SDG No.:	G4699
Lab Sample ID:	G4699-01	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	4.56		1	0.4	1	2	mg/L		12/11/15 12:46	SM2320 B
Ammonia as N	0.066	J	1	0.034	0.05	0.1	mg/L	12/09/15 12:46	12/09/15 17:38	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/09/15 14:03	300
Chloride	4.5	J	1	0.075	0.075	0.15	mg/L		12/09/15 14:03	300
Nitrate	0.743	J ~~H~~	1	0.027	0.057	0.113	mg/L		12/09/15 14:03	300
Sulfate	1.83		1	0.132	0.375	0.75	mg/L		12/09/15 14:03	300
BOD5	2	UJ ~~HU~~	1	2	2	2	mg/L		12/09/15 14:10	SM5210 B
COD	5	U	1	2.43	2.5	5	mg/L		12/11/15 16:00	SM5220 D
Color	5	J ~~H~~	1	5	5	5	cu		12/09/15 11:44	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 13:00	ISM01.3_CN
Phenolics	0.05	UJ ~~U~~	1	0.01	0.025	0.05	mg/L	12/09/15 12:46	12/10/15 17:21	9065
TDS	27		1	0.031	5	10	mg/L		12/10/15 16:33	SM2540C
TKN	0.5	U	1	0.096	0.25	0.5	mg/L	12/11/15 09:31	12/14/15 15:34	SM4500-N Org B or C
TOC	0.705		1	0.08	0.25	0.5	mg/L		12/10/15 19:55	SM5310B

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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2

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 11:45
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3	SDG No.:	G4699
Lab Sample ID:	G4699-02	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	164		1	0.4	1	2	mg/L		12/11/15 12:49	SM2320 B
Ammonia as N	7.6 ~~7.81~~	~~OR~~	10 ~~1~~	~~0.034~~	~~0.05~~ 0.5	~~0.1~~ 1	mg/L	12/09/15 12:46	12/09/15 17:39	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/09/15 14:34	300
Chloride	190 ~~273~~ J	~~OR~~	20 1	~~0.075~~	0.075 1.5	~~0.15~~ 3	mg/L		12/09/15 14:34	300
Nitrate	0.113 UJ	~~HU~~	1	0.027	0.057	0.113	mg/L		12/09/15 14:34	300
Sulfate	39.1		1	0.132	0.375	0.75	mg/L		12/09/15 14:34	300
BOD5	2 UJ	~~HU~~	1	2	2	2	mg/L		12/09/15 14:10	SM5210 B
COD	11.8		1	2.43	2.5	5	mg/L		12/11/15 16:01	SM5220 D
Color	200		5	25	25	25	cu		12/09/15 11:35	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 13:00	ISM01.3_CN
Phenolics	0.018 J ~~J~~		1	0.01	0.025	0.05	mg/L	12/09/15 12:46	12/10/15 17:31	9065
TDS	545		1	0.031	5	10	mg/L		12/10/15 16:33	SM2540C
TKN	12.5 ~~11.1~~	~~OR~~	2 ~~1~~	~~0.096~~ 0.192	0.25 ~~0.5~~	~~0.5~~ 1	mg/L	12/11/15 09:31	12/14/15 15:34	SM4500-N Org B or C
TOC	3.65		1	0.08	0.25	0.5	mg/L		12/10/15 20:14	SM5310B

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

MW 1/23/16

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2DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 11:45
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-3DL	SDG No.:	G4699
Lab Sample ID:	G4699-02DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Ammonia as N	7.6	D	10	0.34	0.5	1	mg/L	12/09/15 12:46	12/09/15 17:47	SM4500-NH3
Chloride	190 J	D	20	1.5	1.5	3	mg/L		12/09/15 20:45	300
TKN	12.5	D	2	0.192	0.5	1	mg/L	12/11/15 09:31	12/14/15 16:02	SM4500-N Org B or C

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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3

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6	SDG No.:	G4699
Lab Sample ID:	G4699-03	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	69.8		1	0.4	1	2	mg/L		12/11/15 12:54	SM2320 B
Ammonia as N	0.113		1	0.034	0.05	0.1	mg/L	12/09/15 12:46	12/09/15 17:39	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/09/15 15:05	300
Chloride	5.14 J		1	0.075	0.075	0.15	mg/L		12/09/15 15:05	300
Nitrate	1.64 J ~~H~~		1	0.027	0.057	0.113	mg/L		12/09/15 15:05	300
Sulfate	72.7 ~~79.5~~	~~OR~~ 2	~~1~~	~~0.132~~	~~0.375~~ 0.75	~~0.75~~ 1.5	mg/L		12/09/15 15:05	300
BOD5	2 UJ	~~HU~~	1	2 0.264	2	2	mg/L		12/09/15 14:10	SM5210 B
COD	3.03	J	1	2.43	2.5	5	mg/L		12/11/15 16:01	SM5220 D
Color	10		1	5	5	5	cu		12/09/15 11:50	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 13:00	ISM01.3_CN
Phenolics	0.024 J ~~J~~		1	0.01	0.025	0.05	mg/L	12/09/15 12:46	12/10/15 17:31	9065
TDS	215		1	0.031	5	10	mg/L		12/10/15 16:33	SM2540C
TKN	0.177	J	1	0.096	0.25	0.5	mg/L	12/11/15 09:31	12/14/15 15:34	SM4500-N Org B or C
TOC	2.18		1	0.08	0.25	0.5	mg/L		12/10/15 20:32	SM5310B

Comments:

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OR = Over Range
N =Spiked sample recovery not within control limits

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3DL

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 13:00
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	SY-6DL	SDG No.:	G4699
Lab Sample ID:	G4699-03DL	Matrix:	WATER
		% Solid:	0

use original results

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Sulfate	72.7	D	2	0.264	0.75	1.5	mg/L		12/09/15 21:16	300

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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4

Report of Analysis

Client:	Lockwood, Kessler, & Bartlett	Date Collected:	12/07/15 14:00
Project:	Syosset Landfill 2015	Date Received:	12/09/15
Client Sample ID:	FIELDBLANK	SDG No.:	G4699
Lab Sample ID:	G4699-04	Matrix:	WATER
		% Solid:	0

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Alkalinity	0.4	J	1	0.4	1	2	mg/L		12/11/15 12:58	SM2320 B
Ammonia as N	0.1	U	1	0.034	0.05	0.1	mg/L	12/09/15 12:46	12/09/15 17:38	SM4500-NH3
Bromide	0.5	U	1	0.066	0.25	0.5	mg/L		12/09/15 15:36	300
Chloride	0.138	J ~~J~~	1	0.075	0.075	0.15	mg/L		12/09/15 15:36	300
Nitrate	0.113	UJ ~~HU~~	1	0.027	0.057	0.113	mg/L		12/09/15 15:36	300
Sulfate	0.75	U	1	0.132	0.375	0.75	mg/L		12/09/15 15:36	300
BOD5	2	UJ ~~HU~~	1	2	2	2	mg/L		12/09/15 14:10	SM5210 B
COD	5	U	1	2.43	2.5	5	mg/L		12/11/15 16:02	SM5220 D
Color	0		1	5	5	5	cu		12/09/15 11:55	SM2120 B
Cyanide	0.01	U	1	0.0018	0.005	0.01	mg/L	12/09/15 14:00	12/10/15 13:00	ISM01.3_CN
Phenolics	0.016	J ~~J~~	1	0.01	0.025	0.05	mg/L	12/09/15 12:46	12/10/15 17:31	9065
TDS	5	J	1	0.031	5	10	mg/L		12/10/15 16:33	SM2540C
TKN	0.5	U	1	0.096	0.25	0.5	mg/L	12/11/15 09:31	12/14/15 15:40	SM4500-N Org B or C
TOC	0.261	J	1	0.08	0.25	0.5	mg/L		12/10/15 23:04	SM5310B

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

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B = Analyte Found in Associated Method Blank
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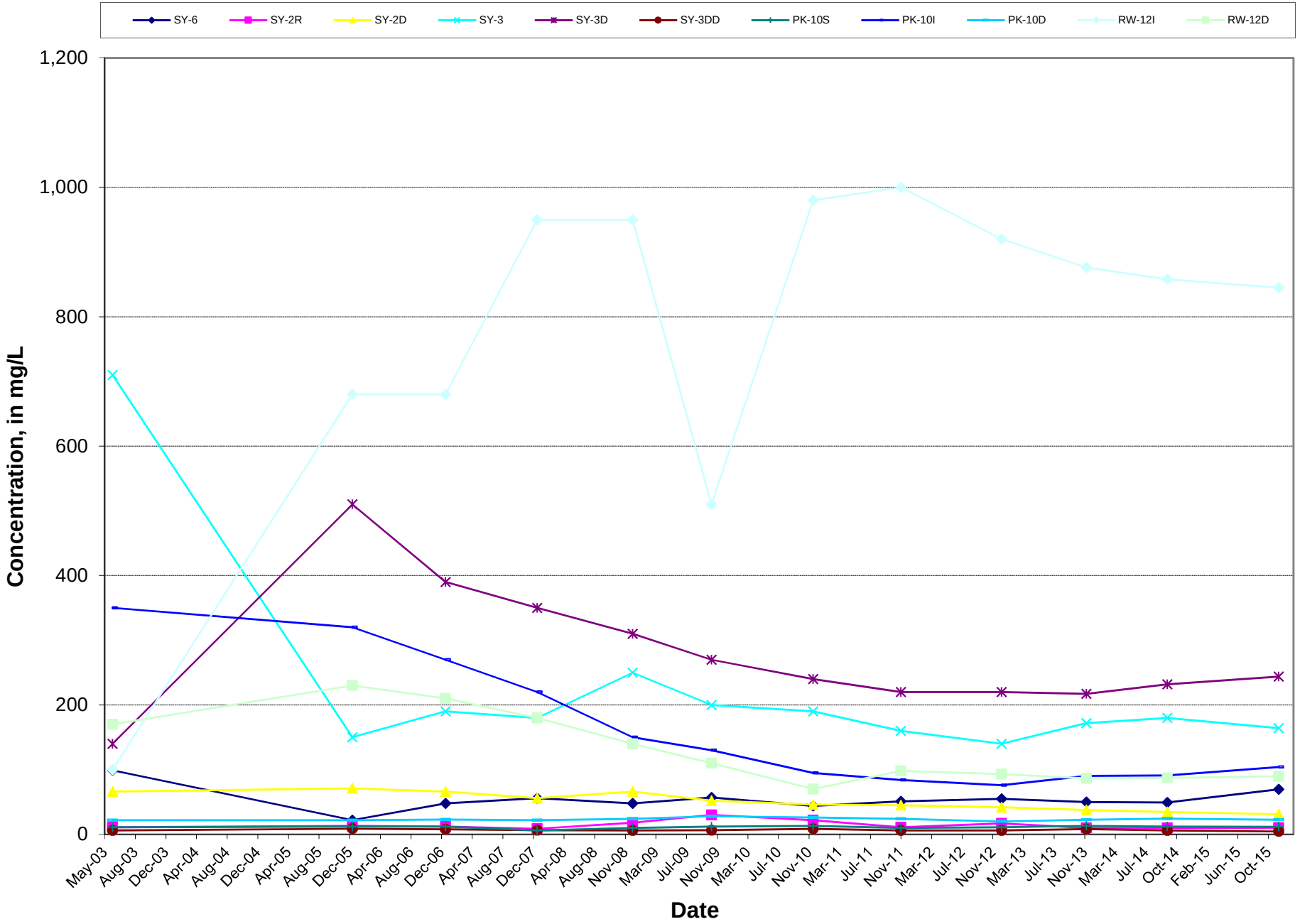
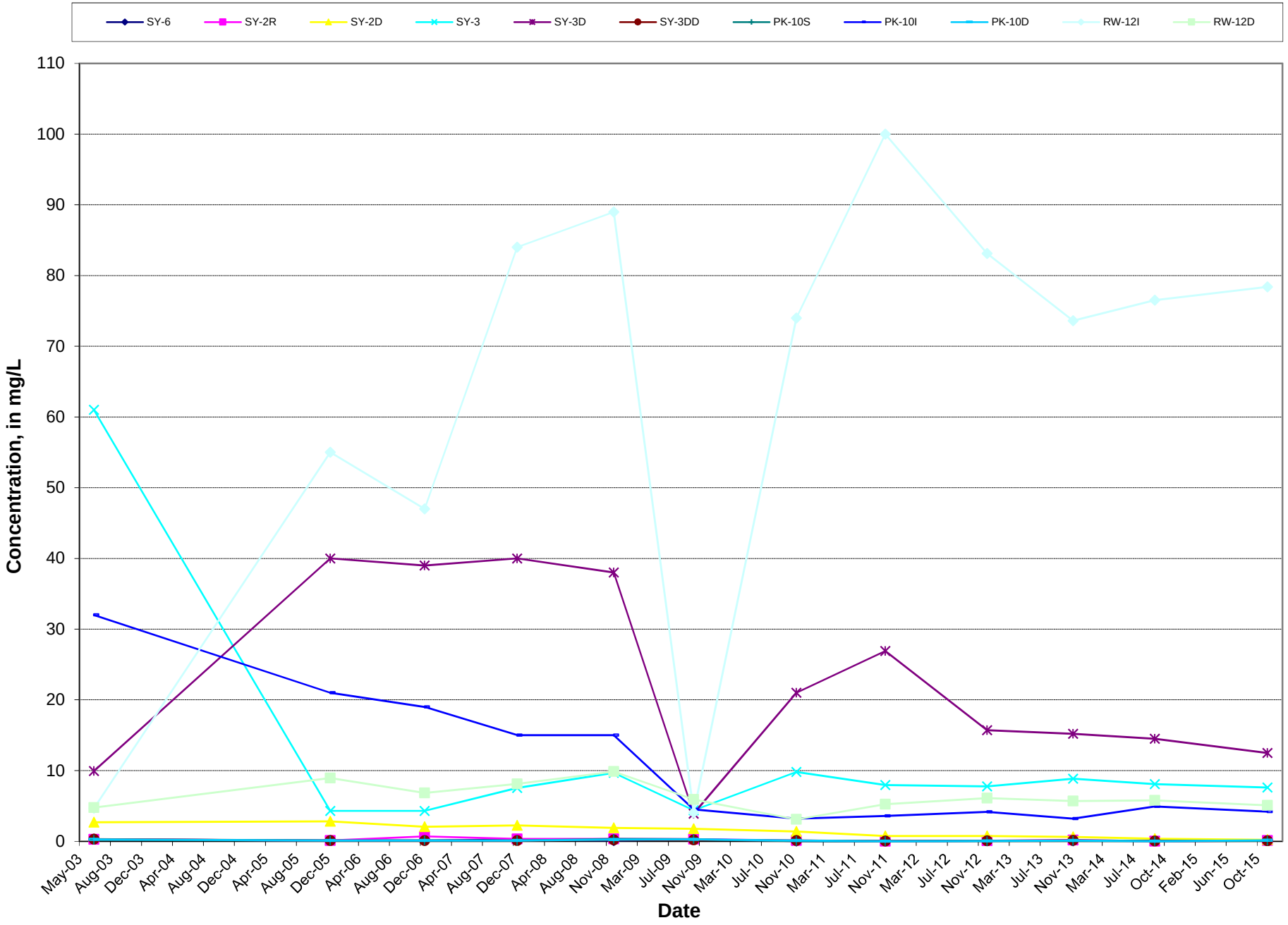
APPENDIX C

Trend Analysis Charts

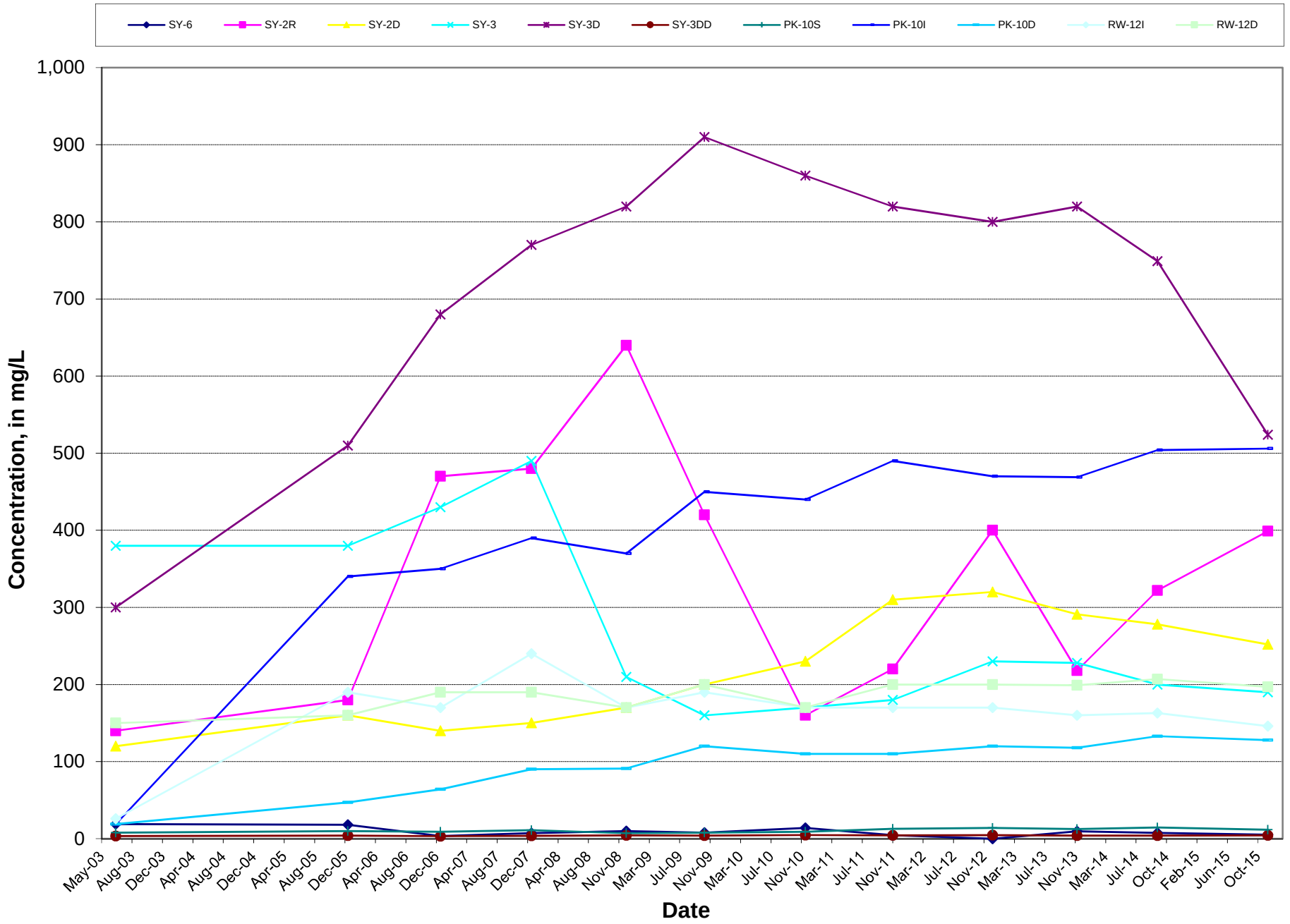
Post-Closure Alkalinity Concentrations in Syosset Landfill Ground Water-Monitoring Wells

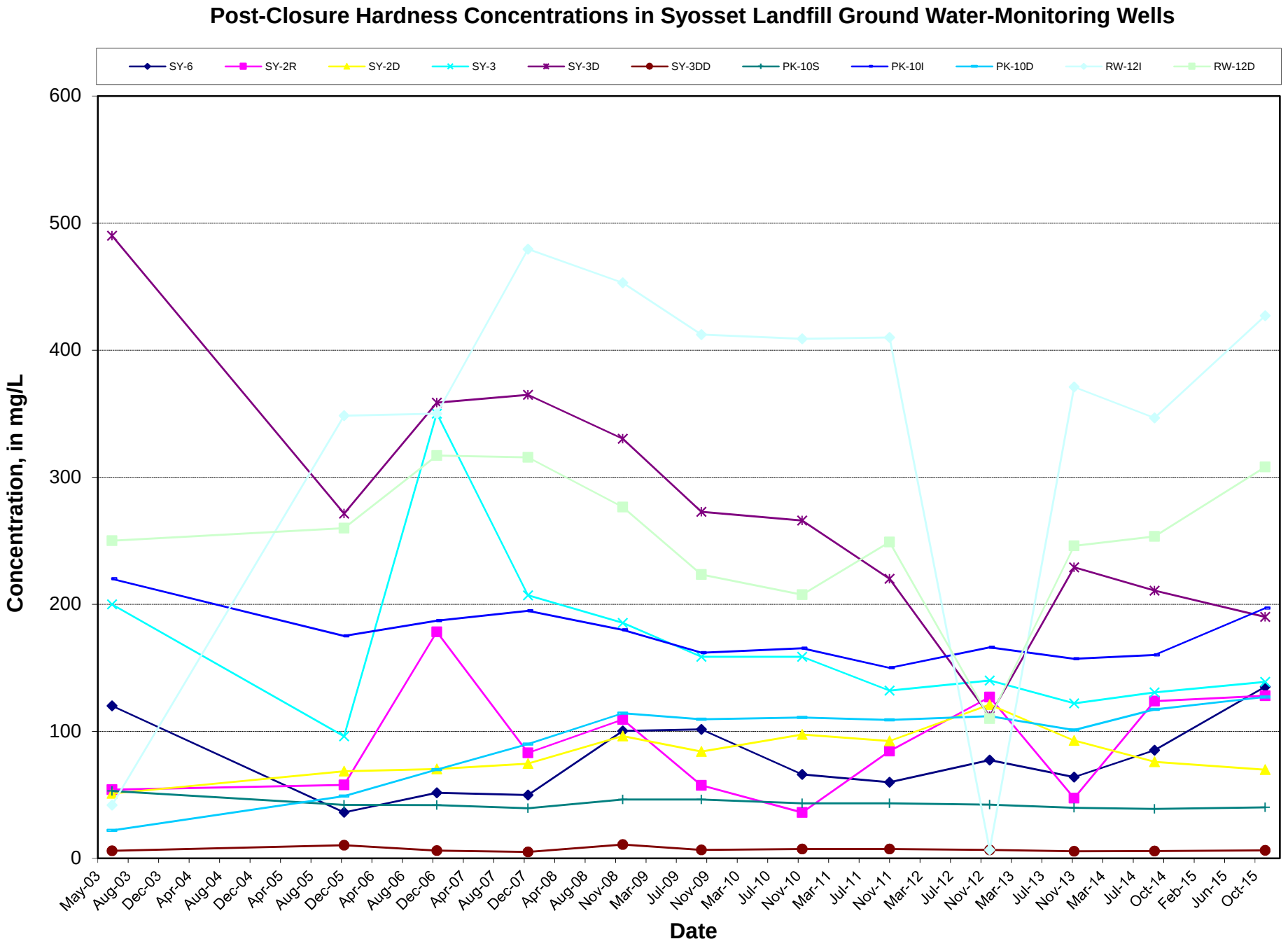


Post-Closure Ammonia Concentrations in Syosset Landfill Ground Water-Monitoring Wells

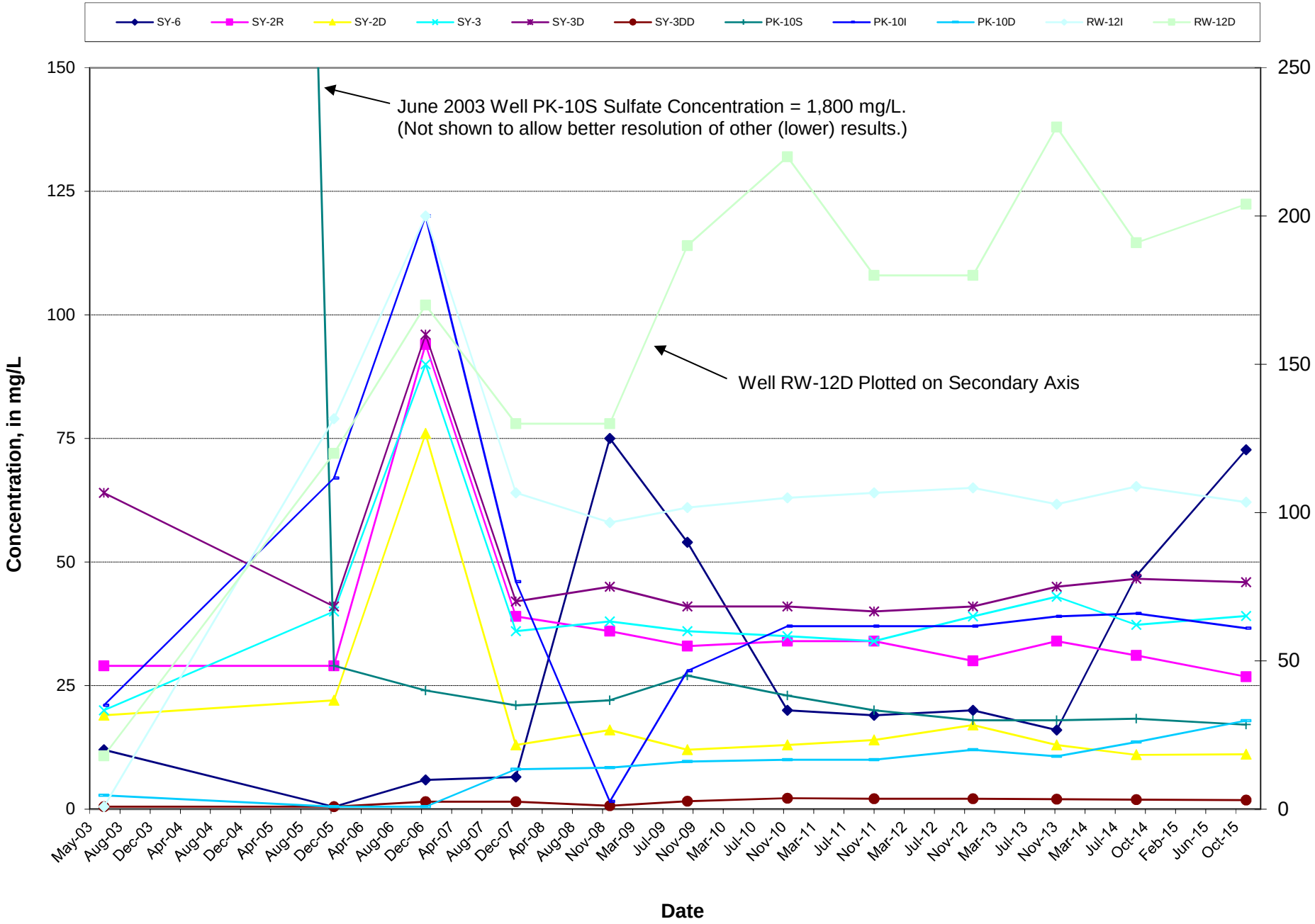


Post-Closure Chloride Concentrations in Syosset Landfill Ground Water-Monitoring Wells

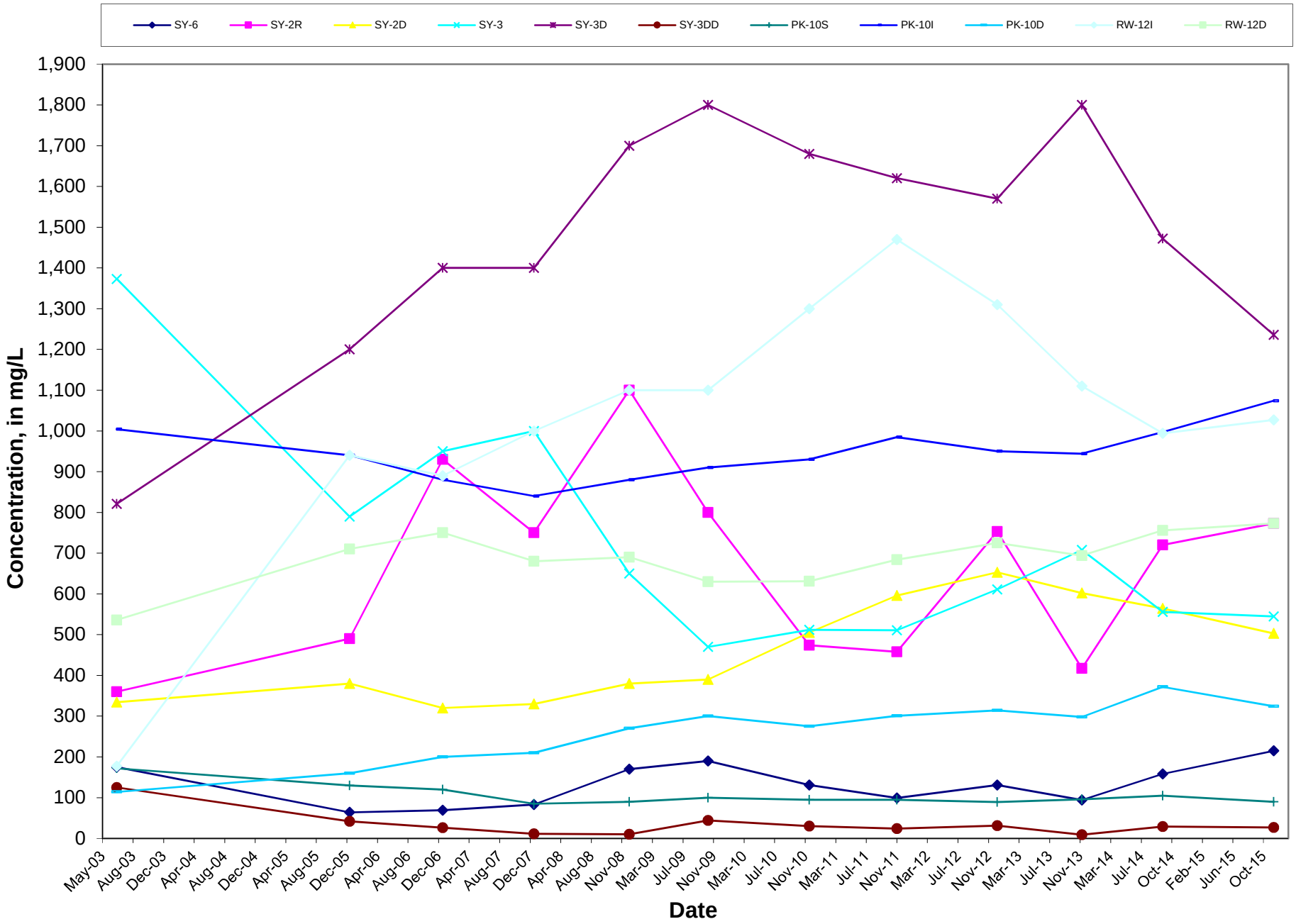



Post-Closure Hardness Concentrations in Syosset Landfill Ground Water-Monitoring Wells
SY-6
SY-2R
SY-2D
SY-3
SY-3D
SY-3DD
PK-10S
PK-10I
PK-10D
RW-12I
RW-12D
Concentration, in mg/L
600
500
400
300
200
100
0
May-03
Aug-03
Dec-03
Apr-04
Aug-04
Dec-04
Apr-05
Aug-05
Dec-05
Apr-06
Aug-06
Dec-06
Apr-07
Aug-07
Dec-07
Apr-08
Aug-08
Nov-08
Mar-09
Jul-09
Nov-09
Mar-10
Jul-10
Nov-10
Mar-11
Jul-11
Nov-11
Mar-12
Jul-12
Nov-12
Mar-13
Jul-13
Nov-13
Mar-14
Jul-14
Oct-14
Feb-15
Jun-15
Oct-15
Date

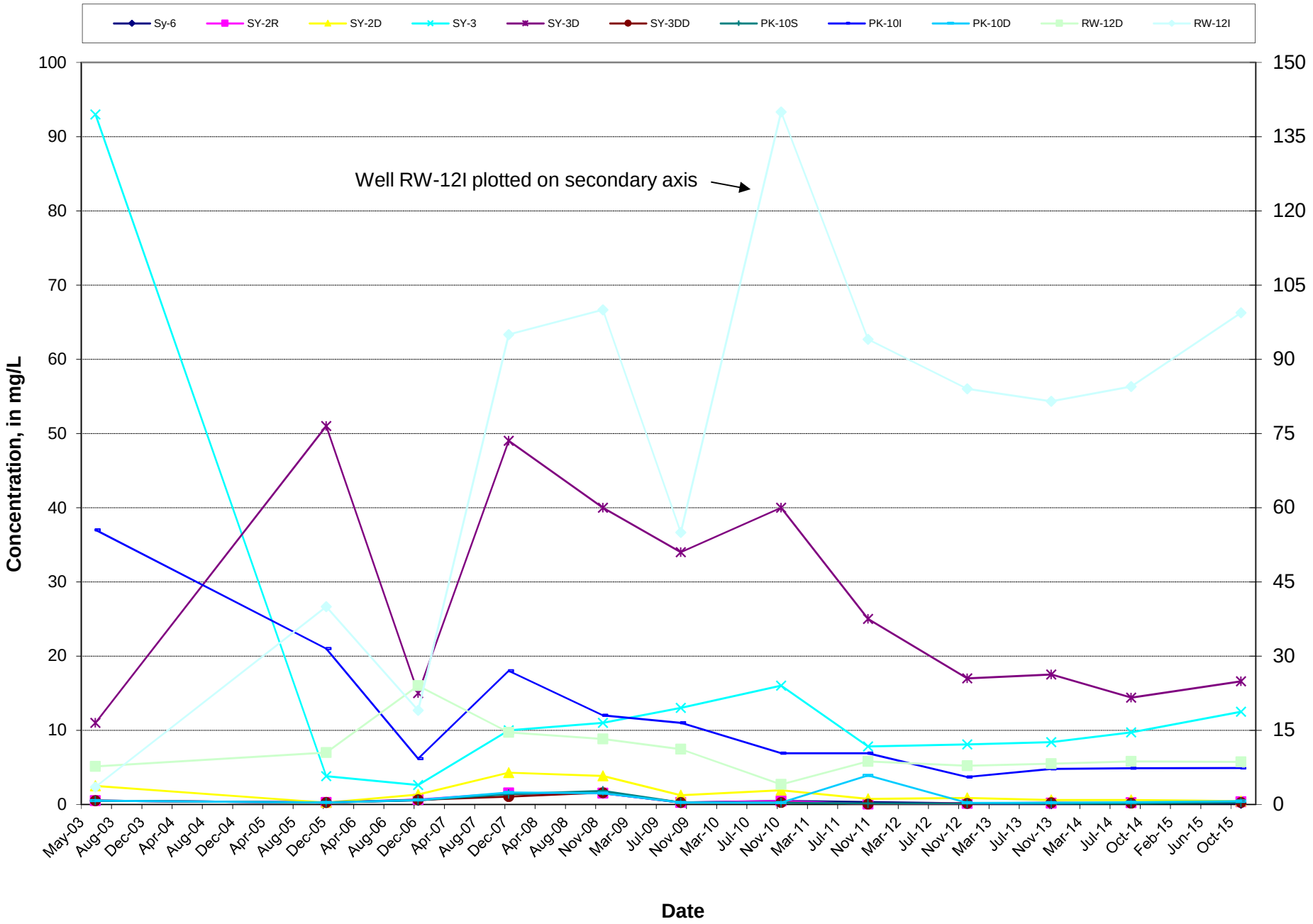
Post-Closure Sulfate Concentrations in Syosset Landfill Ground Water-Monitoring Wells



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