FIRST SEMIANNUAL REPORT OF 2023

OLD BETHPAGE LANDFILL
POST-TERMINATION GROUNDWATER MONITORING PROGRAM

Prepared for:

TOWN OF OYSTER BAY
DEPARTMENT OF PUBLIC WORKS
NASSAU COUNTY, NEW YORK

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1.0 INTRODUCTION

This First Semiannual Report of 2023 was prepared at the request of the Town of Oyster Bay to summarize and evaluate the data collected for the Post-Termination Groundwater Monitoring Program at the Old Bethpage Landfill. The monitoring was completed in accordance with the requirements of the Protocols for Sampling Groundwater under the Old Bethpage Solid Waste Disposal Complex Remedial Action Plan (RAP) prepared by Geraghty & Miller, Appendix I of the 1988 Record of Decision (New York State Department of Environmental Conservation [NYSDEC] and the United States Environmental Protection Agency [USEPA]). The purpose of the Post-Termination Groundwater Monitoring Program is to assess whether the termination criteria set forth in the RAP continues to be met following shutdown of the recovery wells RW-1 and RW-2.

Note that this report describes the first semiannual groundwater sampling event of 2023 and is the thirteenth sampling round and report completed under the Post-Termination Groundwater Monitoring Program. In an October 7, 2016 letter, the NYSDEC approved the shutdown of recovery wells RW-1 and RW-2 and to enter Post-Termination Monitoring under the Final Consent Decree. As described in the NYSDEC letter, Post-Termination Monitoring was to be performed semi-annually for three years, for a total of six rounds. A Final Post Termination Groundwater Monitoring Report which summarized the initial six sampling rounds completed between 2017 and 2019 has been prepared and previously submitted to the NYSDEC in March 2020. This final report evaluated whether the termination criteria described in Appendix A, Section III of the Consent Decree has been met. The findings of this report indicated that the termination criteria have sufficiently been met and there is no benefit in continuing the operation of recovery wells RW-1 and RW-2 and it was recommended that these wells remain shut down. Until a formal response is received upon the NYSDEC review of the report, the Town will continue with current protocols. This thirteenth sampling round will serve as a continuation of the Post Termination Monitoring period.

2.0 COMPLETED SCOPE OF WORK

The scope of work for the Post-Termination Groundwater Monitoring Program includes the sampling of 13 groundwater monitoring wells as described below. In accordance with the October 7, 2016 letter from the NYSDEC, hydraulic monitoring is not a Town responsibility under this program, including the collection of synoptic water levels and mapping of groundwater flow.

2.1 Groundwater Sampling Procedures

In accordance with the October 7, 2016 letter from the NYSDEC, monitoring wells LF-1, LF-2, MW-05B, MW-06A, MW-06B, MW-06C, MW-06E, MW-06F, MW-08A, MW-08B, MW-09B, MW-09C and OBS-1 were sampled on May 1, 5, 9 and 10, 2023 as part of the first semiannual groundwater sampling event of 2023. The locations of these monitoring wells are depicted in **Figure 1**.

Prior to collecting groundwater samples, the monitoring wells were purged to remove standing water in the well. Well purging was accomplished by first measuring the static water level in the well and calculating the volume of standing water. All monitoring wells were purged utilizing a non-dedicated submersible pump, with the pump intake placed just below (approximately 5 feet) the static water level in each well. All down-well equipment was decontaminated before use and after sampling each well.

Field measurements of pH, temperature, specific conductivity, turbidity, dissolved oxygen and oxidation-reduction potential (ORP) were observed and recorded during the purging process. When the values of the field parameters stabilized within 10%, the turbidity of the groundwater was less than 50 Nephelometric Turbidity Units (NTUs) and at least three well volumes had been removed, well purging was considered complete. Field observations and measurements were documented on the well sampling logs, provided in **Appendix A**.

After well purging was complete, the flow rate was substantially reduced, and groundwater samples were collected at a low flow rate of approximately (500 ml/minute or less) directly from

the pump discharge tubing. Samples for volatile organic compounds (VOC) analysis were collected first, followed by other parameters. Each sample was labeled with the well number, time and date, and stored in an ice-filled cooler with the chain of custody forms. Samples were delivered to the laboratory on a daily basis. Quality Assurance/Quality Control (QA/QC) samples were also collected and analyzed, including one field blank, one field duplicate, and four trip blanks. The chain of custody forms are provided in **Appendix B**.

2.2 Sample Analyses

Groundwater samples collected during the first semiannual groundwater sampling event of 2023 from the monitoring wells were analyzed for VOCs, total and dissolved metals, and leachate indicators. Laboratory analyses were performed by Pace Analytical Laboratories, located in Melville, New York (Pace Analytical). This laboratory is approved under the New York State Department of Health Environmental Laboratory Approval Program (ELAP) for the analyses performed. Filtering of the samples for dissolved metals analysis was performed in the field using in-line 0.45-micron disposable filters.

The analytical results are summarized in **Table 1** for VOCs, **Table 2** for total and dissolved metals and **Table 3** for leachate indicators. The results are discussed below in Section 3.0.

3.0 DISCUSSION OF RESULTS

3.1 Data Validation

Thirteen groundwater samples, one field duplicate, one field blank and four trip blanks were collected as part of the first semiannual groundwater sampling event of 2023 performed at the Old Bethpage Landfill under the Post-Termination Groundwater Monitoring Program. All samples were analyzed for VOCs, total and dissolved metals, and leachate indicators. Sample analysis was performed in accordance with SW-846 methods. The laboratory analysis was performed by Pace Analytical Laboratories, located in Melville, New York, and was reported in data packages 70254720 and 70255436. Phenolics were subcontracted to Microbac Laboratories, Inc. located in Marietta, Ohio and were reported in data packages M3E0199, M3E0662, and M3E0868.

The data package submitted by the analytical laboratory was validated in accordance with NYSDEC quality assurance/quality control (QA/QC) requirements. The Data Validation Checklists are provided in **Appendix C**. The laboratory data package is provided in **Appendix D**. The following qualification of the data was required based on the findings of the data validation:

- The following metals detected in the blanks were qualified as non-detect (UB): total aluminum in sdg 70254720 for all samples; dissolved aluminum in samples LF-1, LF-2, MW-06A, MW-06B, BLIND DUPLICATE, MW-06C, MW-06E, MW-08A, and MW-08B; total potassium in sample MW-06A; and total nickel in samples MW-06E and MW-06C.

- The percent recovery (%R) was below the QC limit in the matrix spike for total sodium associated with samples MW-06E and MW-06C. As a result, total sodium was qualified as estimated (J) in samples MW-06E and MW-06C.

- The %Rs were above the QC limits in the matrix spike and were qualified as estimated (J) in the following samples: dissolved iron associated with samples MW-06B and BLIND DUPLICATE-1; dissolved calcium and manganese associated with samples MW-08B, MW-08A, MW-06B, and BLIND DUPLICATE-1; and dissolved zinc associated with sample MW-08B.

- The relative standard deviation (RPD) was above the QC limit in the duplicate for total zinc associated with samples MW-08A, MW-06B, and BLIND DUPLICATE-1 and was therefore qualified as estimated (J/UJ) in all associated samples.

- Numerous samples were originally analyzed for alkalinity at a dilution. Based on these results, the samples were reanalyzed at no dilution and the non-diluted results were reported.

- Total and dissolved hexavalent chromium were analyzed outside of holding times associated with samples MW-06C, MW-06E, and MW-06F and was therefore qualified as an estimated detection limit (UJ) in the associated samples.

- Sulfate was detected in the blanks. Sulfate was qualified as non-detect (UB) in samples MW-06B, BLIND DUPLICATE, and MW-06F.

- The relative standard deviation (RPD) was above the QC limit in the duplicate for total dissolved solids associated with all samples in sdg 70254720 and was therefore qualified as estimated (J/UJ).

- The %R was below the QC limit in the LCS and/or matrix spike for alkalinity carbonate associated with samples MW-06E, MW-06C, MW-06F, MW-06A, LF-2, LF-1 and FIELD BLANK; nitrate-nitrite associated with all samples; and nitrite associated with samples MW-08A and MW-06B and were therefore qualified as estimated (J/UJ) in the associated samples.

- The RPD was above the QC limit in the duplicate for total dissolved solids associated with samples LF-2, LF-1, and FIELD BLANK and was therefore qualified as estimated (J).

- Sample MW-06B was field duplicated and labeled BLIND DUPLICATE-1. Based on field duplicate results ammonia was qualified as estimated (J) in samples MW-06B and BLIND DUPLICATE-1.

No other issues were found with the sample results and all results are deemed valid and usable for environmental assessment purposes as qualified above.

3.2 Groundwater Results

The analytical results for the first semiannual groundwater sampling event of 2023 are summarized in **Table 1** for VOCs, **Table 2** for total and dissolved metals and **Table 3** for leachate indicators. Analytical parameters are compared to the NYSDEC Ambient Water Quality Standards

and Guidance Values for Class GA groundwater (herein referred to as the Class GA groundwater standards and guidance values). Figures presenting exceedances of the Class GA groundwater standards and guidance values detected during the last four rounds of sampling are presented as **Figure 2** for VOCs, **Figure 3** for total and dissolved metals, and **Figure 4** for leachate indicators.

3.2.1 Volatile Organic Compounds

Detectable concentrations of VOCs were identified in 7 of the 13 groundwater monitoring wells, including LF-2, MW-06A, MW-06B, MW-06C, MW-06E, MW-06F and MW-08A. The highest concentration of total VOCs of 29 ug/l was detected at MW-06B. The sample collected from MW-08A exhibited the next highest concentration of total VOCs of 19.7 ug/l, followed in decreasing order by MW-06C, MW-06E, LF-2, MW-06A and MW-06F. VOCs were detected at concentrations above Class GA groundwater standards and guidance values in wells MW-06B and MW-08A as follows:

- 1,4-Dichlorobenze was detected in MW-06B at a concentration of 4.6 ug/l, slightly above the Class GA standard of 3 ug/l.
- Benzene was detected in MW-06B at a concentration of 3.3 ug/l, slightly above the Class GA standard of 1 ug/l.
- Chlorobenzene was detected in MW-06B at a concentration of 17.9 ug/l, above the Class GA standard of 5 ug/l.
- Cis-1,2-dichloroethylene (1,2-DCE) was detected in MW-08A at a concentration of 11.5 ug/l, above the Class GA standard of 5 ug/l.
- Tetrachloroethylene (PCE) was detected in MW-08A at a concentration of 5.5 ug/l, slightly above the Class GA standard of 5 ug/l.

3.2.2 Inorganic Parameters

Iron, manganese, and sodium were detected above groundwater standards in either total and/or dissolved samples, as described below.

- Total iron was detected above the Class GA groundwater standard of 300 ug/l in 5 of the 13 groundwater monitoring wells (LF-1, LF-2, MW-06B, MW-06C and MW-06E), with concentrations ranging from 6,460 ug/l in MW-06C to a maximum concentration of 20,900 ug/l in MW-06B. Dissolved iron concentrations were similar to their respective total concentrations in the wells exhibiting exceedances of the groundwater standard.

- Total manganese was detected above the Class GA groundwater standard of 300 ug/l in wells LF-1, MW-05B, MW-08B, MW-09B and OBS-1 at concentrations of 1,710 ug/l, 2,460 ug/l, 554 ug/l, 2,000 ug/l and 2,270 ug/l, respectively. Dissolved manganese concentrations were similar to their respective total concentrations.

- Total sodium was detected above the Class GA groundwater standard of 20,000 ug/l in 12 of the 13 groundwater monitoring wells, with these concentrations ranging from 40,100 ug/l in OBS-1 to a maximum of 331,000 ug/l in LF-2. In general, dissolved sodium concentrations were similar to their respective total concentrations.

3.2.3 Leachate Indicators

Chloride, ammonia, total phenols, and total dissolved solids were detected above groundwater standards in the collected samples, as follows:

- Chloride was detected above the Class GA groundwater standard of 250 mg/l in 2 of the 13 groundwater monitoring wells, with concentrations of 267 mg/l in MW-06C and 426 mg/l in MW-06F.

- Ammonia was detected above the Class GA groundwater standard of 2 mg/l in 5 of the 13 groundwater monitoring wells, with concentrations ranging from 12.8 mg/l in OBS-1 to a maximum of 160 mg/l in MW-06B.

- Total phenols were detected above the Class GA groundwater standard of 0.001 mg/l in 5 of the 13 groundwater monitoring wells, with these concentrations ranging from 0.0028 mg/l in well MW-09B to a maximum of 0.0278 mg/l in MW-06B.

- Total dissolved solids (TDS) were detected above the Class GA groundwater standard of 500 mg/l in 4 of the 13 groundwater monitoring wells, with these concentrations ranging from 594 mg/l in MW-06B to a maximum of 950 mg/l at MW-06C.

3.3 Historical Groundwater Trends

Since the objective of the Post-Termination monitoring period (2017 through present) is to assess the impacts of ceasing operation of recovery wells RW-1 and RW-2 (well pumps are out of service but the wells remain in place for potential future use), D&B performed an interim trend analysis using the results from the thirteen post-termination groundwater rounds, as well as for comparison purposes, six existing rounds of operational monitoring conducted in calendar years 2015 and 2016. As part of evaluating changes in groundwater quality during the time period described above, historical graphs depicting trend lines have been prepared for total volatile organic compounds (TVOCs), inorganic parameters and leachate indicators. These graphs are presented in **Appendix E**. It should be noted, for inorganic parameters and leachate indicators, historical graphs and trend lines were prepared for selected constituents which have exhibited concentrations exceeding NYSDEC Class GA groundwater standards or guidance values. Previously collected post-termination groundwater data is provided in **Appendix F**. The following provides a brief discussion of the trend analysis.

3.3.1 Volatile Organic Compounds

Based on a review of the data, 9 of the 13 monitoring wells, MW-06A, MW-06C, MW-06E, MW-06F, MW-08A, MW-08B, MW-09B, MW-09C and OBS-1, have shown relatively stable concentrations of VOCs since ceasing operation of the recovery wells. Monitoring wells LF-1 and LF-2 had previously shown an increasing trend in VOCs; however, the last two monitoring events have shown a decreasing trend with non-detectable concentrations of VOCs in LF-1 in this most recent sampling event. Monitoring wells MW-08A and MW-06B have shown increasing concentrations of VOCs since ceasing operation of the recovery wells. It should be noted, the increasing TVOC trend in MW-08A is most likely due to the former Claremont Polychemical Site and not related to the landfill.

3.3.2 Inorganic Parameters

Historical graphs and trend lines have been established for the following inorganic parameters: iron, manganese, and sodium. In general, these parameters exhibited either a decreasing or flat trend in all or nearly all of the wells, with the exception of the following:

- Wells MW-06B and LF-2 show a slight increasing trend in iron concentrations since the Fall of 2020.
- Well MW-06C shows a slight increasing trend in manganese concentrations since the Fall of 2019.
- Well MW-06F shows a slight increasing trend in sodium concentrations since the Fall of 2020.

It should be noted that iron, manganese and sodium are naturally occurring in the groundwater aquifers on Long Island and these concentrations detected in the monitoring wells downgradient of the Landfill should not impose a significant concern for the groundwater quality.

3.3.3 Leachate Indicators

Historical graphs and trend lines have been established for the following leachate indicators: ammonia, chloride, total phenols, and total dissolved solids. In general, these leachate indicators exhibited either a decreasing or relatively flat trend in the majority of the wells, with the exception of the following:

- Well LF-2 shows an increasing trend in ammonia concentrations.
- Well MW-06F shows a slight increasing trend in chloride concentrations.
- Wells MW-06C, MW-06F and MW-09C show slight increasing trends in total dissolved solids.

4.0 CONCLUSIONS

The following conclusions are made based on the above information:

- Overall, the results of the first semiannual 2023 sampling event (thirteenth round) of post-termination monitoring are, in general, consistent with the results from the prior post-termination rounds, except where noted below.

- Landfill related impacts (select metals) continue to be evident in well LF-1, as well as in well LF-2 (trace VOCs, select metals, ammonia and total dissolved solids). In addition, landfill related impacts in wells MW-06B, MW-06C, MW-06E and MW-06F (VOCs, metals and leachate indicators) located in a cluster further downgradient of the landfill, continue to be evident. The remaining wells that were sampled continue to exhibit no or only minor landfill-related impacts.

- Although wells LF-1 and LF-2 are both located on the downgradient boundary of the landfill, well LF-1 exhibits far less landfill-related impacts (i.e., leachate indicators) in comparison to well LF-2. This is most likely attributed to the fact that well LF-1 is located downgradient of the newer portion of the landfill, which is partially lined, whereas well LF-2 is located downgradient of the older unlined portion of the landfill that is primarily composed of ash.

- It should be noted that well cluster 6 which has historically exhibited the most landfill-related impacts of the monitoring wells is also located downgradient of the older, unlined portion of the landfill. Wells MW-06B, MW-06C, MW-06E and MW-06F, which show the most landfill related impacts are screened at depths that most likely intercept the off-site landfill plume.

- It is noted in the trend analysis that certain parameters exhibit a degree of variability, including short term increases of VOCs in LF-1 and LF-2, which could possibly be related to temporal variations in aquifer recharge.

- With respect to landfill-related VOCs, detections included: benzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene, chlorobenzene and isopropylbenzene. One or more of these VOCs were detected in wells MW-06B, MW-06C, MW-06E and LF-2. Three of the aromatic hydrocarbons exceeded their individual Class GA groundwater standard in MW-06B.

- Regarding chlorinated solvents, slightly elevated concentrations, above their respective groundwater standards for cis-1,2-DCE and PCE, were detected in well MW-08A. TCE was also detected at a concentration below its respective groundwater standard in this well. This is most likely attributed to residual contamination from the former Claremont Polychemical Site, which is located directly upgradient of this water-table zone well. Chlorinated solvents associated with the former Claremont Polychemical Site have been historically detected in this well. In addition, a low concentration of TCE (below

the groundwater standard) was also detected in well MW-08A. The concentration of TCE detected in well MW-08A is most likely associated with residual contamination from the former Claremont Polychemical Site.

FIGURES

COUNTY RECHARGE BASIN NO. 528

GROUNDWATER TREATMENT FACILITY

BETHPAGE SWEET HOLLOW ROAD

CLAREMONT ROAD

TOWN RECHARGE BASIN NO. 1

SWAMP ROAD

LF-4

LF-3

WINDING ROAD

M-29A-R

M-30A

M-30B-R

M-29B

FORMER CLAREMONT POLYCHEMICAL SITE

LANDFILL BOUNDARY

ROUND SWAMP ROAD

PHASE II PIT

OLD BETHPAGE LANDFILL

LF-2

MW-8A,B,C

TW-1

MW-10A,B,C,D

TW-2

TW-3-R

LF-1

MW-6A,B,C,D,E,F

TOWN PROPERTY BOUNDARY

RW-5

NASSAU COUNTY FIRE SERVICE ACADEMY

TOWN RECHARGE BASIN NO. 33

MW-5A,B

TOWN RECHARGE BASIN NO. 15 (NYS BASIN NO. 938)

MW-9A,B,C

RW-4

RW-3

RW-1

RW-2

MW-7A,B-R

OBS-1

BETHPAGE GOLF COURSE

SWAMP ROAD

ROUND SWAMP ROAD

MW-11A,B

QUAKER MEETING HOUSE ROAD

MELVILLE ROAD

LEGEND:

MW-9A,B,C ● OLD BETHPAGE LANDFILL MONITORING WELL

RW-1 ◉ OLD BETHPAGE LANDFILL RECOVERY WELL

NOTE:

BASE MAP WITH WELL LOCATIONS PROVIDED BY LKB IN DRAWING 101, DATED AUGUST 2005

D&B ENGINEERS AND ARCHITECTS

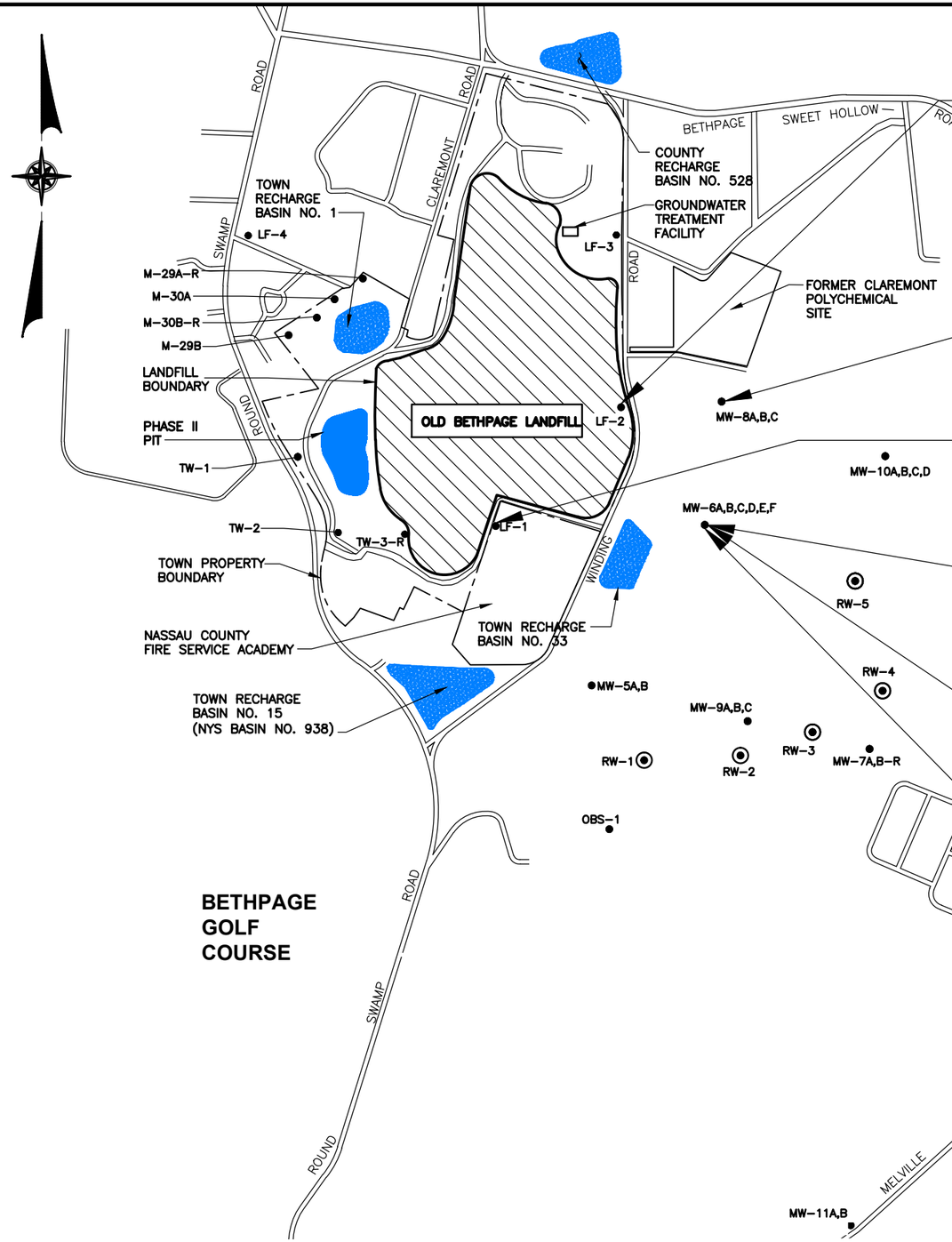
OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY, NEW YORK

GROUNDWATER MONITORING WELL LOCATION MAP

SCALE: 1"=800'

FIGURE 1

J:_WaterSupply\3617 (TOB Groundwater Monitoring)\2017\Landfill Sampling 1Q 2017\3617-C-well location map fig 1.dwg, Layout1, 12/27/2022 3:45:45 PM, droot



Units in ug/l	Sample ID	LF-2	LF-2	LF-2	LF-2
	Sample Date	10/29/21	5/12/22	10/28/22	5/10/23
Compound	GA ST/ GV				
1,4-Dichlorobenzene	3	**3.1**	**3.2**	U	1.1
Benzene	1	**3.7**	**2.8**	U	0.75 J
Isopropylbenzene (Cumene)	5	**7.8**	**8.6**	U	1.2

Units in ug/l	Sample ID	MW-08A	MW-08A	MW-08A	MW-08A
	Sample Date	10/25/21	5/10/22	10/27/22	5/5/23
Compound	GA ST/ GV				
Cis-1,2-Dichloroethylene	5	**12.9**	**11.5**	**6.6**	**11.5**
Tetrachloroethylene(PCE)	5	**5.8**	**6.4**	**7**	**5.5**

Units in ug/l	Sample ID	LF-1	LF-1	LF-1	LF-1
	Sample Date	10/29/21	5/12/22	11/1/22	5/10/23
Compound	GA ST/ GV				
Trichloroethylene (TCE)	5	**14.9**	**22.3**	**8.4**	U

Units in ug/l	Sample ID	MW-06A	MW-06A	MW-06A	MW-06A
	Sample Date	10/28/21	5/11/22	10/31/22	5/9/23
Compound	GA ST/ GV				
Trichloroethylene (TCE)	5	U	U	**7.7**	1.5

Units in ug/l	Sample ID	MW-06B	MW-06B	MW-06B	MW-06B
	Sample Date	10/28/21	5/11/22	11/1/22	5/5/23
Compound	GA ST/ GV				
1,4-Dichlorobenzene	3	2.4	**3.8**	**3.8**	**4.6**
Benzene	1	**1.5**	**3.6**	**2.1**	**3.3**
Chlorobenzene	5	4.7	**12.9**	**17.4**	**17.9**

Units in ug/l	Sample ID	MW-06C	MW-06C	MW-06C	MW-06C
	Sample Date	10/27/21	5/10/22	10/31/22	5/9/23
Compound	GA ST/GV				
Benzene	1	**1.8**	U	U	0.57 J

Footnotes/Qualifiers:
ug/l Micrograms per liter
U Compound was analyzed for but not detected
Exceeds NYSDEC Class GA Standard or Guidance Value

LEGEND:

MW-9A,B,C ● OLD BETHPAGE LANDFILL MONITORING WELL

RW-1 ⊙ OLD BETHPAGE LANDFILL RECOVERY WELL

NOTE:

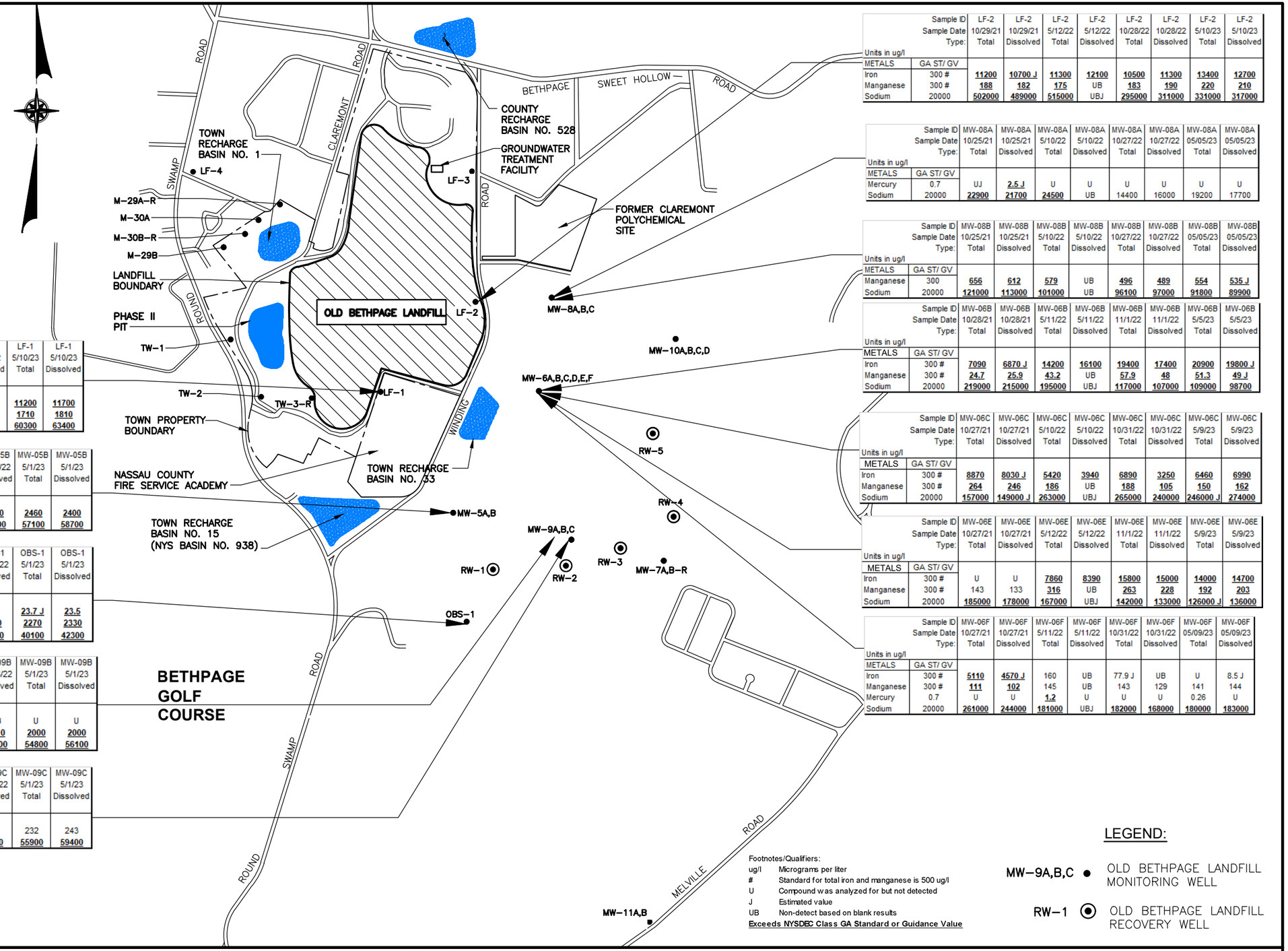
BASE MAP WITH WELL LOCATIONS PROVIDED BY LKB IN DRAWING 101, DATED AUGUST 2005

D&B ENGINEERS AND ARCHITECTS

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY, NEW YORK
VOLATILE ORGANIC COMPOUND CONCENTRATIONS DETECTED ABOVE GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES, 2021 - 2023

SCALE: 1"=900'

FIGURE 2



	Sample ID	LF-1	LF-1	LF-1	LF-1	LF-1	LF-1	LF-1	LF-1
	Sample Date	10/29/21	10/29/21	5/12/22	5/12/22	11/1/22	11/1/22	5/10/23	5/10/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	**23100**	**19600 J**	**22400**	**23900**	**16000**	**15200**	**11200**	**11700**
Manganese	300 #	**3480**	**3190**	**3330**	**3590**	**2640**	**2330**	**1710**	**1810**
Sodium	20000	**69000**	**65300**	**77700**	UBJ	**77200**	**72800**	**60300**	**63400**

	Sample ID	MW-05B	MW-05B	MW-05B	MW-05B	MW-05B	MW-05B	MW-05B	MW-05B
	Sample Date	10/25/21	10/25/21	5/5/22	5/5/22	10/27/22	10/27/22	5/1/23	5/1/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Manganese	300	**3200**	**2990**	**2510**	**2600**	**2660**	**2640**	**2460**	**2400**
Sodium	20000	**59400**	**56900**	**57000**	UB	**57000**	**59400**	**57100**	**58700**

	Sample ID	OBS-1	OBS-1	OBS-1	OBS-1	OBS-1	OBS-1	OBS-1	OBS-1
	Sample Date	10/25/21	10/25/21	5/5/22	5/5/22	10/25/22	10/25/22	5/1/23	5/1/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	U	U	UB	UB	***23.9 J***	UB	***23.7 J***	**23.5**
Manganese	300 #	**2350**	**2140**	**2170**	**2230**	**2100**	**2120**	**2270**	**2330**
Sodium	20000	**51400**	**47500**	**41700**	UB	**43600**	**41900**	**40100**	**42300**

	Sample ID	MW-09B	MW-09B	MW-09B	MW-09B	MW-09B	MW-09B	MW-09B	MW-09B
	Sample Date	10/25/21	10/25/21	5/5/22	5/5/22	10/26/22	10/26/22	5/1/23	5/1/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	U	U	U	U	***21.8 J***	UB	U	U
Manganese	300 #	**3170**	**2720**	**2960**	**2970**	**2330**	**2410**	**2000**	**2000**
Sodium	20000	**50400**	**46200**	**55800**	UB	**54300**	**58500**	**54800**	**56100**

	Sample ID	MW-09C	MW-09C	MW-09C	MW-09C	MW-09C	MW-09C	MW-09C	MW-09C
	Sample Date	10/25/21	10/25/21	5/5/22	5/5/22	10/26/22	10/26/22	5/1/23	5/1/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Manganese	300	**307**	280	**325**	UB	241	248	232	243
Sodium	20000	**65400**	**60100**	**62900**	UB	**56600**	**61000**	**55900**	**59400**

NOTE:

BASE MAP WITH WELL LOCATIONS PROVIDED BY LKB IN DRAWING 101, DATED AUGUST 2005

	Sample ID	LF-2	LF-2	LF-2	LF-2	LF-2	LF-2	LF-2	LF-2
	Sample Date	10/29/21	10/29/21	5/12/22	5/12/22	10/28/22	10/28/22	5/10/23	5/10/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	**11200**	**10700 J**	**11300**	**12100**	**10500**	**11300**	**13400**	**12700**
Manganese	300 #	**188**	**182**	**175**	UB	**183**	**190**	**220**	**210**
Sodium	20000	**502000**	**489000**	**515000**	UBJ	**295000**	**311000**	**331000**	**317000**

	Sample ID	MW-08A	MW-08A	MW-08A	MW-08A	MW-08A	MW-08A	MW-08A	MW-08A
	Sample Date	10/25/21	10/25/21	5/10/22	5/10/22	10/27/22	10/27/22	05/05/23	05/05/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Mercury	0.7	UJ	**2.5 J**	U	U	U	U	U	U
Sodium	20000	**22900**	**21700**	**24500**	UB	14400	16000	19200	17700

	Sample ID	MW-08B	MW-08B	MW-08B	MW-08B	MW-08B	MW-08B	MW-08B	MW-08B
	Sample Date	10/25/21	10/25/21	5/10/22	5/10/22	10/27/22	10/27/22	05/05/23	05/05/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Manganese	300	**656**	**612**	**579**	UB	**496**	**489**	**554**	**535 J**
Sodium	20000	**121000**	**113000**	**101000**	UB	**96100**	**97000**	**91800**	**89900**

	Sample ID	MW-06B	MW-06B	MW-06B	MW-06B	MW-06B	MW-06B	MW-06B	MW-06B
	Sample Date	10/28/21	10/28/21	5/11/22	5/11/22	11/1/22	11/1/22	5/5/23	5/5/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	**7090**	**6870 J**	**14200**	**16100**	**19400**	**17400**	**20900**	**19800 J**
Manganese	300 #	**24.7**	**25.9**	**43.2**	UB	**57.9**	**48**	**51.3**	**49 J**
Sodium	20000	**219000**	**215000**	**195000**	UBJ	**117000**	**107000**	**109000**	**98700**

	Sample ID	MW-06C	MW-06C	MW-06C	MW-06C	MW-06C	MW-06C	MW-06C	MW-06C
	Sample Date	10/27/21	10/27/21	5/10/22	5/10/22	10/31/22	10/31/22	5/9/23	5/9/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	**8870**	**8030 J**	**5420**	**3940**	**6890**	**3250**	**6460**	**6990**
Manganese	300 #	**264**	**246**	**186**	UB	**188**	**105**	**150**	**162**
Sodium	20000	**157000**	**149000 J**	**263000**	UBJ	**265000**	**240000**	**246000 J**	**274000**

	Sample ID	MW-06E	MW-06E	MW-06E	MW-06E	MW-06E	MW-06E	MW-06E	MW-06E
	Sample Date	10/27/21	10/27/21	5/12/22	5/12/22	11/1/22	11/1/22	5/9/23	5/9/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	U	U	**7860**	**8390**	**15800**	**15000**	**14000**	**14700**
Manganese	300 #	143	133	**316**	UB	**263**	**228**	**192**	**203**
Sodium	20000	**185000**	**178000**	**167000**	UBJ	**142000**	**133000**	**126000 J**	**136000**

	Sample ID	MW-06F	MW-06F	MW-06F	MW-06F	MW-06F	MW-06F	MW-06F	MW-06F
	Sample Date	10/27/21	10/27/21	5/11/22	5/11/22	10/31/22	10/31/22	05/09/23	05/09/23
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l									
METALS	GA ST/ GV								
Iron	300 #	**5110**	**4570 J**	160	UB	77.9 J	UB	U	8.5 J
Manganese	300 #	**111**	**102**	145	UB	143	129	141	144
Mercury	0.7	U	U	**1.2**	U	U	U	0.26	U
Sodium	20000	**261000**	**244000**	**181000**	UBJ	**182000**	**168000**	**180000**	**183000**

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
Exceeds NYSDEC Class GA Standard or Guidance Value	

LEGEND:

MW-9A,B,C ● OLD BETHPAGE LANDFILL MONITORING WELL

RW-1 ⊙ OLD BETHPAGE LANDFILL RECOVERY WELL

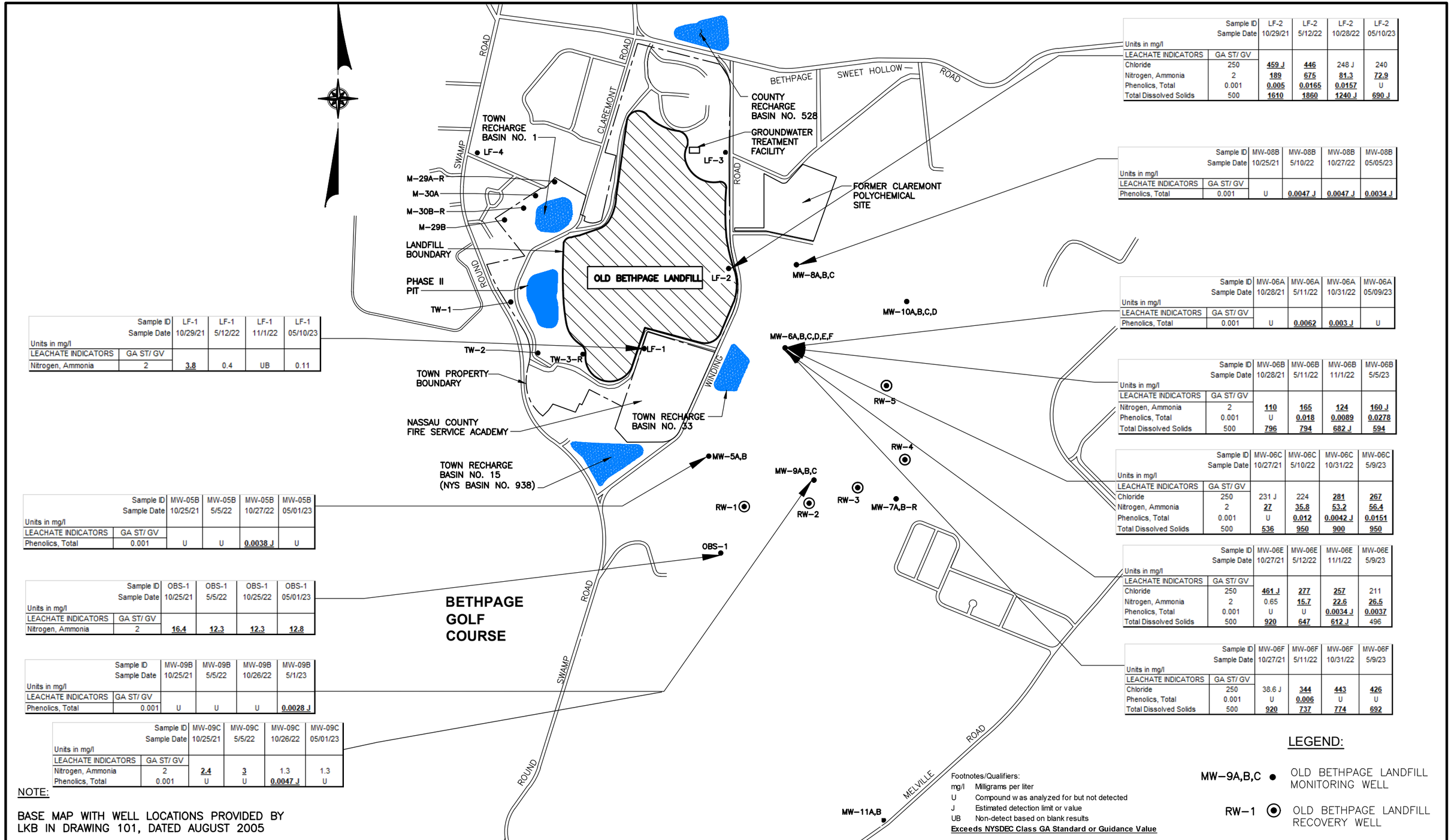
D&B ENGINEERS AND ARCHITECTS

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY, NEW YORK
TOTAL AND DISSOLVED METAL CONCENTRATIONS DETECTED ABOVE GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES, 2021 - 2023

SCALE: 1"=900'

FIGURE 3

F:\3617\3617-07\dwg\3617-07-C-PL02.dwg, METALS, 12/27/2022 3:42:40 PM, droot



Units in mg/l	Sample ID	LF-1	LF-1	LF-1	LF-1
	Sample Date	10/29/21	5/12/22	11/1/22	05/10/23
LEACHATE INDICATORS	GA ST/ GV				
Nitrogen, Ammonia	2	**3.8**	0.4	UB	0.11

Units in mg/l	Sample ID	LF-2	LF-2	LF-2	LF-2
	Sample Date	10/29/21	5/12/22	10/28/22	05/10/23
LEACHATE INDICATORS	GA ST/ GV				
Chloride	250	**459 J**	**446**	248 J	240
Nitrogen, Ammonia	2	**189**	**675**	**81.3**	**72.9**
Phenolics, Total	0.001	**0.005**	**0.0165**	**0.0157**	U
Total Dissolved Solids	500	**1610**	**1860**	**1240 J**	**690 J**

Units in mg/l	Sample ID	MW-08B	MW-08B	MW-08B	MW-08B
	Sample Date	10/25/21	5/10/22	10/27/22	05/05/23
LEACHATE INDICATORS	GA ST/ GV				
Phenolics, Total	0.001	U	**0.0047 J**	**0.0047 J**	**0.0034 J**

Units in mg/l	Sample ID	MW-06A	MW-06A	MW-06A	MW-06A
	Sample Date	10/28/21	5/11/22	10/31/22	05/09/23
LEACHATE INDICATORS	GA ST/ GV				
Phenolics, Total	0.001	U	**0.0062**	**0.003 J**	U

Units in mg/l	Sample ID	MW-06B	MW-06B	MW-06B	MW-06B
	Sample Date	10/28/21	5/11/22	11/1/22	5/5/23
LEACHATE INDICATORS	GA ST/ GV				
Nitrogen, Ammonia	2	**110**	**165**	**124**	**160 J**
Phenolics, Total	0.001	U	**0.018**	**0.0089**	**0.0278**
Total Dissolved Solids	500	**796**	**794**	**682 J**	**594**

Units in mg/l	Sample ID	MW-06C	MW-06C	MW-06C	MW-06C
	Sample Date	10/27/21	5/10/22	10/31/22	5/9/23
LEACHATE INDICATORS	GA ST/ GV				
Chloride	250	231 J	224	**281**	**267**
Nitrogen, Ammonia	2	**27**	**35.8**	**53.2**	**56.4**
Phenolics, Total	0.001	U	**0.012**	**0.0042 J**	**0.0151**
Total Dissolved Solids	500	**536**	**950**	**900**	**950**

Units in mg/l	Sample ID	MW-06E	MW-06E	MW-06E	MW-06E
	Sample Date	10/27/21	5/12/22	11/1/22	5/9/23
LEACHATE INDICATORS	GA ST/ GV				
Chloride	250	**461 J**	**277**	**257**	211
Nitrogen, Ammonia	2	0.65	**15.7**	**22.6**	**26.5**
Phenolics, Total	0.001	U	U	**0.0034 J**	**0.0037**
Total Dissolved Solids	500	**920**	**647**	**612 J**	496

Units in mg/l	Sample ID	MW-06F	MW-06F	MW-06F	MW-06F
	Sample Date	10/27/21	5/11/22	10/31/22	5/9/23
LEACHATE INDICATORS	GA ST/ GV				
Chloride	250	38.6 J	**344**	**443**	**426**
Phenolics, Total	0.001	U	**0.006**	U	U
Total Dissolved Solids	500	**920**	**737**	**774**	**692**

Units in mg/l	Sample ID	MW-05B	MW-05B	MW-05B	MW-05B
	Sample Date	10/25/21	5/5/22	10/27/22	05/01/23
LEACHATE INDICATORS	GA ST/ GV				
Phenolics, Total	0.001	U	U	**0.0038 J**	U

Units in mg/l	Sample ID	OBS-1	OBS-1	OBS-1	OBS-1
	Sample Date	10/25/21	5/5/22	10/25/22	05/01/23
LEACHATE INDICATORS	GA ST/ GV				
Nitrogen, Ammonia	2	**16.4**	**12.3**	**12.3**	**12.8**

Units in mg/l	Sample ID	MW-09B	MW-09B	MW-09B	MW-09B
	Sample Date	10/25/21	5/5/22	10/26/22	5/1/23
LEACHATE INDICATORS	GA ST/ GV				
Phenolics, Total	0.001	U	U	U	**0.0028 J**

Units in mg/l	Sample ID	MW-09C	MW-09C	MW-09C	MW-09C
	Sample Date	10/25/21	5/5/22	10/26/22	05/01/23
LEACHATE INDICATORS	GA ST/ GV				
Nitrogen, Ammonia	2	**2.4**	**3**	1.3	1.3
Phenolics, Total	0.001	U	U	**0.0047 J**	U

NOTE:

BASE MAP WITH WELL LOCATIONS PROVIDED BY LKB IN DRAWING 101, DATED AUGUST 2005

Footnotes/Qualifiers:
- mg/l Milligrams per liter
- U Compound was analyzed for but not detected
- J Estimated detection limit or value
- UB Non-detect based on blank results
- **Exceeds NYSDEC Class GA Standard or Guidance Value**

LEGEND:

- MW-9A,B,C ● OLD BETHPAGE LANDFILL MONITORING WELL
- RW-1 ⊙ OLD BETHPAGE LANDFILL RECOVERY WELL

D&B ENGINEERS AND ARCHITECTS

OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY, NEW YORK
LEACHATE INDICATOR CONCENTRATIONS DETECTED ABOVE GROUNDWATER QUALITY STANDARDS/GUIDANCE VALUES, 2021 - 2023

SCALE: 1"=900'

FIGURE 4

TABLES

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID / Sample Date	LF-1 5/10/23	LF-2 5/10/23	MW-05B 5/1/23	MW-06A 5/9/23	MW-06B 5/5/23	MW-06C 5/9/23	MW-06E 5/9/23	MW-06F 5/9/23	MW-08A 5/5/23	MW-08B 5/5/23	MW-09B 5/1/23	MW-09C 5/1/23	OBS-1 5/1/23
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1.1	1 U	1 U	***4.6***	1.6	1	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	0.75 J	1 U	1 U	***3.3***	0.57 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1.1	1 U	1 U	***17.9***	1.9	3.2	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1.3	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***11.5***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1.2	1 U	1 U	1.7	2.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***5.5***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1.5	1 U	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	ND	3.4	ND	1.5	29	5.7	4.2	1.1	19.7	ND	ND	ND	ND

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated limit
-- No standard
ND Not detected
Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		LF-1	LF-1	LF-2	LF-2	MW-05B	MW-05B	MW-06A	MW-06A	MW-06B	MW-06B	MW-06C	MW-06C	MW-06E	MW-06E
Sample Date		5/10/23	5/10/23	5/10/23	5/10/23	5/1/23	5/1/23	5/9/23	5/9/23	5/5/23	5/5/23	5/9/23	5/9/23	5/9/23	5/9/23
Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l															
METALS	NYSDEC Class GA Standard or Guidance Value														
Aluminum	--	200 U	48.2 UB	74.6 J	83.6 UB	37.2 UB	200 U	200 U	38.7 UB	43.8 J	36 UB	53.3 J	82.3 UB	58.6 J	57.2 UB
Barium	1000	54.5 J	55.8 J	69 J	63.5 J	40.8 J	40.5 J	23.1 J	22 J	83.1 J	80.6 J	32.8 J	33.3 J	112 J	112 J
Calcium	--	9680	10100	56500	52800	11600	12000	1750	1680	30600	29500 J	55400	59100	18600	19300
Chromium	50	10 U	10 U	3.6 J	3.3 J	10 U	10 U	10 U	10 U	10 U	10 U	1.3 J	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***11200***	***11700***	***13400***	***12700***	100 U	20 U	100 U	8 J	***20900***	***19800 J***	***6460***	***6990***	***14000***	***14700***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	6150	6390	31700	29300	4780	4830	1610	1610	30900	28900	13200	13500	13500	13800
Manganese	300 #	***1710***	***1810***	***220***	***210***	***2460***	***2400***	9.5 J	9.2 J	***51.3***	***49 J***	***150***	***162***	***192***	***203***
Mercury	0.7	--	0.2 U	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	40 U	4.3 J	10.6 J	9.2 J	7.3 J	40 U	5.8 J	4.4 J	5.7 J	6.3 J	19.9 UB	13 J	17.5 UB	8.6 J
Potassium	--	10800	10900	93600	93100	8680	9220	2460 J	1780 UB	102000	97300	55400	56400	29600	29800
Sodium	20000	***60300***	***63400***	***331000***	***317000***	***57100***	***58700***	7110	7210	***109000***	***98700***	***246000 J***	***274000***	***126000 J***	***136000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5 J	20 UJ	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Not detected base on blank results
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-06F	MW-06F	MW-08A	MW-08A	MW-08B	MW-08B	MW-09B	MW-09B	MW-09C	MW-09C	OBS-1	OBS-1
Sample Date		5/9/23	5/9/23	5/5/23	5/5/23	5/5/23	5/5/23	5/1/23	5/1/23	5/1/23	5/1/23	5/1/23	5/1/23
Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l													
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	233	260	56.7 J	52.4 UB	200 U	41.8 UB	33.9 UB	200 U	32.3 UB	200 U	35 UB	200 U
Barium	1000	257	252	69.2 J	64.8 J	67 J	63.9 J	82.4 J	83.2 J	57.5 J	57.6 J	31.3 J	32.4 J
Calcium	--	44000	44800	7480	7420 J	14300	13900 J	11000	11600	9250	9680	10700	11600
Chromium	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	3.9 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	100 U	8.5 J	100 U	20 U	100 U	20 U	100 U	20 U	100 U	20 U	***23.7 J***	***23.5***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	17000	17100	5130	4720	4120	3930	5420	5490	5850	6050	6760	7060
Manganese	300 #	141	144	135	118 J	***554***	***535 J***	***2000***	***2000***	232	243	***2270***	***2330***
Mercury	0.7	0.26	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	30.6 J	30.3 J	9.4 J	10.2 J	16.2 J	16.2 J	40 U	40 U	5.3 J	40 U	40 U	40 U
Potassium	--	10400	10200	5870	5520	7830	7660	9160	9660	9870	10800	17000	18400
Sodium	20000	***180000***	***183000***	19200	17700	***91800***	***89900***	***54800***	***56100***	***55900***	***59400***	***40100***	***42300***
Zinc	2000	24.6	23.6	9.9 J	7.7 J	26.9	26.9 J	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Not detected base on blank results
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID Sample Date	LF-1 5/10/23	LF-2 5/10/23	MW-05B 5/1/23	MW-06A 5/9/23	MW-06B 5/5/23	MW-06C 5/9/23	MW-06E 5/9/23	MW-06F 5/9/23	MW-08A 5/5/23	MW-08B 5/5/23	MW-09B 5/1/23	MW-09C 5/1/23	OBS-1 5/1/23
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	57.4	1100	42.5	2.1 J	1020	708	217	1 U	33.5	9.2	48.8	94.5	163
Alkalinity,Bicarbonate	---	57.4	1100	42.5	2.1 J	1020	708	217	1 U	33.5	9.2	48.8	94.5	163
Alkalinity,Carbonate	---	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
Chloride	250	99.4	240	102	10.1	69	***267***	211	***426***	30.5	173	101	104	54.8
Cyanide	0.2	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hardness	---	49.5	272	48.6	11	204	193	102	180	39.8	52.7	49.8	47.2	54.6
Hexavalent Chromium	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 UJ	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	0.11	***72.9***	0.1 U	0.1 U	***160 J***	***56.4***	***26.5***	0.17	0.1 U	0.06 J	1	1.3	***12.8***
Nitrogen, Kjeldahl, Total	---	0.74	85.3	0.1 U	0.23	110	49.7	23.2	0.89	0.18	0.1 U	0.72	1.7	12.8
Nitrate	10	0.05 UJ	0.05 UJ	0.5 U	0.4 J	0.05 UJ	0.05 UJ	1.9 J	4.1 J	1.4 J	2.3 J	0.64	1.5	0.17
Nitrite	1	0.028 J	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.0055 U	0.0055 U	0.005 U	0.0055 U	***0.0278***	***0.0151***	***0.0037***	0.005 U	0.005 U	***0.0034 J***	***0.0028 J***	0.0050 U	0.005 U
Sulfate	250	21.9	31.8	20.1	6.7	0.94 UB	1.7 J	40.6	0.23 UB	29.9	26.2	19	18.9	19.1
Total Dissolved Solids	500	264 J	***690 J***	266 J	29	***594***	***950***	496	***692***	115	394	262 J	256 J	202 J

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Non-detect based on blank results
J	Estimated detection limit or value
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

APPENDIX A

GROUNDWATER SAMPLING LOGS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/01/2022

WELL ID: **OBS-1** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 194.75'
Initial static water level (feet from top of casing) ..... 51.29'
Approximate Pump Inlet (feet from top of casing)..... 56'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

2 in. casing:		ft. of water x 0.16 =		gallons
3 in. casing:		ft. of water x 0.36 =		gallons
4 in. casing:	143.46	ft. of water x 0.65 =	93.25	gallons

volume of water removed:
375 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.73	15.95	0.372	0.7	6.60	217
50	6.05	16.41	0.421	2.2	0.62	86
100	5.86	16.43	0.416	4.5	0.00	97
150	5.74	16.43	0.415	8.6	0.00	107
200	5.70	16.43	0.415	9.4	0.00	109
250	5.59	16.42	0.414	0.0	0.00	111
300	5.70	16.41	0.413	0.0	0.00	109
350	5.76	16.40	0.412	0.0	0.00	107
375	5.77	16.41	0.412	0.0	0.00	107

Purging Rate: 5.0 GPM
Purging Time: 75 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 9:45 a.m.

Method:

X	Submersible Pump
X	In-Line Filter (Diss. Metals)
	Pos. Disp. Pump
	Disposable bailer

Analyses: (Pace Analytical Laboratory)

X	VOCs
X	Total & Dissolved Metals
	Leachate
X	Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F, Breezy
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/01/2023

WELL ID: **MW-09C** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 225' historical log
Initial static water level (feet from top of casing) 94.51
Approximate Pump Inlet (feet from top of casing) ..... 99'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 130.49 ft. of water x 0.65 = 84.82 gallons

volume of water removed: 360 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.42	15.31	0.298	3.8	0.01	263
40	5.21	15.90	0.372	1.2	0.00	265
80	5.43	15.95	0.403	0.0	0.90	242
120	5.39	15.96	0.403	0.0	0.00	241
160	5.44	15.96	0.405	0.0	0.00	234
200	5.45	15.97	0.405	0.0	0.00	234
240	-	-	-	-	-	-
280	5.50	15.99	0.405	0.0	0.00	226
320	5.52	16.00	0.405	0.0	0.00	223
360	5.56	16.01	0.405	0.0	0.00	220

Purging Rate: 4.0 GPM
Purging Time: 90 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 12:45 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F, Breezy
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/01/2023

WELL ID: **MW-09B** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) 169.10
Initial static water level (feet from top of casing) ..... 93.21'
Approximate Pump Inlet (feet from top of casing) ..... 98'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 75.89 ft. of water x 0.65 = 49.32 gallons

volume of water removed: 270 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.50	15.08	0.365	1.9	11.60	250
30	5.51	15.41	0.390	0.7	0.00	286
60	5.39	15.44	0.397	0.6	0.00	285
90	5.31	15.42	0.397	0.0	0.00	255
120	5.31	15.50	0.398	0.0	0.00	247
150	5.34	15.43	0.397	0.0	0.00	241
180	5.23	15.46	0.397	0.0	0.00	241
210	5.34	15.43	0.397	0.2	1.80	228
240	5.40	15.42	0.397	0.2	1.44	223
270	5.40	15.41	0.397	0.0	1.29	223

Purging Rate: 3.0 GPM
Purging Time: 90 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 2:40 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F, Breezy
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/01/2023

WELL ID: **MW-05B** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing)..... 117.25'
Initial static water level (feet from top of casing)..... 76.48'
Approximate Pump Inlet (feet from top of casing)..... 82'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 40.77 ft. of water x 0.65 = 26.5 gallons

volume of water removed: 150 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.20	16.01	0.405	1.3	15.00	247
30	5.72	16.21	0.404	0.0	1.05	271
60	5.44	16.25	0.404	0.0	0.00	262
90	5.37	16.30	0.403	0.0	0.00	248
120	5.33	16.37	0.403	0.0	0.00	241
150	5.35	16.39	0.403	0.0	0.00	236

Purging Rate: 3.0 GPM
Purging Time: 50 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling

Time of Sample Collection: 4:30 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations

Weather/Temperature: Partly Cloudy, 50-60F, Breezy
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/05/2023

WELL ID: **MW-08B** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 160.20'
Initial static water level (feet from top of casing) ..... 71.91'
Approximate Pump Inlet (feet from top of casing) ..... 77'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

2 in. casing:		ft. of water x 0.16 =		gallons
3 in. casing:		ft. of water x 0.36 =		gallons
4 in. casing:	88.29	ft. of water x 0.65 =	57.39	gallons

volume of water removed: 180 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	5.96	14.04	0.669	1.8	2.91	209
20	5.65	14.31	0.703	0.6	2.75	226
40	5.44	14.28	0.674	0.0	0.00	237
60	5.42	14.28	0.657	0.0	0.00	240
80	5.12	14.27	0.607	0.0	0.00	264
100	5.01	14.40	0.603	0.0	0.00	270
120	4.99	14.33	0.590	0.0	0.00	280
140	4.90	14.33	0.580	0.0	0.00	290
160	4.84	14.33	0.575	0.0	0.00	301
180	4.88	14.33	0.573	0.0	0.00	304

Purging Rate: 2.0 GPM
Purging Time: 90 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 12:05 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Sunny, Clear Skies, 55-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/05/2023

WELL ID: **MW-08A** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 80.80'
Initial static water level (feet from top of casing) 72.50
Approximate Pump Inlet (feet from top of casing) ..... 77'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 8.3 ft. of water x 0.65 = 5.4 gallons

volume of water removed: 40 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	4.20	14.62	0.105	1.0	5.28	339
5	4.12	14.81	0.107	0.5	3.58	351
10	4.03	14.64	0.120	0.0	3.04	367
15	4.06	14.62	0.123	0.0	2.87	369
20	4.09	14.51	0.142	0.0	2.74	375
25	4.28	14.48	0.166	0.0	2.72	369
30	4.42	14.49	0.168	0.0	2.60	366
40	4.42	14.49	0.168	0.0	2.60	366

Purging Rate: 1.0 GPM
Purging Time: 40 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 1:15 p.m.

Method:
X Submersible Pump
X In-Line Filter (Diss. Metals)
____ Pos. Disp. Pump
Disposable bailer
____
____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
X VOCs
X Total & Dissolved Metals
Leachate
X Parameters

Observations
Weather/Temperature: Sunny, Clear Skies, 55-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/05/2022

WELL ID: **MW-06B** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 134.90'
Initial static water level (feet from top of casing) 98.90
Approximate Pump Inlet (feet from top of casing) ..... 103'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 36.0 ft. of water x 0.65 = 23.4 gallons

volume of water removed: 100 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.25	16.59	1.22	3.9	5.27	-50
20	6.11	16.93	2.01	1.4	0.00	-100
40	6.11	16.93	2.01	1.5	0.00	-100
60	6.15	16.95	2.01	0.5	0.00	-105
80	6.26	16.96	2.00	0.0	0.00	-111
100	6.24	16.96	2.00	0.0	0.00	-108

Purging Rate: 2 GPM
Purging Time: 50 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 3:00 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- Disposable bailer
- ____
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Sunny, Clear Skies, 55-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Slight leachate odor

Note – Collected blind duplicate at MW-06B

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/09/2023

WELL ID: **MW-06E** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 251' historical log
Initial static water level (feet from top of casing) ..... 99.35'
Approximate Pump Inlet (feet from top of casing) ..... 104'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 151.65 ft. of water x 0.65 = 98.6 gallons

volume of water removed: 300 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.33	16.79	1.09	5.2	5.33	-93
50	6.32	17.38	1.11	1.4	0.00	-102
100	6.20	17.38	1.07	40	0.00	-83
150	6.02	17.39	0.974	7.3	0.00	-62
200	6.03	17.37	1.07	1.3	0.00	-60
250	6.04	17.38	1.07	0.0	0.00	-55
300	6.02	17.40	1.08	0.0	0.00	-50

Purging Rate: 2.5 GPM
Purging Time: 120 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 11:20 a.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- ____ Leachate
- X Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/09/2023

WELL ID: **MW-06C** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 160.90'
Initial static water level (feet from top of casing) ..... 98.70'
Approximate Pump Inlet (feet from top of casing) ..... 103'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 62.2 ft. of water x 0.65 = 40.3 gallons

volume of water removed: 140 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.65	17.08	1.70	0.3	8.96	-101
20	6.60	17.48	1.78	0.1	1.64	-106
40	6.65	17.62	1.97	0.0	0.00	-116
60	6.67	17.61	1.98	0.0	0.00	-119
80	6.61	17.64	2.00	0.2	0.00	-120
100	6.63	17.64	2.00	0.0	0.00	-121
120	6.67	17.67	2.01	0.0	0.00	-126
140	6.67	17.67	2.01	0.0	0.00	-126

Purging Rate: 2.5 GPM
Purging Time: 56 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 1:15 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- X Leachate Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F
Sample description: Clear, leachate odor present, slight yellow tint
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Leachate odor

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/09/2023

WELL ID: **MW-06F** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 349' historical log
Initial static water level (feet from top of casing) ..... 98.85'
Approximate Pump Inlet (feet from top of casing) ..... 111'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 250.15 ft. of water x 0.65 = 162.60 gallons

volume of water removed: 500 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	4.66	18.11	1.21	1.3	0.65	326
100	4.38	17.65	1.29	0.8	0.60	371
200	4.11	17.21	1.32	0.6	0.38	411
300	4.08	17.17	1.32	0.0	0.00	421
400	4.10	17.16	1.33	0.0	0.00	415
500	4.13	17.38	1.33	0.0	0.00	416

Purging Rate: 2.5 GPM
Purging Time: 200 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 5:30 p.m.

Method:
X Submersible Pump
X In-Line Filter (Diss. Metals)
____ Pos. Disp. Pump
Disposable bailer
____
____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
X VOCs
X Total & Dissolved Metals
Leachate
X Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/09/2023

WELL ID: **MW-06A** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 100.40'
Initial static water level (feet from top of casing) ..... 98.50'
Approximate Pump Inlet (feet from top of casing) ..... 100'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: ____ ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: 1.9 ft. of water x 0.65 = 1.24 gallons

volume of water removed: 25 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.42	16.14	0.076	43.0	11.97	14
5	5.77	16.33	0.054	16.0	3.64	64
10	5.29	16.57	0.048	7.0	2.85	106
15	4.92	16.84	0.054	0.5	2.76	194
20	4.85	16.84	0.055	1.6	2.99	204
25	4.84	16.85	0.055	0.5	3.05	205

Purging Rate: 1.25 GPM
Purging Time: 25 min
Sampling Rate: *0.1l/min VOCs / 0.5l/min Other Analytes*

Sampling
Time of Sample Collection: 6:30 p.m.

Method:
- X Submersible Pump
- X In-line filter (Diss Metals)
- ____ Pos. Disp. Pump
- Disposable bailer
- ____
- ____ Dedicated pump

Analyses: (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Partly Cloudy, 50-60F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/10/2023

WELL ID: **LF-2** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 102.10'
Initial static water level (feet from top of casing) ..... 55.70'
Approximate Pump Inlet (feet from top of casing)..... 60'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

2 in. casing:		ft. of water x 0.16 =		gallons
3 in. casing:		ft. of water x 0.36 =		gallons
6 in. casing:	46.4	ft. of water x 1.47 =	68.2	gallons

volume of water removed: 260 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	7.03	17.08	2.46	9.5	11.99	-142
60	6.73	17.32	2.44	0.0	0.00	-136
120	6.74	17.37	2.47	0.6	0.00	-138
140	6.70	17.39	2.47	0.0	0.00	-139
200	6.76	17.40	2.47	0.0	0.00	-141
240	6.72	17.43	2.52	0.0	0.00	-137
260	6.72	17.43	2.52	0.0	0.00	-141

Purging Rate: 4.0 GPM
Purging Time: 80 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 10:35 a.m.

Method:
- X Submersible Pump
- X In-line filter (Diss. metals)
- ____ Pos. Disp. Pump
- Disposable bailer
- ____
- ____ Dedicated pump

Analyses (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- Leachate
- X Parameters

Observations
Weather/Temperature: Clear Skies, 60-65F
Sample description: Clear - Yellow tint
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Leachate odor

D&B ENGINEERS AND ARCHITECTS

TOWN OF OYSTER BAY LANDFILL SAMPLING
FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Town of Oyster Bay Landfill DATE 05/10/2023

WELL ID: **LF-1** Time On-site: Time Off-site:
SAMPLERS: KR

Depth of well (feet from top of casing) ..... 102.00'
Initial static water level (feet from top of casing) ..... 47.99'
Approximate Pump Inlet (feet from top of casing) ..... 53'

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Disposable Bladder Pump (Low Flow)	

Well Volume Calculation:

2 in. casing:		ft. of water x 0.16 =		gallons
3 in. casing:		ft. of water x 0.36 =		gallons
6 in. casing:	54.01	ft. of water x 1.47 =	79.39	gallons

volume of water removed:
300 gal. >3 volumes: yes X no ____ purged dry? yes ____ no X

Field Tests

Volume of Purge Water (Gallons)	pH	Temp (c°)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	6.65	17.59	0.409	11.3	11.28	13
60	6.17	17.08	0.420	11.7	0.00	-50
120	6.21	17.06	0.419	2.1	0.00	-64
180	6.18	17.06	0.420	0.0	0.00	-66
240	6.23	17.04	0.421	0.0	0.00	-73
300	6.21	17.02	0.421	0.0	0.00	-75

Purging Rate: 3.5 GPM
Purging Time: 85 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 4:30 p.m.

Method:
- X Submersible Pump
- X In-Line Filter (Diss. Metals)
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump

Analyses (Pace Analytical Laboratory)
- X VOCs
- X Total & Dissolved Metals
- ____ Leachate
- X Parameters

Observations
Weather/Temperature: Clear Skies, 60-65F
Sample description: Clear, no odor
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

Note – Collected field duplicate at LF-1

D&B ENGINEERS AND ARCHITECTS

APPENDIX B

CHAIN OF CUSTODY FORMS

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be co

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.co

WO# : 70255436

70255436

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Town of Oyster Bay	Report To:	Russo, Matt	Attention:	MATT Russo
Address:	150 Miller Place	Copy To:	Keith Robins (D+B Engineers)	Company Name:	Town of Oyster Bay
Syosset, NY 11791				Address:	150 Miller Place, Syosset NY 11791
Email:	mrusso@tobays.net	Purchase Order #:		Pace Quote:	
Phone:	NONE Fax:	Project Name:	Old Bethpage Landfill	Pace Project Manager:	giovanna.deloca@pacelabs.com,
Requested Due Date:	Standard	Project #:	3617 '07 First Qui Groundwater Event - 2023	Pace Profile #:	6466

State / Location
NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Requested Analysis Filtered (Y/N)	N	N	N	N	Y	N	N	N	
1	Trip Blank - 5/5/2023	WT	-	5/5/23	—	5/5/23	—		2	—	—	-	2	-	—	—	—		✓	—	—	—	—	—	—	—	N
2	MW-108B - 5/5/23	WT	G	5/5/23	1205 pm	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓	N
3	MW-08A - 5/5/23	WT	G	5/5/23	1155 am	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓	N
4	MW-06B - 5/5/23	WT	G	5/5/23	300 pm	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓	N
5	Blind Duplicate - 1 - 5/5/23	WT	G	5/5/23	0000	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓	N
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/5/2023	4:45 pm		5.5.23	1655	6.2	Y	Y	
Provide category "B" and EDDs deliverables										
Send data to Lab Data@db-engineers.com										
Sample bottles denoted with (F) were field filtered for dissolved metals, Cr+6										

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Keith Robins					
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5/5/2023				

Pace Analytical®

Client Name: D+B

WO# : 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N,

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: TH0 TH148 Correction Factor: -3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 5.2 Cooler Temperature Corrected(°C): 4.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: TH 5-5-23 1655

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☐Yes	☐No		1.
Chain of Custody Filled Out:	☐Yes	☐No		2.
Chain of Custody Relinquished:	☐Yes	☐No		3.
Sampler Name & Signature on COC:	☐Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☐Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☐No		6.
Rush Turn Around Time Requested:	☐Yes	☐No		7.
Sufficient Volume: (Triple volume provided for I	☐Yes	☐No		8.
Correct Containers Used:	☐Yes	☐No		9.
-Pace Containers Used:	☐Yes	☐No		
Containers Intact:	☐Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Matrix: SL WT OIL	☐Yes	☐No		12.
All containers needing preservation have been checked?	☐Yes	☐No	☐N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐Yes	☐No	☐N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☐Yes	☐No	☐N/A	14.
KI starch test strips Lot #.				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☐Yes	☐No	☐N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☐N/A	16.
Trip Blank Present:	☐Yes	☐No	☐N/A	17.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

CHAIN-OF-CUSTODY / Analytical Request D

WO#: 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Pace

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pa

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Town of Oyster Bay	Report To: Russo, Matt	Attention: MATT Russo
Address: 150 Miller Place	Copy To: Keith Robins (D+B Engineers)	Company Name: Town of Oyster Bay
Syosset, NY 11791		Address: 150 Miller Place Syosset NY 11791
Email: mrusso@tobays.net	Purchase Order #:	Pace Quote:
Phone: NONE Fax	Project Name: Old Bethpage Landfill	Pace Project Manager: giovanna.deloca@pacelabs.com,
Requested Due Date: Standard	Project #: 3617-07 First Semiannual Event - 2023	Pace Profile #: 6466

Regulatory Agency	
State / Location	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Requested Analysis Filtered (Y/N)	N	N	N	N	N	N	N	N	
1	TRIP Blank - 5/09/2023	WT	-	5/9/23	-	5/9/23	-		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-		N
2	MW-06E	WT	G	5/9/23	1120 am	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
3	MW-06C	WT	G	5/9/23	115 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
4	MW-06F	WT	G	5/9/23	530 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
5	MW-06A	WT	G	5/9/23	630 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/10/23	0828		5/10/23	08:28	5.2	4	4	4
Provide Category "B" and EQuIS deliverable										
Send data to Lab data @ d6-mail.com										
Samples bottles denoted with "F" were field filtered for dissolved metals										

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Keith Robins					
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5-10-23				

Pace Analytical®

Client Name: Town of Oyster Bay

Pro

WO#: 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No ☑ N/A

Temperature Blank Present: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: THO TH148 Correction Factor: -0.3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 5.2 Cooler Temperature Corrected(°C): 4.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Date and Initials of person examining contents: M.C. 5/10/23

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL	☑ Yes			
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC298085				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☑ Yes	☐ No	☐ N/A	14.
KI starch test strips Lot # 14-862				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 14-860				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☑ Yes	☐ No	☐ N/A	17.
Trip Blank Custody Seals Present	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0029-01

WO#: 70255436

PM: KMM **Due Date: 05/24/23**

CLIENT: TOY

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

...constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Section C

Page : 1 Of 1

Required Client Information:		roject Information:	Invoice Information:
Company: Town of Oyster Bay		Report To: Russo, Matt	Attention: MATT RUSSO
Address: 150 Miller Place		Copy To: Keith Robins (D+B Engineers)	Company Name: Town of Oyster Bay
Syosset, NY 11791			Address: 150 Miller Place, Syosset, NY 11791
Email: mrusso@tobays.net		Purchase Order #:	Pace Quote:
Phone: NONE	Fax:	Project Name: Old Bethpage Landfill	Pace Project Manager: giovanna.deloca@pacelabs.com,
Requested Due Date: Standard		Project #: 3617-07 First Semiannual Groundwater Event 2023	Pace Profile #: 6466

Regulatory Agency	State / Location
	NY

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Y/N	N	N	N	N	N	N	N	N	
1	TRIP Blank - 5/10/23	WT	-	5/10/23	-	5/10/23	-		2	-	-	-	2	-	-	-	-	Analyses Test	✓	-	-	-	-	-	-	-	N
2	LF-2 - 5/10/23	WT	G	5/10/23	1035	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
3	LF-1 - 5/10/23	WT	G	5/10/23	1130	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
4	Field Blank - 5/10/23	WT	G	5/10/23	1145	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/10/2023	6:00 PM	SJ FOCC I-J	5/10/23	6:03	1.2	Y	N	Y
Sample bottles denoted with (F) were field filtered for dissolved metals										
Send data to Lab data@dbengineers provide category "B" and EQuIS										

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Keith Robins	
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5/10/2023

Pace Analytical®

Client Name: Pro

WO#: 70255436

PM: KMM **Due Date: 05/24/23**

CLIENT: TOY

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No ☑ N/A

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: THO TH148 Correction Factor: -0.3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 1.2 Cooler Temperature Corrected(°C): 0.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Date and Initials of person examining contents: A. S 5/10

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☑ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL AR Oil				
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC 943088				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #.				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 14-800				Positive for Sulfide? Y (N)
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☑ Yes	☐ No A.S 5/10/23	☐ N/A	17.
Trip Blank Custody Seals Present	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS

ENV-FRM-MELV-0029-01

WO# : 70254720

70254720

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

...stitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Town of Oyster Bay	Report To:	Russo, Matt	Attention:	MATT RUSSO
Address:	150 Miller Place	Copy To:	Keith Robins (D+B Engineers)	Company Name:	Town of Oyster Bay
	Syosset, NY 11791			Address:	150 miller place
Email:	mrusso@tobays.net	Purchase Order #:		Pace Quote:	
Phone:	NONE Fax:	Project Name:	Old Bethpage Landfill	Pace Project Manager:	giovanna.deloca@pacelabs.com,
Requested Due Date:	Standard	Project #:	3617-07	Pace Profile #:	~~6466~~ 6501a DR 5/1/23

Regulatory Agency	
State / Location	NY

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Requested Analysis Filtered (Y/N)	N	N	N	N	N	N	N	N		
1	Trip Blank - 5/1/2023	WT	-	5/1/23	—	5/1/23	—		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-	-	N	001
2	OBS-1 - 5/1/2023	WT	G	5/1/23	0945	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	002, 006
3	MW-09C - 5/1/2023	WT	G	5/1/23	1245 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	003, 007
4	MW-09B - 5/1/2023	WT	G	5/1/23	240 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	004, 008
5	MW-05B - 5/1/2023	WT	G	5/1/23	430 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	005, 009
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/1/2023	515 pm	[signature] / PACE	5/1/23	17:15	0.6	Y W	N	Y
D+B field filtered for dissolved metals denoted with "F" on bottles										
Send data to Lab data@db-eng.com Provide Catagory "B" deliverables + EQuIS										

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Keith Robins		
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	5/1/2023

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Sample Condition Upon Receipt

Pace Analytical®

WO#: 70254720

PM: KMM Due Date: 05/16/23

CLIENT: TOY

Client Name: Town of Oyster Bay Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☐ No ☒ N/A Temperature Blank Present: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Ziploc ☐ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: THO: TH148 Correction Factor: -0.3 ☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 0.6 Cooler Temperature Corrected(°C): 0.3 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample) Date and Initials of person examining contents: KJO 5/11/23

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☒ Yes	☐ No		1.
Chain of Custody Filled Out:	☒ Yes	☐ No		2.
Chain of Custody Relinquished:	☒ Yes	☐ No		3.
Sampler Name & Signature on COC:	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☒ Yes	☐ No		6.
Rush Turn Around Time Requested:	☒ Yes	☐ No		7.
Sufficient Volume: (Triple volume provided for I	☒ Yes	☐ No		8.
Correct Containers Used:	☒ Yes	☐ No		9.
-Pace Containers Used:	☒ Yes	☐ No		
Containers Intact:	☒ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☒ Yes	☐ No	☐ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☒ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL				
All containers needing preservation have been checked?	☒ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC210330				
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☒ Yes	☐ No	☐ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☒ N/A	14.
KI starch test strips Lot #. Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide?	☐ Yes	☐ No	☒ N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☒ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☒ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

APPENDIX C

DATA VALIDATION CHECKLIST

DATA VALIDATION CHECKLIST

Project Name:	Old Bethpage Landfill
Project Number:	3617-05
Sample Date(s):	May 1, 2023
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 4 Field Duplicates/ 0 Trip Blanks / 1 Field Blanks/ 0
Analyzing Laboratory:	Pace Analytical, Melville, NY and Phenolics were subcontracted to Microbac Laboratories, Inc., Marietta, OH
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: Total and dissolved by USEPA 200.7 and mercury by USEPA 245.1 General Chemistry: Alkalinity (SM2320B), Hardness (SM2340B), Total Dissolved Solids (SM 2540C), Hexavalent Chromium (SM22 3500), Chloride (SM22 4500), Sulfate (USEPA 300.0), Total Kjeldahl Nitrogen (TKN) (USEPA 351.2), Nitrate-Nitrite and Nitrite (USEPA 353.2), Ammonia (SM22 4500), Phenolics (USEPA 420.1), and Cyanide (SM22 4500)
Laboratory Report No:	70254720 (M3E199) Date: 5/18/2023

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, November 2020, or USEPA National Functional Guidelines of Inorganic Data Review, November 2020, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS

Custody Numbers:70254720
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
TRIP BLANK	70254720001	5/1/2023		X				
OBS-1	70254720002-6	5/1/2023		X			X	X
MW-09C	70254720003-7	5/1/2023		X			X	X
MW-09B	70254720004-8	5/1/2023		X			X	X
MW-05B	70254720005-9	5/1/2023		X			X	X

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) and MS duplicate %R		X	X		
4. Duplicate RPD		X		X	
5. Laboratory control sample (LCS) %R		X		X	
6. Surrogate spike recoveries		X		X	
7. Field duplicate					X

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2C. The field blank was analyzed in data package 70255436. No VOCs were detected in the field blank.

3. The %R was above the QC limit in the MS duplicate for dibromochloromethane associated with all samples. It was not detected in the samples therefore qualification of the data was not necessary.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Field blanks		X		X	
3. Laboratory control sample %R		X		X	
4. Spike sample %R		X		X	
5. Duplicate RPD		X		X	
6. Total verse dissolved results		X		X	
7. Field duplicate					X

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2. Total aluminum was detected in the method blank. The field blank was analyzed in data package 70255436 with dissolved aluminum and total potassium detected. Total aluminum was qualified as non-detect (UB) in all samples.

INORGANIC ANALYSES
GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Field blanks		X	X		
3. Laboratory spike %R		X		X	
4. Laboratory duplicate RPD		X	X		
5. Matrix spike %R		X		X	
6. Field duplicate					X

%R percent recovery RPD - relative percent difference %D – percent difference
RSD - relative standard deviation

Comments:
Performance was acceptable, except the following:

Numerous samples were originally analyzed for alkalinity at a dilution. Based on these results, the samples were reanalyzed at no dilution and the non-diluted results were reported.

2. The field blank was analyzed in data package 70255436 with sulfate detected. No qualification of the data was necessary.

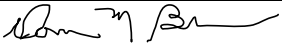
4. The RPD was above the QC limit in the duplicate for total dissolved solids associated with all samples and was qualified as estimated (J).

D&B ENGINEERS AND ARCHITECTS

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:70254720

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
No qualification of the data was necessary.			
Metals			
All samples	Total aluminum	UB	Detected in the Blanks
General Chemistry			
Numerous samples	Alkalinity		Originally analyzed at a dilution, reanalyzed at no dilution and the non-diluted results were reported.
All samples	Total dissolved solids	J	The RPD was above QC limit in the laboratory duplicate

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 8/15/2023
VALIDATION PERFORMED BY SIGNATURE:	

D&B ENGINEERS AND ARCHITECTS

DATA VALIDATION CHECKLIST

Project Name:	Old Bethpage Landfill
Project Number:	3617-05
Sample Date(s):	May 5-10, 2023
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 9 Field Duplicates/ 1 Trip Blanks / 3 Field Blanks/ 1
Analyzing Laboratory:	Pace Analytical, Melville, NY and Phenolics were subcontracted to Microbac Laboratories, Inc., Marietta, OH
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C Metals: Total and dissolved by USEPA 200.7 and mercury by USEPA 245.1 General Chemistry: Alkalinity (SM2320B), Hardness (SM2340B), Total Dissolved Solids (SM 2540C), Hexavalent Chromium (SM22 3500), Chloride (SM22 4500), Sulfate (USEPA 300.0), Total Kjeldahl Nitrogen (TKN) (USEPA 351.2), Nitrate-Nitrite and Nitrite (USEPA 353.2), Ammonia (SM22 4500), Phenolics (USEPA 420.1), and Cyanide (SM22 4500)
Laboratory Report No:	70255436 (M3E0662&M3E0868) Date: 5/26/2023

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, November 2020, or USEPA National Functional Guidelines of Inorganic Data Review, November 2020, method performance criteria, and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS

Custody Numbers:70255436
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
TRIP BLANK	70255436001	5/5/2023		X				
MW-08B	70255436002	5/5/2023		X			X	X
MW-08A	70255436003	5/5/2023		X			X	X
MW-06B	70255436004	5/5/2023		X			X	X
BLIND DUPLICATE-1	70255436005	5/5/2023	MW-06B	X			X	X
TRIP BLANK	70255436007	5/9/2023		X				
MW-06E	70255436008-9	5/9/2023		X			X	X
MW-06C	70255436010-11	5/9/2023		X			X	X
MW-06F	70255436012-13	5/9/2023		X			X	X
MW-06A	70255436014-15	5/9/2023		X			X	X
TRIP BLANK	70255436016	5/10/2023		X				
LF-2	70255436017-18	5/10/2023		X			X	X
LF-1	70255436019-20	5/10/2023		X			X	X
FIELD BLANK	70255436021-22	5/10/2023		X			X	X

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks		X		X	
3. Matrix spike (MS) & MS duplicate %R		X	X		
4. Duplicate RPD		X		X	
5. Laboratory control sample (LCS) %R		X		X	
6. Surrogate spike recoveries		X		X	
7. Field duplicate		X		X	

VOCs - volatile organic compounds %R - percent recovery RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

3. The %R was above the QC limit in the MS and MS duplicate for vinyl chloride associated with all samples. It was not detected therefore qualification of the data was not necessary.

INORGANIC ANALYSES
METALS

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X	X		
B. Field blanks		X	X		
3. Laboratory control sample %R		X		X	
4. Spike sample %R		X	X		
5. Duplicate RPD		X	X		
6. Total verse dissolved results		X		X	
7. Field duplicate		X		X	

%R - percent recovery %D - percent difference RPD - relative percent difference

Comments:
Performance was acceptable, except the following:

2. The following metals were detected in the blanks: total aluminum, calcium, iron, and magnesium associated with sample MW-08B; total nickel associated with samples MW-06E and MW-06C; and total potassium and dissolved aluminum associated with all samples. The following metals were qualified as non-detect (UB): dissolved aluminum in samples LF-1, LF-2, MW-06A, MW-06B, BLIND DUPLICATE, MW-06C, MW-06E, MW-08A, and MW-08B; total potassium in sample MW-06A; and total nickel in samples MW-06E and MW-06C.

4. The %R was below the QC limit in the matrix spike for total sodium associated with samples MW-06E and MW-06C. It was qualified as estimated (J) in samples MW-06E and MW-06C.

   The %Rs were above the QC limits in the matrix spike for dissolved aluminum, barium, calcium, chromium, iron, manganese, and zinc associated with samples MW-08B, MW-08A, MW-06B, and BLIND DUPLICATE-1. The following were qualified as estimated (J): dissolved iron associated with samples MW-06B, and BLIND DUPLICATE-1; dissolved calcium and manganese associated with samples MW-08B, MW-08A, MW-06B, and BLIND DUPLICATE-1; and dissolved zinc associated with sample MW-08B.

5. The RPD was above the QC limit in the duplicate for total zinc associated with samples MW-08A, MW-06B, and BLIND DUPLICATE-1 and was qualified as estimated (J/UJ).

INORGANIC ANALYSES
GENERAL CHEMISTRY

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Holding times		X	X		
2. Blanks					
A. Method blanks		X	X		
B. Field blanks		X	X		
3. Laboratory spike %R		X	X		
4. Laboratory duplicate RPD		X	X		
5. Matrix spike %R		X	X		
6. Field duplicate		X	X		

%R percent recovery RPD - relative percent difference %D – percent difference
RSD - relative standard deviation

Comments:
Performance was acceptable, except the following:

Numerous samples were originally analyzed for alkalinity at a dilution. Based on these results, the samples were reanalyzed at no dilution and the non-diluted results were reported.

1. Total and dissolved hexavalent chromium were analyzed outside of holding times associated with samples MW-06C, MW-06E, and MW-06F and it was qualified as an estimated detection limit (UJ).

2. Sulfate was detected in the blanks. Sulfate was qualified as non-detect (UB) in samples MW-06B, BLIND DUPLICATE, and MW-06F.

3&5. The %R was below the QC limit in the LCS and/or matrix spike for alkalinity carbonate associated with samples MW-06E, MW-06C, MW-06F, MW-06A, LF-2, LF-1, and FIELD BLANK; nitrate-nitrite associated with all samples; and nitrite associated with samples MW-08A and MW-06B and were qualified as estimated (J/UJ).

4. The RPD was above the QC limit in the duplicate for total dissolved solids associated with samples LF-2, LF-1, and FIELD BLANK and was qualified as estimated (J).

6. Sample MW-06B was field duplicated and labeled BLIND DUPLICATE-1. Based on field duplicate results ammonia was qualified as estimated (J) in samples MW-06B and BLIND DUPLICATE-1.

D&B ENGINEERS AND ARCHITECTS

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:70255436

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
No qualification of the data was necessary.			
Metals			
LF-1, LF-2, MW-06A, MW-06B, BLIND DUPLICATE, MW-06C, MW-06E, MW-08A, and MW-08B	Dissolved aluminum	UB	Detected in the Blanks
MW-06A	Total potassium		
MW-06E and MW-06C	Total nickel		
MW-06E and MW-06C	Total sodium	J	The %R was below the QC limit in the matrix spike
MW-06B, and BLIND DUPLICATE-1	Dissolved iron	J	The %R was above the QC limit
MW-08B, MW-08A, MW-06B, and BLIND DUPLICATE-1	Dissolved calcium and manganese		
MW-08B	Dissolved zinc		
MW-08A, MW-06B, and BLIND DUPLICATE-1	Total zinc	J/UJ	The RPD was above the QC limit in the duplicate
General Chemistry			
Numerous samples	Alkalinity		Originally analyzed at a dilution, reanalyzed at no dilution and the non-diluted results were reported.
MW-06C, MW-06E, and MW-06F	Total and dissolved hexavalent chromium	UJ	Analyzed outside of holding times
MW-06B, BLIND DUPLICATE, and MW-06F	Sulfate	UB	Detected in the Field Blank and/or method blank
LF-2, LF-1, and FIELD BLANK	Total dissolved solids	J	The RPD was above QC limit in the laboratory duplicate
MW-06E, MW-06C, MW-06F, MW-06A, LF-2, LF-1, and FIELD BLANK	Alkalinity carbonate	J/UJ	The %R was below the QC limit in the LCS and/or matrix spike
All samples	Nitrate-nitrite		
MW-08A and MW-06B	Nitrite		
MW-06B and BLIND DUPLICATE-1	Ammonia	J	Field duplicate results

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 8/15/2023
VALIDATION PERFORMED BY SIGNATURE:	

APPENDIX D

LABORATORY DATA REPORTS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

May 18, 2023

Keith Robins
Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

RE: Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Dear Keith Robins:

Enclosed are the analytical results for sample(s) received by the laboratory on May 01, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kimberley Mack

Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Donna Brown, D&B Engineers and Architechts, P.C.
Tom Fox, D&B Engineers and Architechts, P.C.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

CERTIFICATIONS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 200.7**
Description: 200.7 Metals, Total
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 200.7 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 303530

B: Analyte was detected in the associated method blank.

- BLANK for HBN 303530 [MPRP/157 (Lab ID: 1538247)
  - Aluminum

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 303530

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70254497002,70254762001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1538252)
  - Sodium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 200.7**
Description: 200.7 Metals, Dissolved
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 200.7 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 2340B**
Description: 2340B Hardness, Total (Calc.)
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 2340B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 245.1**
Description: 245.1 Mercury
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 245.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 245.1**
Description: 245.1 Mercury, Dissolved
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 245.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
5 samples were analyzed for EPA 8260C/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304017

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70254720006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1541437)
  - Dibromochloromethane

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 303805

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255006005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1539515)
  - Alkalinity,Carbonate (CaCO3)

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 2540C**
Description: 2540C Total Dissolved Solids
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 2540C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 303870

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1539763)
  - Total Dissolved Solids

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 3500-Cr B**
Description: Chromium, Hexavalent
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
8 samples were analyzed for SM22 3500-Cr B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 300.0 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 351.2**
Description: 351.2 Total Kjeldahl Nitrogen
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 351.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 4500-CN-E**
Description: SM 4500 CNE Cyanide, Total
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 4500-CN-E by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM20/22 4500-CN-C with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 4500-Cl-E**
Description: 4500 Chloride
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 4500-Cl-E by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Method: **SM22 4500 NH3 H**
Description: 4500 Ammonia Water
Client: Town of Oyster Bay
Date: May 18, 2023

General Information:
4 samples were analyzed for SM22 4500 NH3 H by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: TRIP BLANK_5/1/2023 **Lab ID: 70254720001** Collected: 05/01/23 00:00 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/05/23 17:38	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/05/23 17:38	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/05/23 17:38	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 17:38	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/05/23 17:38	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/05/23 17:38	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/05/23 17:38	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/05/23 17:38	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	80-120	1		05/05/23 17:38	17060-07-0	
4-Bromofluorobenzene (S)	100	%	73-122	1		05/05/23 17:38	460-00-4	
Toluene-d8 (S)	105	%	75-122	1		05/05/23 17:38	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: OBS-1_5/1/2023 DISS **Lab ID: 70254720002** Collected: 05/01/23 09:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/02/23 14:12	7429-90-5	
Barium, Dissolved	**32.4J**	ug/L	200	1		05/02/23 14:12	7440-39-3	
Calcium, Dissolved	**11600**	ug/L	1000	1		05/02/23 14:12	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/02/23 14:12	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/02/23 14:12	7440-50-8	
Iron, Dissolved	**23.5**	ug/L	20.0	1		05/02/23 14:12	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/02/23 14:12	7439-92-1	
Magnesium, Dissolved	**7060**	ug/L	1000	1		05/02/23 14:12	7439-95-4	
Manganese, Dissolved	**2330**	ug/L	10.0	1		05/02/23 14:12	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		05/02/23 14:12	7440-02-0	
Potassium, Dissolved	**18400**	ug/L	5000	1		05/02/23 14:12	7440-09-7	
Sodium, Dissolved	**42300**	ug/L	5000	1		05/02/23 14:12	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:12	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/03/23 08:36	05/04/23 11:01	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 19:57	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09C_5/1/2023 DISS **Lab ID: 70254720003** Collected: 05/01/23 12:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/02/23 14:23	7429-90-5	
Barium, Dissolved	**57.6J**	ug/L	200	1		05/02/23 14:23	7440-39-3	
Calcium, Dissolved	**9680**	ug/L	1000	1		05/02/23 14:23	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/02/23 14:23	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/02/23 14:23	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:23	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/02/23 14:23	7439-92-1	
Magnesium, Dissolved	**6050**	ug/L	1000	1		05/02/23 14:23	7439-95-4	
Manganese, Dissolved	**243**	ug/L	10.0	1		05/02/23 14:23	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		05/02/23 14:23	7440-02-0	
Potassium, Dissolved	**10800**	ug/L	5000	1		05/02/23 14:23	7440-09-7	
Sodium, Dissolved	**59400**	ug/L	5000	1		05/02/23 14:23	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:23	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/03/23 08:36	05/04/23 11:02	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 20:02	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09B_5/1/2023 DISS **Lab ID: 70254720004** Collected: 05/01/23 14:40 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/02/23 14:31	7429-90-5	
Barium, Dissolved	**83.2J**	ug/L	200	1		05/02/23 14:31	7440-39-3	
Calcium, Dissolved	**11600**	ug/L	1000	1		05/02/23 14:31	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/02/23 14:31	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/02/23 14:31	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:31	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/02/23 14:31	7439-92-1	
Magnesium, Dissolved	**5490**	ug/L	1000	1		05/02/23 14:31	7439-95-4	
Manganese, Dissolved	**2000**	ug/L	10.0	1		05/02/23 14:31	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		05/02/23 14:31	7440-02-0	
Potassium, Dissolved	**9660**	ug/L	5000	1		05/02/23 14:31	7440-09-7	
Sodium, Dissolved	**56100**	ug/L	5000	1		05/02/23 14:31	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:31	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/03/23 08:36	05/04/23 11:03	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 20:00	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-05B_5/1/2023 DISS **Lab ID: 70254720005** Collected: 05/01/23 16:30 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**<200**	ug/L	200	1		05/02/23 14:34	7429-90-5	
Barium, Dissolved	**40.5J**	ug/L	200	1		05/02/23 14:34	7440-39-3	
Calcium, Dissolved	**12000**	ug/L	1000	1		05/02/23 14:34	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/02/23 14:34	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/02/23 14:34	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:34	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/02/23 14:34	7439-92-1	
Magnesium, Dissolved	**4830**	ug/L	1000	1		05/02/23 14:34	7439-95-4	
Manganese, Dissolved	**2400**	ug/L	10.0	1		05/02/23 14:34	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		05/02/23 14:34	7440-02-0	
Potassium, Dissolved	**9220**	ug/L	5000	1		05/02/23 14:34	7440-09-7	
Sodium, Dissolved	**58700**	ug/L	5000	1		05/02/23 14:34	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/02/23 14:34	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/03/23 08:36	05/04/23 11:05	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 19:59	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: OBS-1_5/1/2023 **Lab ID: 70254720006** Collected: 05/01/23 09:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**35.0J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:09	7429-90-5	B
Barium	**31.3J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:09	7440-39-3	
Calcium	**10700**	ug/L	200	1	05/03/23 09:24	05/04/23 13:09	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:09	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/03/23 09:24	05/04/23 13:09	7440-50-8	
Iron	**23.7J**	ug/L	100	1	05/03/23 09:24	05/04/23 13:09	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/03/23 09:24	05/04/23 13:09	7439-92-1	
Magnesium	**6760**	ug/L	200	1	05/03/23 09:24	05/04/23 13:09	7439-95-4	
Manganese	**2270**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:09	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	05/03/23 09:24	05/04/23 13:09	7440-02-0	
Potassium	**17000**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:09	7440-09-7	
Sodium	**40100**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:09	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	05/03/23 09:24	05/04/23 13:09	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**54600**	ug/L	830	1		05/04/23 13:09		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/04/23 07:02	05/04/23 13:10	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/05/23 18:00	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/05/23 18:00	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	124-48-1	M1
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	100-41-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: OBS-1_5/1/2023 **Lab ID: 70254720006** Collected: 05/01/23 09:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/05/23 18:00	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:00	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:00	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/05/23 18:00	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/05/23 18:00	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/05/23 18:00	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		05/05/23 18:00	17060-07-0	
4-Bromofluorobenzene (S)	100	%	73-122	1		05/05/23 18:00	460-00-4	
Toluene-d8 (S)	103	%	75-122	1		05/05/23 18:00	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**135**	mg/L	1.0	1		05/10/23 09:53		
Alkalinity,Bicarbonate (CaCO3)	**135**	mg/L	1.0	1		05/10/23 09:53		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/10/23 09:53		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**163**	mg/L	5.0	1		05/04/23 17:03		
Alkalinity,Bicarbonate (CaCO3)	**163**	mg/L	5.0	1		05/04/23 17:03		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/04/23 17:03		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**202**	mg/L	10.0	1		05/04/23 19:17		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 19:58	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**19.1**	mg/L	5.0	1		05/12/23 01:38	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**12.8**	mg/L	0.50	5	05/03/23 04:35	05/03/23 13:03	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: OBS-1_5/1/2023 **Lab ID: 70254720006** Collected: 05/01/23 09:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**0.17**	mg/L	0.050	1		05/11/23 18:19	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/01/23 21:35	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/04/23 14:20	05/04/23 16:45	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**54.8**	mg/L	2.0	1		05/03/23 15:20	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**12.8**	mg/L	2.0	20		05/04/23 12:46	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09C_5/1/2023 **Lab ID: 70254720007** Collected: 05/01/23 12:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**32.3J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:12	7429-90-5	B
Barium	**57.5J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:12	7440-39-3	
Calcium	**9250**	ug/L	200	1	05/03/23 09:24	05/04/23 13:12	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:12	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/03/23 09:24	05/04/23 13:12	7440-50-8	
Iron	**<100**	ug/L	100	1	05/03/23 09:24	05/04/23 13:12	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/03/23 09:24	05/04/23 13:12	7439-92-1	
Magnesium	**5850**	ug/L	200	1	05/03/23 09:24	05/04/23 13:12	7439-95-4	
Manganese	**232**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:12	7439-96-5	
Nickel	**5.3J**	ug/L	40.0	1	05/03/23 09:24	05/04/23 13:12	7440-02-0	
Potassium	**9870**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:12	7440-09-7	
Sodium	**55900**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:12	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	05/03/23 09:24	05/04/23 13:12	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**47200**	ug/L	830	1		05/04/23 13:12		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/04/23 07:02	05/04/23 13:14	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/05/23 18:22	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/05/23 18:22	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	100-41-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09C_5/1/2023 **Lab ID: 70254720007** Collected: 05/01/23 12:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/05/23 18:22	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:22	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:22	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/05/23 18:22	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/05/23 18:22	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/05/23 18:22	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%	80-120	1		05/05/23 18:22	17060-07-0	
4-Bromofluorobenzene (S)	101	%	73-122	1		05/05/23 18:22	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/05/23 18:22	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**46.2**	mg/L	1.0	1		05/10/23 09:59		
Alkalinity,Bicarbonate (CaCO3)	**46.2**	mg/L	1.0	1		05/10/23 09:59		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/10/23 09:59		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**94.5**	mg/L	5.0	1		05/04/23 17:06		
Alkalinity,Bicarbonate (CaCO3)	**94.5**	mg/L	5.0	1		05/04/23 17:06		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/04/23 17:06		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**256**	mg/L	10.0	1		05/04/23 19:26		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 20:02	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**18.9**	mg/L	5.0	1		05/12/23 01:51	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**1.7**	mg/L	0.10	1	05/03/23 04:35	05/03/23 12:52	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09C_5/1/2023 **Lab ID: 70254720007** Collected: 05/01/23 12:45 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**1.5**	mg/L	0.050	1		05/11/23 18:22	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/01/23 22:01	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/04/23 14:20	05/04/23 16:46	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**104**	mg/L	10.0	5		05/03/23 15:34	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**1.3**	mg/L	0.10	1		05/04/23 11:44	7664-41-7	

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09B_5/1/2023 **Lab ID: 70254720008** Collected: 05/01/23 14:40 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**33.9J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:15	7429-90-5	B
Barium	**82.4J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:15	7440-39-3	
Calcium	**11000**	ug/L	200	1	05/03/23 09:24	05/04/23 13:15	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:15	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/03/23 09:24	05/04/23 13:15	7440-50-8	
Iron	**<100**	ug/L	100	1	05/03/23 09:24	05/04/23 13:15	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/03/23 09:24	05/04/23 13:15	7439-92-1	
Magnesium	**5420**	ug/L	200	1	05/03/23 09:24	05/04/23 13:15	7439-95-4	
Manganese	**2000**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:15	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	05/03/23 09:24	05/04/23 13:15	7440-02-0	
Potassium	**9160**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:15	7440-09-7	
Sodium	**54800**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:15	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	05/03/23 09:24	05/04/23 13:15	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**49800**	ug/L	830	1		05/04/23 13:15		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/04/23 07:02	05/04/23 13:15	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/05/23 18:44	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/05/23 18:44	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	100-41-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09B_5/1/2023 **Lab ID: 70254720008** Collected: 05/01/23 14:40 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/05/23 18:44	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 18:44	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/05/23 18:44	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/05/23 18:44	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/05/23 18:44	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/05/23 18:44	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		05/05/23 18:44	17060-07-0	
4-Bromofluorobenzene (S)	100	%	73-122	1		05/05/23 18:44	460-00-4	
Toluene-d8 (S)	104	%	75-122	1		05/05/23 18:44	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**38.8**	mg/L	1.0	1		05/10/23 10:06		
Alkalinity,Bicarbonate (CaCO3)	**38.8**	mg/L	1.0	1		05/10/23 10:06		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/10/23 10:06		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**48.8**	mg/L	5.0	1		05/04/23 17:10		
Alkalinity,Bicarbonate (CaCO3)	**48.8**	mg/L	5.0	1		05/04/23 17:10		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/04/23 17:10		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**262**	mg/L	10.0	1		05/04/23 19:26		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 20:01	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**19.0**	mg/L	5.0	1		05/12/23 20:00	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**0.72**	mg/L	0.10	1	05/03/23 04:35	05/03/23 12:53	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-09B_5/1/2023 **Lab ID: 70254720008** Collected: 05/01/23 14:40 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**0.64**	mg/L	0.050	1		05/11/23 18:52	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/01/23 22:02	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/04/23 14:20	05/04/23 16:47	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**101**	mg/L	10.0	5		05/03/23 15:35	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**1.0**	mg/L	0.10	1		05/04/23 11:47	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-05B_5/1/2023 **Lab ID: 70254720009** Collected: 05/01/23 16:30 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**37.2J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:17	7429-90-5	B
Barium	**40.8J**	ug/L	200	1	05/03/23 09:24	05/04/23 13:17	7440-39-3	
Calcium	**11600**	ug/L	200	1	05/03/23 09:24	05/04/23 13:17	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:17	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/03/23 09:24	05/04/23 13:17	7440-50-8	
Iron	**<100**	ug/L	100	1	05/03/23 09:24	05/04/23 13:17	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/03/23 09:24	05/04/23 13:17	7439-92-1	
Magnesium	**4780**	ug/L	200	1	05/03/23 09:24	05/04/23 13:17	7439-95-4	
Manganese	**2460**	ug/L	10.0	1	05/03/23 09:24	05/04/23 13:17	7439-96-5	
Nickel	**7.3J**	ug/L	40.0	1	05/03/23 09:24	05/04/23 13:17	7440-02-0	
Potassium	**8680**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:17	7440-09-7	
Sodium	**57100**	ug/L	5000	1	05/03/23 09:24	05/04/23 13:17	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	05/03/23 09:24	05/04/23 13:17	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**48600**	ug/L	830	1		05/04/23 13:17		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/04/23 07:02	05/04/23 13:17	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/05/23 19:06	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/05/23 19:06	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	100-41-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-05B_5/1/2023 **Lab ID: 70254720009** Collected: 05/01/23 16:30 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/05/23 19:06	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/05/23 19:06	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/05/23 19:06	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/05/23 19:06	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/05/23 19:06	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/05/23 19:06	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%	80-120	1		05/05/23 19:06	17060-07-0	
4-Bromofluorobenzene (S)	101	%	73-122	1		05/05/23 19:06	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/05/23 19:06	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**33.4**	mg/L	1.0	1		05/10/23 10:12		
Alkalinity,Bicarbonate (CaCO3)	**33.4**	mg/L	1.0	1		05/10/23 10:12		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/10/23 10:12		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**42.5**	mg/L	5.0	1		05/04/23 17:14		
Alkalinity,Bicarbonate (CaCO3)	**42.5**	mg/L	5.0	1		05/04/23 17:14		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/04/23 17:14		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**266**	mg/L	10.0	1		05/04/23 19:26		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/01/23 20:00	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**20.1**	mg/L	5.0	1		05/12/23 20:13	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/03/23 04:35	05/03/23 13:04	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Sample: MW-05B_5/1/2023 **Lab ID: 70254720009** Collected: 05/01/23 16:30 Received: 05/01/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.50**	mg/L	0.50	10		05/11/23 19:03	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/01/23 22:04	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/04/23 14:20	05/04/23 16:47	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**102**	mg/L	10.0	5		05/03/23 15:35	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**<0.10**	mg/L	0.10	1		05/04/23 11:49	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303411
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005

METHOD BLANK: 1537592 Matrix: Water
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<200	200	05/02/23 14:07	
Barium, Dissolved	ug/L	<200	200	05/02/23 14:07	
Calcium, Dissolved	ug/L	<1000	1000	05/02/23 14:07	
Chromium, Dissolved	ug/L	<10.0	10.0	05/02/23 14:07	
Copper, Dissolved	ug/L	<25.0	25.0	05/02/23 14:07	
Iron, Dissolved	ug/L	<20.0	20.0	05/02/23 14:07	
Lead, Dissolved	ug/L	<5.0	5.0	05/02/23 14:07	
Magnesium, Dissolved	ug/L	<1000	1000	05/02/23 14:07	
Manganese, Dissolved	ug/L	<10.0	10.0	05/02/23 14:07	
Nickel, Dissolved	ug/L	<40.0	40.0	05/02/23 14:07	
Potassium, Dissolved	ug/L	<5000	5000	05/02/23 14:07	
Sodium, Dissolved	ug/L	<5000	5000	05/02/23 14:07	
Zinc, Dissolved	ug/L	<20.0	20.0	05/02/23 14:07	

LABORATORY CONTROL SAMPLE: 1537593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	25000	24300	97	85-115	
Barium, Dissolved	ug/L	500	480	96	85-115	
Calcium, Dissolved	ug/L	25000	24800	99	85-115	
Chromium, Dissolved	ug/L	500	469	94	85-115	
Copper, Dissolved	ug/L	500	493	99	85-115	
Iron, Dissolved	ug/L	12500	12100	97	85-115	
Lead, Dissolved	ug/L	500	494	99	85-115	
Magnesium, Dissolved	ug/L	25000	24200	97	85-115	
Manganese, Dissolved	ug/L	500	482	96	85-115	
Nickel, Dissolved	ug/L	500	496	99	85-115	
Potassium, Dissolved	ug/L	25000	24300	97	85-115	
Sodium, Dissolved	ug/L	25000	24400	98	85-115	
Zinc, Dissolved	ug/L	500	498	100	85-115	

MATRIX SPIKE SAMPLE: 1537595

Parameter	Units	70254720002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	<200	12500	13400	107	70-130	
Barium, Dissolved	ug/L	32.4J	500	551	104	70-130	
Calcium, Dissolved	ug/L	11600	12500	24400	102	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

MATRIX SPIKE SAMPLE: 1537595

Parameter	Units	70254720002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	<10.0	500	508	102	70-130	
Copper, Dissolved	ug/L	<25.0	500	532	106	70-130	
Iron, Dissolved	ug/L	23.5	5000	5280	105	70-130	
Lead, Dissolved	ug/L	<5.0	500	530	106	70-130	
Magnesium, Dissolved	ug/L	7060	12500	19100	96	70-130	
Manganese, Dissolved	ug/L	2330	500	2690	72	70-130	
Nickel, Dissolved	ug/L	<40.0	500	517	103	70-130	
Potassium, Dissolved	ug/L	18400	12500	31000	101	70-130	
Sodium, Dissolved	ug/L	42300	12500	53300	88	70-130	
Zinc, Dissolved	ug/L	<20.0	500	546	109	70-130	

SAMPLE DUPLICATE: 1537594

Parameter	Units	70254720002 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	<200	<200		
Barium, Dissolved	ug/L	32.4J	32.4J		
Calcium, Dissolved	ug/L	11600	11500	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	23.5	23.5	0	
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	7060	7080	0	
Manganese, Dissolved	ug/L	2330	2350	1	
Nickel, Dissolved	ug/L	<40.0	<40.0		
Potassium, Dissolved	ug/L	18400	18400	0	
Sodium, Dissolved	ug/L	42300	42400	0	
Zinc, Dissolved	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303716 | Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 | Analysis Description: 245.1 Mercury
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1538966 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	05/04/23 12:41	

LABORATORY CONTROL SAMPLE: 1538967

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.98	98	85-115	

MATRIX SPIKE SAMPLE: 1538976

Parameter	Units	70254405001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.98	89	70-130	

MATRIX SPIKE SAMPLE: 1539073

Parameter	Units	70254762001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	1.0	102	70-130	

SAMPLE DUPLICATE: 1538977

Parameter	Units	70254405001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

SAMPLE DUPLICATE: 1539074

Parameter	Units	70254762001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303519 — Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 — Analysis Description: 245.1 Mercury - Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005

METHOD BLANK: 1538221 — Matrix: Water
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.20	0.20	05/04/23 10:49	

LABORATORY CONTROL SAMPLE: 1538222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	1	0.93	93	85-115	

MATRIX SPIKE SAMPLE: 1538223

Parameter	Units	70254388001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	<0.20	1	0.98	98	70-130	

SAMPLE DUPLICATE: 1538224

Parameter	Units	70254388001 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303530
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1538247 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	34.6J	200	05/04/23 11:29	
Barium	ug/L	<200	200	05/04/23 11:29	
Calcium	ug/L	<200	200	05/04/23 11:29	
Chromium	ug/L	<10.0	10.0	05/04/23 11:29	
Copper	ug/L	<25.0	25.0	05/04/23 11:29	
Iron	ug/L	<100	100	05/04/23 11:29	
Lead	ug/L	<5.0	5.0	05/04/23 11:29	
Magnesium	ug/L	<200	200	05/04/23 11:29	
Manganese	ug/L	<10.0	10.0	05/04/23 11:29	
Nickel	ug/L	<40.0	40.0	05/04/23 11:29	
Potassium	ug/L	<5000	5000	05/04/23 11:29	
Sodium	ug/L	<5000	5000	05/04/23 11:29	
Zinc	ug/L	<20.0	20.0	05/04/23 11:29	

LABORATORY CONTROL SAMPLE: 1538248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	24400	98	85-115	
Barium	ug/L	500	479	96	85-115	
Calcium	ug/L	25000	24500	98	85-115	
Chromium	ug/L	500	475	95	85-115	
Copper	ug/L	500	480	96	85-115	
Iron	ug/L	12500	12000	96	85-115	
Lead	ug/L	500	498	100	85-115	
Magnesium	ug/L	25000	24100	96	85-115	
Manganese	ug/L	500	488	98	85-115	
Nickel	ug/L	500	496	99	85-115	
Potassium	ug/L	25000	24000	96	85-115	
Sodium	ug/L	25000	24700	99	85-115	
Zinc	ug/L	500	487	97	85-115	

MATRIX SPIKE SAMPLE: 1538250

Parameter	Units	70254762001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	12500	11400	90	70-130	
Barium	ug/L	<200	500	455	87	70-130	
Calcium	ug/L	5190	12500	16900	94	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

MATRIX SPIKE SAMPLE: 1538250

Parameter	Units	70254762001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	<10.0	500	435	87	70-130	
Copper	ug/L	445	500	888	89	70-130	
Iron	ug/L	235	5000	4700	89	70-130	
Lead	ug/L	5.5	500	463	92	70-130	
Magnesium	ug/L	1160	12500	11900	86	70-130	
Manganese	ug/L	139	500	608	94	70-130	
Nickel	ug/L	<40.0	500	440	88	70-130	
Potassium	ug/L	<5000	12500	11300	86	70-130	
Sodium	ug/L	9220	12500	20600	91	70-130	
Zinc	ug/L	<20.0	500	464	90	70-130	

MATRIX SPIKE SAMPLE: 1538252

Parameter	Units	70254497002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	284	12500	12300	96	70-130	
Barium	ug/L	<200	500	476	92	70-130	
Calcium	ug/L	14900	12500	27800	103	70-130	
Chromium	ug/L	<10.0	500	456	91	70-130	
Copper	ug/L	60.2	500	521	92	70-130	
Iron	ug/L	2450	5000	7200	95	70-130	
Lead	ug/L	<5.0	500	477	95	70-130	
Magnesium	ug/L	2400	12500	13600	90	70-130	
Manganese	ug/L	67.6	500	529	92	70-130	
Nickel	ug/L	<40.0	500	469	92	70-130	
Potassium	ug/L	<5000	12500	17100	98	70-130	
Sodium	ug/L	78200	12500	94600	131	70-130	M1
Zinc	ug/L	317	500	801	97	70-130	

SAMPLE DUPLICATE: 1538249

Parameter	Units	70254762001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	148J		
Barium	ug/L	<200	17.9J		
Calcium	ug/L	5190	5100	2	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	445	437	2	
Iron	ug/L	235	259	10	
Lead	ug/L	5.5	4.5J		
Magnesium	ug/L	1160	1150	1	
Manganese	ug/L	139	164	17	
Nickel	ug/L	<40.0	<40.0		
Potassium	ug/L	<5000	<5000		
Sodium	ug/L	9220	9060	2	
Zinc	ug/L	<20.0	12.9J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

SAMPLE DUPLICATE: 1538251

Parameter	Units	70254497002 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	284	288	1	
Barium	ug/L	<200	17.5J		
Calcium	ug/L	14900	15000	1	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	60.2	58.9	2	
Iron	ug/L	2450	2470	1	
Lead	ug/L	<5.0	4.5J		
Magnesium	ug/L	2400	2420	1	
Manganese	ug/L	67.6	67.8	0	
Nickel	ug/L	<40.0	11.6J		
Potassium	ug/L	<5000	4800J		
Sodium	ug/L	78200	78400	0	
Zinc	ug/L	317	318	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 304017
QC Batch Method: EPA 8260C/5030C
Analysis Method: EPA 8260C/5030C
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720001, 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1540604 Matrix: Water
Associated Lab Samples: 70254720001, 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	05/05/23 13:44	
1,1-Dichloroethane	ug/L	<1.0	1.0	05/05/23 13:44	
1,1-Dichloroethene	ug/L	<1.0	1.0	05/05/23 13:44	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	05/05/23 13:44	
1,2-Dichloroethane	ug/L	<1.0	1.0	05/05/23 13:44	
1,2-Dichloropropane	ug/L	<1.0	1.0	05/05/23 13:44	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	05/05/23 13:44	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	05/05/23 13:44	
Benzene	ug/L	<1.0	1.0	05/05/23 13:44	
Bromodichloromethane	ug/L	<1.0	1.0	05/05/23 13:44	
Bromoform	ug/L	<1.0	1.0	05/05/23 13:44	
Carbon tetrachloride	ug/L	<1.0	1.0	05/05/23 13:44	
Chlorobenzene	ug/L	<1.0	1.0	05/05/23 13:44	
Chloroethane	ug/L	<1.0	1.0	05/05/23 13:44	
Chloroform	ug/L	<1.0	1.0	05/05/23 13:44	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	05/05/23 13:44	
Dibromochloromethane	ug/L	<1.0	1.0	05/05/23 13:44	
Dichlorodifluoromethane	ug/L	<1.0	1.0	05/05/23 13:44	
Ethylbenzene	ug/L	<1.0	1.0	05/05/23 13:44	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	05/05/23 13:44	
m&p-Xylene	ug/L	<2.0	2.0	05/05/23 13:44	
Methylene Chloride	ug/L	<1.0	1.0	05/05/23 13:44	
n-Butylbenzene	ug/L	<1.0	1.0	05/05/23 13:44	
o-Xylene	ug/L	<1.0	1.0	05/05/23 13:44	
tert-Butylbenzene	ug/L	<1.0	1.0	05/05/23 13:44	
Tetrachloroethene	ug/L	<1.0	1.0	05/05/23 13:44	
Toluene	ug/L	<1.0	1.0	05/05/23 13:44	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	05/05/23 13:44	
Trichloroethene	ug/L	<1.0	1.0	05/05/23 13:44	
Vinyl chloride	ug/L	<1.0	1.0	05/05/23 13:44	
Xylene (Total)	ug/L	<3.0	3.0	05/05/23 13:44	
1,2-Dichloroethane-d4 (S)	%	95	80-120	05/05/23 13:44	
4-Bromofluorobenzene (S)	%	100	73-122	05/05/23 13:44	
Toluene-d8 (S)	%	105	75-122	05/05/23 13:44	

LABORATORY CONTROL SAMPLE: 1540605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	43.3	87	66-121	

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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

LABORATORY CONTROL SAMPLE: 1540605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	44.4	89	61-127	
1,1-Dichloroethene	ug/L	50	40.9	82	51-133	
1,2-Dichlorobenzene	ug/L	50	46.9	94	78-116	
1,2-Dichloroethane	ug/L	50	53.0	106	70-127	
1,2-Dichloropropane	ug/L	50	48.1	96	73-121	
1,3-Dichlorobenzene	ug/L	50	46.6	93	76-116	
1,4-Dichlorobenzene	ug/L	50	47.0	94	77-115	
Benzene	ug/L	50	46.4	93	72-122	
Bromodichloromethane	ug/L	50	50.6	101	79-118	
Bromoform	ug/L	50	53.2	106	61-139	
Carbon tetrachloride	ug/L	50	46.7	93	57-124	
Chlorobenzene	ug/L	50	50.2	100	72-125	
Chloroethane	ug/L	50	45.4	91	51-136	
Chloroform	ug/L	50	48.2	96	69-124	
cis-1,2-Dichloroethene	ug/L	50	44.9	90	65-126	
Dibromochloromethane	ug/L	50	53.1	106	72-134	
Dichlorodifluoromethane	ug/L	50	34.3	69	13-154	
Ethylbenzene	ug/L	50	46.3	93	72-120	
Isopropylbenzene (Cumene)	ug/L	50	47.5	95	68-122	
m&p-Xylene	ug/L	100	93.9	94	69-121	
Methylene Chloride	ug/L	50	48.8	98	59-127	
n-Butylbenzene	ug/L	50	43.4	87	65-124	
o-Xylene	ug/L	50	46.9	94	70-121	
tert-Butylbenzene	ug/L	50	44.0	88	69-118	
Tetrachloroethene	ug/L	50	42.2	84	60-134	
Toluene	ug/L	50	47.0	94	75-120	
trans-1,2-Dichloroethene	ug/L	50	43.8	88	54-132	
Trichloroethene	ug/L	50	43.5	87	74-118	
Vinyl chloride	ug/L	50	39.8	80	39-127	
Xylene (Total)	ug/L	150	141	94	70-121	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			100	73-122	
Toluene-d8 (S)	%			101	75-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1541436 1541437

Parameter	Units	70254720006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	<1.0	50	50	52.3	51.0	105	102	68-134	3	
1,1-Dichloroethane	ug/L	<1.0	50	50	49.6	49.8	99	100	54-145	0	
1,1-Dichloroethene	ug/L	<1.0	50	50	46.9	48.1	94	96	53-147	3	
1,2-Dichlorobenzene	ug/L	<1.0	50	50	56.4	56.0	113	112	75-120	1	
1,2-Dichloroethane	ug/L	<1.0	50	50	55.2	57.2	110	114	58-141	4	
1,2-Dichloropropane	ug/L	<1.0	50	50	52.8	52.8	106	106	64-136	0	
1,3-Dichlorobenzene	ug/L	<1.0	50	50	56.9	57.3	114	115	67-129	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1541436 1541437

Parameter	Units	70254720006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,4-Dichlorobenzene	ug/L	<1.0	50	50	57.1	57.1	114	114	75-119	0	
Benzene	ug/L	<1.0	50	50	52.5	52.5	105	105	67-139	0	
Bromodichloromethane	ug/L	<1.0	50	50	58.3	57.9	117	116	70-127	1	
Bromoform	ug/L	<1.0	50	50	64.1	66.1	128	132	47-138	3	
Carbon tetrachloride	ug/L	<1.0	50	50	57.2	56.3	114	113	61-136	2	
Chlorobenzene	ug/L	<1.0	50	50	59.8	60.5	120	121	73-130	1	
Chloroethane	ug/L	<1.0	50	50	48.3	49.8	97	100	48-152	3	
Chloroform	ug/L	<1.0	50	50	53.8	56.1	108	112	58-143	4	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	53.0	53.8	106	108	58-142	1	
Dibromochloromethane	ug/L	<1.0	50	50	64.6	67.3	129	135	65-133	4	M1
Dichlorodifluoromethane	ug/L	<1.0	50	50	45.0	45.8	90	92	15-152	2	
Ethylbenzene	ug/L	<1.0	50	50	56.3	56.8	113	114	63-139	1	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	57.9	57.4	116	115	67-137	1	
m&p-Xylene	ug/L	<2.0	100	100	113	115	113	115	60-138	2	
Methylene Chloride	ug/L	<1.0	50	50	50.2	50.8	100	102	47-142	1	
n-Butylbenzene	ug/L	<1.0	50	50	57.2	56.5	114	113	46-148	1	
o-Xylene	ug/L	<1.0	50	50	56.9	59.0	114	118	64-135	4	
tert-Butylbenzene	ug/L	<1.0	50	50	56.6	56.7	113	113	64-134	0	
Tetrachloroethene	ug/L	<1.0	50	50	53.1	53.1	106	106	64-144	0	
Toluene	ug/L	<1.0	50	50	52.7	51.6	105	103	72-136	2	
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	50.4	50.6	101	101	47-151	0	
Trichloroethene	ug/L	<1.0	50	50	51.0	49.8	102	100	76-130	2	
Vinyl chloride	ug/L	<1.0	50	50	51.5	53.3	103	107	43-135	3	
Xylene (Total)	ug/L	<3.0	150	150	169	174	113	116	63-136	3	
1,2-Dichloroethane-d4 (S)	%						94	93	80-120		
4-Bromofluorobenzene (S)	%						102	105	73-122		
Toluene-d8 (S)	%						104	105	75-122		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 304476 | Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1542850 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/10/23 08:57	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/10/23 08:57	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/10/23 08:57	

LABORATORY CONTROL SAMPLE: 1542851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	24.6	98	85-115	
Alkalinity,Bicarbonate (CaCO3)	mg/L		1.1			
Alkalinity,Carbonate (CaCO3)	mg/L	25	23.5	94	85-115	

MATRIX SPIKE SAMPLE: 1542853

Parameter	Units	70255231001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	163	50	205	85	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	163		166			
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	50	39.8	80	75-125	

SAMPLE DUPLICATE: 1542852

Parameter	Units	70255231001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	163	159	3	
Alkalinity,Bicarbonate (CaCO3)	mg/L	163	159	3	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303805
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity, High Level
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1539512 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.5	05/04/23 14:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	2.5	05/04/23 14:22	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	2.5	05/04/23 14:22	

LABORATORY CONTROL SAMPLE: 1539513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	125	129	103	80-120	
Alkalinity,Bicarbonate (CaCO3)	mg/L		<5.0			
Alkalinity,Carbonate (CaCO3)	mg/L	125	125	100	80-120	

MATRIX SPIKE SAMPLE: 1539515

Parameter	Units	70255006005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5400	625	6050	104	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5400		6050			
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	625	<5.0	0	75-125	M1

SAMPLE DUPLICATE: 1539514

Parameter	Units	70255006005 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5400	5360	1	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5400	5360	1	
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	<5.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303870 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1539761 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	05/04/23 19:08	

LABORATORY CONTROL SAMPLE: 1539762

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	508	102	85-115	

MATRIX SPIKE SAMPLE: 1539764

Parameter	Units	70254669002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	117	300	426	103	75-125	

SAMPLE DUPLICATE: 1539763

Parameter	Units	70254669002 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	117	129	10	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303333 — Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B — Analysis Description: Chromium, Hexavalent by 3500
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005, 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1537241 — Matrix: Water
Associated Lab Samples: 70254720002, 70254720003, 70254720004, 70254720005, 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/01/23 19:56	

LABORATORY CONTROL SAMPLE: 1537242

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.21	106	85-115	

MATRIX SPIKE SAMPLE: 1537243

Parameter	Units	70254720002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.21	105	75-125	

SAMPLE DUPLICATE: 1537244

Parameter	Units	70254720006 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 304541
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007

METHOD BLANK: 1543134 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	0.20J	5.0	05/11/23 19:17	

LABORATORY CONTROL SAMPLE: 1543135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	10	10.2	102	90-110	

MATRIX SPIKE SAMPLE: 1543138

Parameter	Units	70254575001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	15.6	10	26.4	108	90-110	

MATRIX SPIKE SAMPLE: 1543140

Parameter	Units	70255189001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	<5.0	10	11.0	102	90-110	

SAMPLE DUPLICATE: 1543139

Parameter	Units	70254575001 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	15.6	16.4	5	

SAMPLE DUPLICATE: 1543141

Parameter	Units	70255189001 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	<5.0	0.79J		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 304957
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720008, 70254720009

METHOD BLANK: 1545185 Matrix: Water
Associated Lab Samples: 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	0.21J	5.0	05/12/23 19:32	

LABORATORY CONTROL SAMPLE: 1545186

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	10	9.7	97	90-110	

MATRIX SPIKE SAMPLE: 1545188

Parameter	Units	70255041004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	10.9	10	21.4	104	90-110	

MATRIX SPIKE SAMPLE: 1545190

Parameter	Units	70255055007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	7.6	10	17.7	101	90-110	

SAMPLE DUPLICATE: 1545189

Parameter	Units	70255041004 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	10.9	11.0	0	

SAMPLE DUPLICATE: 1545191

Parameter	Units	70255055007 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	7.6	7.7	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303510 | Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 | Analysis Description: 351.2 TKN
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1538196 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	ND	0.094	05/03/23 12:29	

LABORATORY CONTROL SAMPLE: 1538197

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	3.9	98	90-110	

MATRIX SPIKE SAMPLE: 1538198

Parameter	Units	70254642005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	4	5.4	102	90-110	

MATRIX SPIKE SAMPLE: 1538200

Parameter	Units	70254515004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	45.3	4	49.4	103	90-110	

SAMPLE DUPLICATE: 1538199

Parameter	Units	70254642005 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	1.3	8	

SAMPLE DUPLICATE: 1538201

Parameter	Units	70254515004 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	45.3	45.3	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303328
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1537156 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/01/23 21:33	

LABORATORY CONTROL SAMPLE: 1537157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	104	90-110	

MATRIX SPIKE SAMPLE: 1537158

Parameter	Units	70254720006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.50	98	90-110	

MATRIX SPIKE SAMPLE: 1537160

Parameter	Units	70254672001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.52	100	90-110	

SAMPLE DUPLICATE: 1537159

Parameter	Units	70254720006 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1537161

Parameter	Units	70254672001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 304766
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1544173 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	ND	0.037	05/11/23 18:13	

LABORATORY CONTROL SAMPLE: 1544174

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 1544175

Parameter	Units	70254720006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.17	0.5	0.68	101	90-110	

MATRIX SPIKE SAMPLE: 1544177

Parameter	Units	70255392004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	8.8	2.5	11.1	94	90-110	

SAMPLE DUPLICATE: 1544176

Parameter	Units	70254720006 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.17	0.18	2	

SAMPLE DUPLICATE: 1544178

Parameter	Units	70255392004 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	8.8	8.6	2	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303743 | Analysis Method: SM22 4500-CN-E
QC Batch Method: SM20/22 4500-CN-C | Analysis Description: 4500 CNE Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1539086 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	ND	5.0	05/04/23 16:32	

LABORATORY CONTROL SAMPLE: 1539087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	75.6	101	85-115	

MATRIX SPIKE SAMPLE: 1539088

Parameter	Units	70254616001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	96.0	92	75-125	H3

SAMPLE DUPLICATE: 1539089

Parameter	Units	70254616001 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		H3

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303537 | Analysis Method: SM22 4500-Cl-E
QC Batch Method: SM22 4500-Cl-E | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

METHOD BLANK: 1538270 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007, 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	05/03/23 15:17	

LABORATORY CONTROL SAMPLE: 1538271

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.4	99	90-110	

MATRIX SPIKE SAMPLE: 1538272

Parameter	Units	70254699001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	235	125	340	84	80-120	

SAMPLE DUPLICATE: 1538273

Parameter	Units	70254699001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	235	236	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303728
QC Batch Method: SM22 4500 NH3 H
Analysis Method: SM22 4500 NH3 H
Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720006, 70254720007

METHOD BLANK: 1539036 Matrix: Water
Associated Lab Samples: 70254720006, 70254720007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.050	05/04/23 11:12	

LABORATORY CONTROL SAMPLE: 1539037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.98	98	90-110	

MATRIX SPIKE SAMPLE: 1539038

Parameter	Units	70254830001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	11.4	10	22.6	112	75-125	

SAMPLE DUPLICATE: 1539039

Parameter	Units	70254830001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	11.4	11.3	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

QC Batch: 303729
QC Batch Method: SM22 4500 NH3 H
Analysis Method: SM22 4500 NH3 H
Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70254720008, 70254720009

METHOD BLANK: 1539048 Matrix: Water
Associated Lab Samples: 70254720008, 70254720009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.050	05/04/23 11:45	

LABORATORY CONTROL SAMPLE: 1539049

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.98	98	90-110	

MATRIX SPIKE SAMPLE: 1539050

Parameter	Units	70254930001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	1	1.1	110	75-125	

SAMPLE DUPLICATE: 1539051

Parameter	Units	70254930001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	<0.10		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALIFIERS

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H3	Sample was received or analysis requested beyond the recognized method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70254720006	OBS-1_5/1/2023	EPA 200.7	303530	EPA 200.7	303611
70254720007	MW-09C_5/1/2023	EPA 200.7	303530	EPA 200.7	303611
70254720008	MW-09B_5/1/2023	EPA 200.7	303530	EPA 200.7	303611
70254720009	MW-05B_5/1/2023	EPA 200.7	303530	EPA 200.7	303611
70254720002	OBS-1_5/1/2023 DISS	EPA 200.7	303411		
70254720003	MW-09C_5/1/2023 DISS	EPA 200.7	303411		
70254720004	MW-09B_5/1/2023 DISS	EPA 200.7	303411		
70254720005	MW-05B_5/1/2023 DISS	EPA 200.7	303411		
70254720006	OBS-1_5/1/2023	SM22 2340B	304734		
70254720007	MW-09C_5/1/2023	SM22 2340B	304734		
70254720008	MW-09B_5/1/2023	SM22 2340B	304734		
70254720009	MW-05B_5/1/2023	SM22 2340B	304734		
70254720006	OBS-1_5/1/2023	EPA 245.1	303716	EPA 245.1	303741
70254720007	MW-09C_5/1/2023	EPA 245.1	303716	EPA 245.1	303741
70254720008	MW-09B_5/1/2023	EPA 245.1	303716	EPA 245.1	303741
70254720009	MW-05B_5/1/2023	EPA 245.1	303716	EPA 245.1	303741
70254720002	OBS-1_5/1/2023 DISS	EPA 245.1	303519	EPA 245.1	303540
70254720003	MW-09C_5/1/2023 DISS	EPA 245.1	303519	EPA 245.1	303540
70254720004	MW-09B_5/1/2023 DISS	EPA 245.1	303519	EPA 245.1	303540
70254720005	MW-05B_5/1/2023 DISS	EPA 245.1	303519	EPA 245.1	303540
70254720001	TRIP BLANK_5/1/2023	EPA 8260C/5030C	304017		
70254720006	OBS-1_5/1/2023	EPA 8260C/5030C	304017		
70254720007	MW-09C_5/1/2023	EPA 8260C/5030C	304017		
70254720008	MW-09B_5/1/2023	EPA 8260C/5030C	304017		
70254720009	MW-05B_5/1/2023	EPA 8260C/5030C	304017		
70254720006	OBS-1_5/1/2023	SM22 2320B	304476		
70254720007	MW-09C_5/1/2023	SM22 2320B	304476		
70254720008	MW-09B_5/1/2023	SM22 2320B	304476		
70254720009	MW-05B_5/1/2023	SM22 2320B	304476		
70254720006	OBS-1_5/1/2023	SM22 2320B	303805		
70254720007	MW-09C_5/1/2023	SM22 2320B	303805		
70254720008	MW-09B_5/1/2023	SM22 2320B	303805		
70254720009	MW-05B_5/1/2023	SM22 2320B	303805		
70254720006	OBS-1_5/1/2023	SM22 2540C	303870		
70254720007	MW-09C_5/1/2023	SM22 2540C	303870		
70254720008	MW-09B_5/1/2023	SM22 2540C	303870		
70254720009	MW-05B_5/1/2023	SM22 2540C	303870		
70254720002	OBS-1_5/1/2023 DISS	SM22 3500-Cr B	303333		
70254720003	MW-09C_5/1/2023 DISS	SM22 3500-Cr B	303333		
70254720004	MW-09B_5/1/2023 DISS	SM22 3500-Cr B	303333		
70254720005	MW-05B_5/1/2023 DISS	SM22 3500-Cr B	303333		
70254720006	OBS-1_5/1/2023	SM22 3500-Cr B	303333		
70254720007	MW-09C_5/1/2023	SM22 3500-Cr B	303333		
70254720008	MW-09B_5/1/2023	SM22 3500-Cr B	303333		

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/1
Pace Project No.: 70254720

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70254720009	**MW-05B_5/1/2023**	SM22 3500-Cr B	303333		
70254720006	**OBS-1_5/1/2023**	EPA 300.0	304541		
70254720007	**MW-09C_5/1/2023**	EPA 300.0	304541		
70254720008	**MW-09B_5/1/2023**	EPA 300.0	304957		
70254720009	**MW-05B_5/1/2023**	EPA 300.0	304957		
70254720006	**OBS-1_5/1/2023**	EPA 351.2	303510	EPA 351.2	303514
70254720007	**MW-09C_5/1/2023**	EPA 351.2	303510	EPA 351.2	303514
70254720008	**MW-09B_5/1/2023**	EPA 351.2	303510	EPA 351.2	303514
70254720009	**MW-05B_5/1/2023**	EPA 351.2	303510	EPA 351.2	303514
70254720006	**OBS-1_5/1/2023**	EPA 353.2	304766		
70254720007	**MW-09C_5/1/2023**	EPA 353.2	304766		
70254720008	**MW-09B_5/1/2023**	EPA 353.2	304766		
70254720009	**MW-05B_5/1/2023**	EPA 353.2	304766		
70254720006	**OBS-1_5/1/2023**	EPA 353.2	303328		
70254720007	**MW-09C_5/1/2023**	EPA 353.2	303328		
70254720008	**MW-09B_5/1/2023**	EPA 353.2	303328		
70254720009	**MW-05B_5/1/2023**	EPA 353.2	303328		
70254720006	**OBS-1_5/1/2023**	SM20/22 4500-CN-C	303743	SM22 4500-CN-E	303830
70254720007	**MW-09C_5/1/2023**	SM20/22 4500-CN-C	303743	SM22 4500-CN-E	303830
70254720008	**MW-09B_5/1/2023**	SM20/22 4500-CN-C	303743	SM22 4500-CN-E	303830
70254720009	**MW-05B_5/1/2023**	SM20/22 4500-CN-C	303743	SM22 4500-CN-E	303830
70254720006	**OBS-1_5/1/2023**	SM22 4500-Cl-E	303537		
70254720007	**MW-09C_5/1/2023**	SM22 4500-Cl-E	303537		
70254720008	**MW-09B_5/1/2023**	SM22 4500-Cl-E	303537		
70254720009	**MW-05B_5/1/2023**	SM22 4500-Cl-E	303537		
70254720006	**OBS-1_5/1/2023**	SM22 4500 NH3 H	303728		
70254720007	**MW-09C_5/1/2023**	SM22 4500 NH3 H	303728		
70254720008	**MW-09B_5/1/2023**	SM22 4500 NH3 H	303729		
70254720009	**MW-05B_5/1/2023**	SM22 4500 NH3 H	303729		

WO# : 70254720

70254720

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

...nstitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Town of Oyster Bay	Report To:	Russo, Matt	Attention:	MATT RUSSO
Address:	150 Miller Place	Copy To:	Keith Robins (D+B Engineers)	Company Name:	Town of Oyster Bay
	Syosset, NY 11791			Address:	150 miller place
Email:	mrusso@tobays.net	Purchase Order #:		Pace Quote:	
Phone:	NONE Fax:	Project Name:	Old Bethpage Landfill	Pace Project Manager:	giovanna.deloca@pacelabs.com,
Requested Due Date:	Standard	Project #:	3617-07	Pace Profile #:	~~6466~~ 6501a DR 5/1/23

Regulatory Agency	
State / Location	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Y/N	N	N	N	N	N	N	N	N		
1	Trip Blank - 5/1/2023	WT	-	5/1/23	—	5/1/23	—		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-	-	N	001
2	OBS-1 - 5/1/2023	WT	G	5/1/23	0945	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	002, 006
3	MW-09C - 5/1/2023	WT	G	5/1/23	1245 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	003, 007
4	MW-09B - 5/1/2023	WT	G	5/1/23	240 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	004, 008
5	MW-05B - 5/1/2023	WT	G	5/1/23	430 pm	5/1/23	—		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	005, 009
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/1/2023	515 pm	[signature] / PACE	5/1/23	17:15	0.6	Y W	N	Y
D+B field filtered for dissolved metals denoted with "F" on bottles										
Send data to Lab data @ db-eng.com provide Catagory "B" deliverables + EQuIS										

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Keith Robins	
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5/1/2023

Sample Condition Upon Receipt

Pace Analytical®

WO#: 70254720

PM: KMM **Due Date: 05/16/23**

CLIENT: TOY

Client Name: Town of Oyster Bay Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☐ No ☒ N/A Temperature Blank Present: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Ziploc ☐ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: THO: TH148 Correction Factor: -0.3 ☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 0.6 Cooler Temperature Corrected(°C): 0.3 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample) Date and Initials of person examining contents: KJO 5/11/23

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☒ Yes	☐ No		1.
Chain of Custody Filled Out:	☒ Yes	☐ No		2.
Chain of Custody Relinquished:	☒ Yes	☐ No		3.
Sampler Name & Signature on COC:	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☒ Yes	☐ No		6.
Rush Turn Around Time Requested:	☒ Yes	☐ No		7.
Sufficient Volume: (Triple volume provided for I	☒ Yes	☐ No		8.
Correct Containers Used:	☒ Yes	☐ No		9.
-Pace Containers Used:	☒ Yes	☐ No		
Containers Intact:	☒ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☒ Yes	☐ No	☐ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☒ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL				
All containers needing preservation have been checked?	☒ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC210330				
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☒ Yes	☐ No	☐ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☒ N/A	14.
KI starch test strips Lot #. Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
SM 4500 CN samples checked for sulfide?	☐ Yes	☐ No	☒ N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☒ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☒ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024-01

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

70254720

For:

LATOYA SOBRATIE

Pace Analytical Melville

575 BROAD HOLLOW RD

MELVILLE, NY 11747

Project State of Origin: New York

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	10861	NY State Department of Health

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 05/12/2023

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	OBS-1_5/1/2023			**Collection Date:**	05/01/2023 09:45
Laboratory ID:	M3E0199-01			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-09C_5/1/2023			**Collection Date:**	05/01/2023 12:45
Laboratory ID:	M3E0199-02			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-09B_5/1/2023			**Collection Date:**	05/01/2023 14:40
Laboratory ID:	M3E0199-03			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	0.0028	0.0025	0.0050	J	

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-05B_5/1/2023			**Collection Date:**	05/01/2023 16:30
Laboratory ID:	M3E0199-04			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Notes and Definitions

J: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L: Milligrams per Liter
MDL: Method Detection Limit
RL: Reporting Limit

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70254720 **Workorder Name:** Old Bethpage Landfill 5/1 **Results Requested By:** 5/16/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70254720KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers H2SO4	Requested Analysis Phenol	LAB USE ONLY
1	OBS-1_5/1/2023	5/1/2023 09:45	70254720006	Water		X	
2	MW-09C_5/1/2023	5/1/2023 12:45	70254720007	Water		X	
3	MW-09B_5/1/2023	5/1/2023 14:40	70254720008	Water		X	
4	MW-05B_5/1/2023	5/1/2023 16:30	70254720009	Water		X	
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace Ld	5/2/23 1500	Brenda Gregory	5/3/23 e
2				
3				

Comments

10 12 LEVEL 4 DP

Cooler Temperature on Receipt 0.8 °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

M 3 E 0 1 9 9

Analytical - Melville, NY

05/03/2023 10:12
Brenda Gregory Temp: 0.8 (Signature)

MICROBAC®

Work Order # 23E0199

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5-3-23 BLG

pH Lot # HC205981

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5-3-23 BLG

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

BLG 5-3-23

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Microbac Laboratories Inc., - Marietta, OH

Level IV QA/QC Data Package

Laboratory Report Number:

M3E0199

Client Project ID:

70254720

For:

LATOYA SOBRATIE

Pace Analytical Melville

575 BROAD HOLLOW RD

MELVILLE, NY 11747

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	10861	NY State Department of Health

Project State of Origin: New York

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received. ***The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.***

Laboratory Project Manager:

Michelle Taylor

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Michelle Taylor

Project Manager

Issued: 05/12/2023

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Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

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Sample Summary

Sample Summary

Laboratory Report Number: M3E0199

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Client Sample ID:	Lab Sample ID:	Sampled:
OBS-1_5/1/2023	M3E0199-01	05/01/23 09:45
MW-09C_5/1/2023	M3E0199-02	05/01/23 12:45
MW-09B_5/1/2023	M3E0199-03	05/01/23 14:40
MW-05B_5/1/2023	M3E0199-04	05/01/23 16:30

Holding Time Summary

Specific Method: EPA 420.1 **Hold Time**

Laboratory Report Number: M3E0199

Matrix: Aqueous

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
OBS-1_5/1/2023	05/01/23 09:45	05/03/23 10:12	05/11/23 15:06	10.22	28.00	
MW-09C_5/1/2023	05/01/23 12:45	05/03/23 10:12	05/11/23 15:06	10.10	28.00	
MW-09B_5/1/2023	05/01/23 14:40	05/03/23 10:12	05/11/23 15:06	10.02	28.00	
MW-05B_5/1/2023	05/01/23 16:30	05/03/23 10:12	05/11/23 15:06	9.94	28.00	

* - Holding time exceeded.

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Analysis Class

Wet Chemistry

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Wet Chemistry - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

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Wet Chemistry
EPA 420.1

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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FORM I:
Wet Chemistry
EPA 420.1
RESULTS SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0199

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	OBS-1_5/1/2023			**Collection Date:**	05/01/2023 09:45
Laboratory ID:	M3E0199-01			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

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Laboratory Report Number: M3E0199

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	MW-09C_5/1/2023			**Collection Date:**	05/01/2023 12:45
Laboratory ID:	M3E0199-02			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

MICROBAC®

Laboratory Report Number: M3E0199

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	MW-09B_5/1/2023			**Collection Date:**	05/01/2023 14:40
Laboratory ID:	M3E0199-03			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	0.0028	0.0025	0.0050	J	

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
J: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L: Milligrams per Liter

MICROBAC®

Laboratory Report Number: M3E0199

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70254720

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	MW-05B_5/1/2023			**Collection Date:**	05/01/2023 16:30
Laboratory ID:	M3E0199-04			**Prep Date:**	05/10/2023 08:39
Matrix:	Aqueous			**Analyzed:**	05/11/2023 15:06
Batch / Sequence:	B3E0530 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E0530_230511012436.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

MICROBAC®

FORM II:
Wet Chemistry
EPA 420.1
ICV/CCV SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0199
Client Project ID: 70254720

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: UV-2600
Sequence:
Control Limt: +/- 10.00%

Method: EPA 420.1
Calibration:
File ID: Phenols_UV2600_2023-04-25_B
Analyst: TTB

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
B3E0530-CCV2	Phenolics, Total	0.0300	0.0297	99.0	mg/L	05/11/23 15:06	
B3E0530-CCV4	Phenolics, Total	0.0300	0.0288	95.8	mg/L	05/11/23 15:06	

* Values outside of QC limits

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FORM III:
Wet Chemistry
EPA 420.1
ICB/CCB/PREP BLANK SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M3E0199

Client Project ID: 70254720

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B3E0530-BLK1	**Batch:**	B3E0530
Blank File ID:	Phenols_UV2600_2023-04-25	**Instrument:**	UV-2600
Prepared:	05/10/2023 8:39	**Method:**	EPA 420.1
Analyzed:	05/11/2023 15:06	**Analyst:**	TTB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B3E0530-BLK1	600_2023-04-25_B3E0530_230	05/11/2023 15:06
LCS	B3E0530-BS2	600_2023-04-25_B3E0530_230	05/11/2023 15:06
Calibration Check	B3E0530-CCV2	600_2023-04-25_B3E0530_230	05/11/2023 15:06
Calibration Check	B3E0530-CCV4	600_2023-04-25_B3E0530_230	05/11/2023 15:06
OBS-1_5/1/2023	M3E0199-01	600_2023-04-25_B3E0530_230	05/11/2023 15:06
MW-09C_5/1/2023	M3E0199-02	600_2023-04-25_B3E0530_230	05/11/2023 15:06
MW-09B_5/1/2023	M3E0199-03	600_2023-04-25_B3E0530_230	05/11/2023 15:06
MW-05B_5/1/2023	M3E0199-04	600_2023-04-25_B3E0530_230	05/11/2023 15:06

MICROBAC®

Laboratory Report Number: M3E0199

METHOD BLANK
FORM IIIB

Client Project ID: 70254720

Sample ID:	B3E0530-BLK1	**Prep Date:**	05/10/23 08:39	**Matrix:**	Aqueous
Instrument:	UV-2600	**Analyzed:**	05/11/23 15:06	**Method:**	EPA 420.1
File ID:	Phenols_UV2600_2023	**Sequence:**		**Analyst:**	TTB
Batch:	B3E0530	**Units:**	mg/L	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Phenolics, Total	0.0025	0.0025	0.0050	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

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FORM VII:
Wet Chemistry
EPA 420.1
LCS/LCSD

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0199

Client Project ID: 70254720

BLANK SPIKE (BS)
FORM VII

Method:	EPA 420.1		**Blank Spike**
Batch:	B3E0530	**Spike ID:**	B3E0530-BS2
Analyst:	TTB	**Prepared:**	05/10/23 08:39
Matrix:	Aqueous	**Analyzed:**	05/11/23 15:06
Units:	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3
Instrument:	UV-2600	**Initial/Final:**	50mL/50mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Phenolics, Total	0.0500	0.0512	102	80 - 120	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 420.1
Batch / Sequence Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Phenols

Laboratory: Microbac - OVD

Method:	EPA 420.1
Batch:	B3E0530
SOP:	K4201 rev 22
Instrument:	UV-2600
Balance ID:	

Analyst	Date	Time	Temp ºC	
	5/10/2023	12:30	NA	Distilled
TTB				
	5/11/2023	15:06	NA	Spec. Run

Curve ID:	2023/04/25 TTB	2023/04/25 TTB
Range:	Low	High
Slope:	3.15791	0.102902
Y Intercept:	0.00320	-0.00068

Calculation: Result = [(Absorbance-Intercept)/Slope] * Final Vol./Initial Vol.*Instument Dilution

#	Sample ID	Sample Name	Sample Date	Initial Vol. (mL)	Final Vol. (mL)	Low Response (Abs)	High Response (Abs)	Instrument Dilution	Final Dilution Factor	Spike Amt. mg/L	Slope (m)	Y Intercept (b)	Phenols mg/L	Recovery %
	B3E0530-CCV1	Calibration Check		50.00	50.00			1.0	1.00	1.00				#VALUE!
1	B3E0530-BLK1	Blank		50.00	50.00	0.0000		1.0	1.00		3.15791	0.00320	-0.00101	
	B3E0530-BS1	LCS		50.00	50.00			1.0	1.00	0.50				#VALUE!
3	B3E0530-BS2	LCS		50.00	50.00	0.1650		1.0	1.00	0.05	3.15791	0.00320	0.05124	102.472
	B3E0530-CCV3	Calibration Check		50.00	50.00			1.0	1.00	1.00				#VALUE!
2	B3E0530-CCV4	Calibration Check		50.00	50.00	0.0940		1.0	1.00	0.03	3.15791	0.00320	0.02875	95.84267
12	B3E0530-DUP1	Duplicate M3E0362-01		50.00	50.00	0.0130		1.0	1.00		3.15791	0.00320	0.00310	
13	B3E0530-MS1	Matrix Spike M3E0362-01		50.00	50.00	0.1570		1.0	1.00	0.05	3.15791	0.00320	0.04870	97.40537
4	M3E0199-01	OBS-1_5/1/2023	5/1/23 9:45	50.00	50.00	0.0090		1.0	1.00		3.15791	0.00320	0.00184	
5	M3E0199-02	MW-09C_5/1/2023	5/1/23 12:45	50.00	50.00	0.0060		1.0	1.00		3.15791	0.00320	0.00089	
6	M3E0199-03	MW-09B_5/1/2023	5/1/23 14:40	50.00	50.00	0.0120		1.0	1.00		3.15791	0.00320	0.00279	
7	M3E0199-04	MW-05B_5/1/2023	5/1/23 16:30	50.00	50.00	0.0100		1.0	1.00		3.15791	0.00320	0.00215	
8	M3E0200-01	LEACHATE PIT #1	4/28/23 10:50	50.00	50.00	0.0390		1.0	1.00		3.15791	0.00320	0.01134	
9	M3E0200-02	FMMH-1S	4/28/23 11:30	50.00	50.00	0.0120		1.0	1.00		3.15791	0.00320	0.00279	
10	M3E0200-03	FMMH-1N	4/28/23 11:10	50.00	50.00	0.0110		1.0	1.00		3.15791	0.00320	0.00247	
11	M3E0362-01	A3E0670-01 (Outfall	5/3/23 7:43	50.00	50.00	0.0090		1.0	1.00		3.15791	0.00320	0.00184	
14	M3E0367-01	A3E1294-04 (NPDES	5/3/23 7:07	50.00	50.00	0.0280		1.0	1.00		3.15791	0.00320	0.00785	
15	M3E0554-03	Outfall 605	5/9/23 7:20	50.00	50.00	0.0140		1.0	1.00		3.15791	0.00320	0.00342	
17	B3E0530-CCV2	Calibration Check		50.00	50.00	0.0970		1.0	1.00	0.03	3.15791	0.00320	0.02970	99.00931
16	M3E0303-01	leachate, won't batch as aqueous		50.00	50.00	0.0170		1.0	1.00		3.15791	0.00320	0.00437	
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					

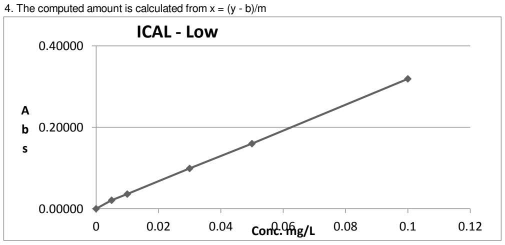
Linear Calibration Model y = mx + b
Phenols - Low

		ICV Standard ID:	2000387/ 2010707
Instrument:	UV-2600	ICV Initial Volume:	50
Curve ID:	2023/04/25 TTB	ICV Final Volume:	50
ICV (Abs):	0.1630	ICV Working Conc:	0.05
ICV Conc (mg/L):	0.05060	Cell Size (cm):	1
ICV %REC	101%	Wavelength (nm):	460

Concentration (x)	Absorbance (OD) (y)	Calculated Amount	% Relative Error	Response Factor	Standard ID
0	0.00000	-0.00101			
0.005	0.02100	0.00564	-12.7253	4.20000	
0.01	0.03600	0.01039	-3.8624	3.60000	
0.03	0.09900	0.03034	-1.1204	3.30000	
0.05	0.16000	0.04965	0.6946	3.20000	
0.1	0.31900	0.10000	-0.0024	3.19000	
		-0.00101		#DIV/0!	

COC (r):	0.99987	Must be > 0.995
SLOPE (m):	3.15791	
y - INTERCEPT (b)	0.00320	
INTERCEPT TEST:	6.56012	Ratio should be > 5
% RELATIVE ERROR TEST:	-12.72534	Should be less than two times CCV criteria

1. R is the coefficient of correlation
2. The intercept test is the ratio of the response (y) of the low standard to the intercept (b):
3. Relative Error (%RE) = (X'i - Xi / Xi) * 100. Where Xi = True value for the calibration standard X'i = Measured concentration of the calibration standard.
4. The computed amount is calculated from x = (y - b)/m



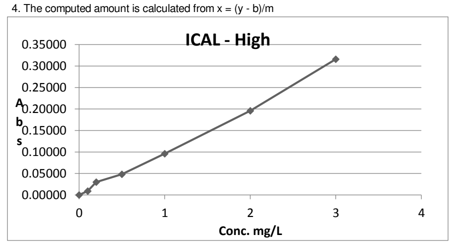
Linear Calibration Model y = mx + b
Phenols - High

		ICV Standard ID:	2000387/ 2010707
Instrument:	UV-2600	ICV Initial Volume:	50
Curve ID:	2023/04/25 TTB	ICV Final Volume:	50
ICV (Abs):	0.0510	ICV Working Conc:	0.50
ICV Conc (mg/L):	0.50219	Cell Size (cm):	1
ICV %REC	100%	Wavelength (nm):	510

Concentration (x)	Absorbance (OD) (y)	Calculated Amount	% Relative Error	Response Factor	Standard ID
0	0.00000	0.00657		#DIV/0!	
0.1	0.00900	0.09403	5.9668	0.09000	
0.2	0.03000	0.29811	-49.0554	0.15000	
0.5	0.04800	0.47303	5.3931	0.09600	
1	0.09600	0.93950	6.0502	0.09600	
2	0.19600	1.91130	4.4352	0.09800	
3	0.31600	3.07746	-2.5818	0.10533	

COC (r):	0.99819	Must be > 0.995
SLOPE (m):	0.10290	
y - INTERCEPT (b)	-0.00068	
INTERCEPT TEST:	13.30972	Ratio should be > 5
% RELATIVE ERROR TEST:	5.96684	Should be less than two times CCV criteria

1. R is the coefficient of correlation
2. The intercept test is the ratio of the response (y) of the low standard to the intercept (b):
3. Relative Error (%RE) = (X'i - Xi / Xi) * 100. Where Xi = True value for the calibration standard X'i = Measured concentration of the calibration standard.
4. The computed amount is calculated from x = (y - b)/m



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Laboratory Report Number: M3E0199

Client Project ID: 70254720

BATCH LOG SUMMARY
SECTION A1

Batch: B3E0530
Matrix: Aqueous
Method: EPA 420.1

Prepared: 5/10/2023 8:39:00AM
Prepared By: TTB

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M3E0199-01	OBS-1_5/1/2023	50.0 mL	50.0 mL						
M3E0199-02	MW-09C_5/1/2023	50.0 mL	50.0 mL						
M3E0199-03	MW-09B_5/1/2023	50.0 mL	50.0 mL						
M3E0199-04	MW-05B_5/1/2023	50.0 mL	50.0 mL						
B3E0530-BS2		50.0 mL	50.0 mL						2010707 2.5µL
B3E0530-CCV4		50.0 mL	50.0 mL						2000387 1.5µL
B3E0530-CCV2		50.0 mL	50.0 mL						2000387 1.5µL
B3E0530-BLK1		50.0 mL	50.0 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
2000387	Phenol Calibration Standard (1000 mg/L)	1/19/2022 8:27:26AM	** Vendor **
2010707	Phenol BS/ICV Stock, 1000 mg/L Lot 4211D00	12/28/2022 9:35:14AM	** Vendor **

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
3000747	Phenol Copper Sulfate Solution	1/30/2023 8:35:29AM	Ethan Tidd
3001993	Ammonia Buffer Solution (Phenol)	3/8/2023 12:00:55PM	Andrew Hout
3002493	Chloroform Lot # 225934	3/24/2023 1:28:13PM	** Vendor **
3003921	Phenol Potassium Ferricyanide Daily Solution	5/11/2023 8:30:00AM	Thomas Burch
3003922	Phenol 4AAP Daily Solution	5/11/2023 8:30:13AM	Thomas Burch

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70254720 **Workorder Name:** Old Bethpage Landfill 5/1 **Results Requested By:** 5/16/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70254720KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4						Requested Analysis: Phenol												LAB USE ONLY
1	OBS-1_5/1/2023	5/1/2023 09:45	70254720006	Water							X												
2	MW-09C_5/1/2023	5/1/2023 12:45	70254720007	Water							X												
3	MW-09B_5/1/2023	5/1/2023 14:40	70254720008	Water							X												
4	MW-05B_5/1/2023	5/1/2023 16:30	70254720009	Water							X												
5																							

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace Ld	5/2/23 1500	Brenda Gregory	5/3/23 e
2				
3				

Comments

10 12 LEVEL 4 DP

Cooler Temperature on Receipt 0.8 °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

M 3 E 0 1 9 9

Analytical - Melville, NY

5/03/2023 10:12
Brenda Gregory Temp: 0.8 (Signature)

MICROBAC®

Work Order # 23E0199

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5-3-23 BLG

pH Lot # HC205981

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5-3-23 BLG

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

BLG 5-3-23

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

May 26, 2023

Keith Robins
Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

RE: Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Dear Keith Robins:

Enclosed are the analytical results for sample(s) received by the laboratory between May 05, 2023 and May 10, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kimberley Mack

Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Donna Brown, D&B Engineers and Architechts, P.C.
Tom Fox, D&B Engineers and Architechts, P.C.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

CERTIFICATIONS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 200.7**
Description: 200.7 Metals, Total
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 200.7 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 304864

B: Analyte was detected in the associated method blank.

- BLANK for HBN 304864 [MPRP/158 (Lab ID: 1544750)
  - Nickel

QC Batch: 305197

B: Analyte was detected in the associated method blank.

- BLANK for HBN 305197 [MPRP/158 (Lab ID: 1546370)
  - Potassium

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304864

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255738001,70255811001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1545160)
  - Sodium

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 200.7**
Description: 200.7 Metals, Total
Client: Town of Oyster Bay
Date: May 26, 2023

QC Batch: 305197

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256148001,70256302002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1546373)
  - Sodium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 304682

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1543682)
  - Zinc

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 200.7**
Description: 200.7 Metals, Dissolved
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 200.7 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 305446

B: Analyte was detected in the associated method blank.

- BLANK for HBN 305446 [ICP/1929 (Lab ID: 1547798)
  - Aluminum, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304224

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255216001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1541507)
  - Aluminum, Dissolved
  - Barium, Dissolved
  - Calcium, Dissolved
  - Chromium, Dissolved
  - Iron, Dissolved
  - Manganese, Dissolved
  - Potassium, Dissolved
  - Sodium, Dissolved
  - Zinc, Dissolved

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 200.7**
Description: 200.7 Metals, Dissolved
Client: Town of Oyster Bay
Date: May 26, 2023

QC Batch: 305445

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436009,70255436011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1547794)
  - Sodium, Dissolved
- MS (Lab ID: 1547796)
  - Sodium, Dissolved

QC Batch: 305446

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436013,70255436015

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1547801)
  - Sodium, Dissolved

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 2340B**
Description: 2340B Hardness, Total (Calc.)
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 2340B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 245.1**
Description: 245.1 Mercury
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
8 samples were analyzed for EPA 245.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 245.1**
Description: 245.1 Mercury, Dissolved
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
12 samples were analyzed for EPA 245.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
15 samples were analyzed for EPA 8260C/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 304329

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- LCS (Lab ID: 1542100)
  - Bromoform
  - Carbon tetrachloride
  - Dibromochloromethane

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1542099)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- BLIND DUPLICATE-1-5/5/23 (Lab ID: 70255436005)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- LCS (Lab ID: 1542100)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- MW-06B-5/5/23 (Lab ID: 70255436004)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- MW-08A-5/5/23 (Lab ID: 70255436003)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- MW-08B-5/5/23 (Lab ID: 70255436002)
  - Dichlorodifluoromethane
  - Tetrachloroethene
- TRIP BLANK (Lab ID: 70255436001)
  - Dichlorodifluoromethane
  - Tetrachloroethene

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Oyster Bay
Date: May 26, 2023

QC Batch: 304935

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1545055)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- FIELD BLANK-5/10/23 (Lab ID: 70255436021)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- LCS (Lab ID: 1545056)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- LF-1 -5/10/23 (Lab ID: 70255436019)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- LF-2 -5/10/23 (Lab ID: 70255436017)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MS (Lab ID: 1545524)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MSD (Lab ID: 1545525)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MW-06A (Lab ID: 70255436014)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MW-06C (Lab ID: 70255436010)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MW-06E (Lab ID: 70255436008)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- MW-06F (Lab ID: 70255436012)
  - Bromoform
  - Carbon tetrachloride

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Town of Oyster Bay
Date: May 26, 2023

QC Batch: 304935

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- Dichlorodifluoromethane
- STORAGE BLANK - 5/10/23 (Lab ID: 70255436006)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- TRIP BLANK - 5/09/2023 (Lab ID: 70255436007)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane
- TRIP BLANK- 5/10/23 (Lab ID: 70255436016)
  - Bromoform
  - Carbon tetrachloride
  - Dichlorodifluoromethane

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304935

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256222002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1545524)
  - Vinyl chloride
- MSD (Lab ID: 1545525)
  - Vinyl chloride

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 305806

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1549653)
  - Alkalinity,Carbonate (CaCO3)

QC Batch: 306176

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1551406)
  - Alkalinity,Carbonate (CaCO3)

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 305250

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256161006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1546763)
  - Alkalinity, Total as CaCO3
  - Alkalinity,Carbonate (CaCO3)

QC Batch: 305806

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255658011

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1549657)
  - Alkalinity,Carbonate (CaCO3)

QC Batch: 306101

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436014

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1551180)

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Oyster Bay
Date: May 26, 2023

QC Batch: 306101

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436014

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Alkalinity,Carbonate (CaCO3)

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 2320B**
Description: 2320B Alkalinity
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304233

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255411005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1541531)
  - Alkalinity, Total as CaCO3
  - Alkalinity,Carbonate (CaCO3)

QC Batch: 304736

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255846001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1544098)
  - Alkalinity,Carbonate (CaCO3)

QC Batch: 304940

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256081004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1545079)
  - Alkalinity,Carbonate (CaCO3)

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 2540C**
Description: 2540C Total Dissolved Solids
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 2540C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 305342

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1547173)
  - Total Dissolved Solids
- DUP (Lab ID: 1547175)
  - Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 3500-Cr B**
Description: Chromium, Hexavalent
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
18 samples were analyzed for SM22 3500-Cr B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- MW-06C (Lab ID: 70255436010)
- MW-06C DISS (Lab ID: 70255436011)
- MW-06E (Lab ID: 70255436008)
- MW-06E DISS (Lab ID: 70255436009)
- MW-06F (Lab ID: 70255436012)
- MW-06F DISS (Lab ID: 70255436013)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 300.0 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 305459

B: Analyte was detected in the associated method blank.

- BLANK for HBN 305459 [WETA/478 (Lab ID: 1547843)
  - Sulfate

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 305459

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256200002,70256309001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1547845)
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 351.2**
Description: 351.2 Total Kjeldahl Nitrogen
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 351.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304456

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436004,70255528002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1542790)
  - Nitrogen, Kjeldahl, Total
- MS (Lab ID: 1542792)
  - Nitrogen, Kjeldahl, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 305506

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70256274001,70256556001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1548150)
  - Nitrate-Nitrite (as N)
- MS (Lab ID: 1548152)
  - Nitrate-Nitrite (as N)

QC Batch: 305853

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255436017,70255898006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1549848)
  - Nitrate-Nitrite (as N)

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 304089

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70255441001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1540962)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 4500-CN-E**
Description: SM 4500 CNE Cyanide, Total
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 4500-CN-E by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM20/22 4500-CN-C with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 4500-Cl-E**
Description: 4500 Chloride
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 4500-Cl-E by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Method: **SM22 4500 NH3 H**
Description: 4500 Ammonia Water
Client: Town of Oyster Bay
Date: May 26, 2023

General Information:
11 samples were analyzed for SM22 4500 NH3 H by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: TRIP BLANK **Lab ID: 70255436001** Collected: 05/05/23 00:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/09/23 18:26	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/09/23 18:26	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/09/23 18:26	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	127-18-4	v3
Toluene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 18:26	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/09/23 18:26	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/09/23 18:26	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/09/23 18:26	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/09/23 18:26	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	113	%	80-120	1		05/09/23 18:26	17060-07-0	
4-Bromofluorobenzene (S)	95	%	73-122	1		05/09/23 18:26	460-00-4	
Toluene-d8 (S)	100	%	75-122	1		05/09/23 18:26	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08B-5/5/23 **Lab ID: 70255436002** Collected: 05/05/23 12:05 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	05/10/23 10:46	05/11/23 13:22	7429-90-5	
Barium	**67.0J**	ug/L	200	1	05/10/23 10:46	05/11/23 13:22	7440-39-3	
Calcium	**14300**	ug/L	200	1	05/10/23 10:46	05/11/23 13:22	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/10/23 10:46	05/11/23 13:22	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/10/23 10:46	05/11/23 13:22	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**35700**	ug/L	500	1	05/10/23 10:46	05/11/23 13:22		
Hardness, Magnesium	**17000**	ug/L	830	1	05/10/23 10:46	05/11/23 13:22		N3
Iron	**<100**	ug/L	100	1	05/10/23 10:46	05/11/23 13:22	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/10/23 10:46	05/11/23 13:22	7439-92-1	
Magnesium	**4120**	ug/L	200	1	05/10/23 10:46	05/11/23 13:22	7439-95-4	
Manganese	**554**	ug/L	10.0	1	05/10/23 10:46	05/11/23 13:22	7439-96-5	
Nickel	**16.2J**	ug/L	40.0	1	05/10/23 10:46	05/11/23 13:22	7440-02-0	
Potassium	**7830**	ug/L	5000	1	05/10/23 10:46	05/11/23 13:22	7440-09-7	
Sodium	**91800**	ug/L	5000	1	05/10/23 10:46	05/11/23 13:22	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**52700**	ug/L	830	1	05/10/23 10:46	05/11/23 13:22		
Zinc	**26.9**	ug/L	20.0	1	05/10/23 10:46	05/11/23 13:22	7440-66-6	
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**41.8J**	ug/L	200	1		05/08/23 15:13	7429-90-5	
Barium, Dissolved	**63.9J**	ug/L	200	1		05/08/23 15:13	7440-39-3	
Calcium, Dissolved	**13900**	ug/L	1000	1		05/08/23 15:13	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/08/23 15:13	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/08/23 15:13	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/08/23 15:13	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/08/23 15:13	7439-92-1	
Magnesium, Dissolved	**3930**	ug/L	1000	1		05/08/23 15:13	7439-95-4	
Manganese, Dissolved	**535**	ug/L	10.0	1		05/08/23 15:13	7439-96-5	
Nickel, Dissolved	**16.2J**	ug/L	40.0	1		05/08/23 15:13	7440-02-0	
Potassium, Dissolved	**7660**	ug/L	5000	1		05/08/23 15:13	7440-09-7	
Sodium, Dissolved	**89900**	ug/L	5000	1		05/08/23 15:13	7440-23-5	
Zinc, Dissolved	**26.9**	ug/L	20.0	1		05/08/23 15:13	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**52700**	ug/L	830	1		05/11/23 13:22		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/12/23 12:02	05/15/23 13:45	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:26	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08B-5/5/23 **Lab ID: 70255436002** Collected: 05/05/23 12:05 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
	Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/09/23 21:32	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/09/23 21:32	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/09/23 21:32	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	127-18-4	v3
Toluene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:32	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/09/23 21:32	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/09/23 21:32	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/09/23 21:32	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/09/23 21:32	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	119	%	80-120	1		05/09/23 21:32	17060-07-0	
4-Bromofluorobenzene (S)	99	%	73-122	1		05/09/23 21:32	460-00-4	
Toluene-d8 (S)	99	%	75-122	1		05/09/23 21:32	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**11.5**	mg/L	1.0	1		05/16/23 11:41		
Alkalinity,Bicarbonate (CaCO3)	**11.5**	mg/L	1.0	1		05/16/23 11:41		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/16/23 11:41		
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**9.2**	mg/L	5.0	1		05/08/23 16:44		
Alkalinity,Bicarbonate (CaCO3)	**9.2**	mg/L	5.0	1		05/08/23 16:44		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08B-5/5/23 **Lab ID: 70255436002** Collected: 05/05/23 12:05 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/08/23 16:44		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**394**	mg/L	10.0	1		05/10/23 18:59		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/05/23 19:57	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**26.2**	mg/L	5.0	1		05/17/23 19:53	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/10/23 04:46	05/10/23 13:31	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**2.3**	mg/L	0.050	1		05/17/23 17:36	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/05/23 21:40	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/18/23 14:00	05/18/23 16:16	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**173**	mg/L	20.0	10		05/10/23 10:06	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**0.060J**	mg/L	0.10	1		05/14/23 14:03	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08A-5/5/23 **Lab ID: 70255436003** Collected: 05/05/23 13:15 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**56.7J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:07	7429-90-5	
Barium	**69.2J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:07	7440-39-3	
Calcium	**7480**	ug/L	200	1	05/11/23 10:16	05/11/23 17:07	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:07	7440-47-3	
Copper	**3.9J**	ug/L	25.0	1	05/11/23 10:16	05/11/23 17:07	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**18700**	ug/L	500	1	05/11/23 10:16	05/11/23 17:07		
Hardness, Magnesium	**21100**	ug/L	830	1	05/11/23 10:16	05/11/23 17:07		N3
Iron	**<100**	ug/L	100	1	05/11/23 10:16	05/11/23 17:07	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/11/23 10:16	05/11/23 17:07	7439-92-1	
Magnesium	**5130**	ug/L	200	1	05/11/23 10:16	05/11/23 17:07	7439-95-4	
Manganese	**135**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:07	7439-96-5	
Nickel	**9.4J**	ug/L	40.0	1	05/11/23 10:16	05/11/23 17:07	7440-02-0	
Potassium	**5870**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:07	7440-09-7	
Sodium	**19200**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:07	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**39800**	ug/L	830	1	05/11/23 10:16	05/11/23 17:07		
Zinc	**9.9J**	ug/L	20.0	1	05/11/23 10:16	05/11/23 17:07	7440-66-6	
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**52.4J**	ug/L	200	1		05/08/23 15:15	7429-90-5	
Barium, Dissolved	**64.8J**	ug/L	200	1		05/08/23 15:15	7440-39-3	
Calcium, Dissolved	**7420**	ug/L	1000	1		05/08/23 15:15	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/08/23 15:15	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/08/23 15:15	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/08/23 15:15	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/08/23 15:15	7439-92-1	
Magnesium, Dissolved	**4720**	ug/L	1000	1		05/08/23 15:15	7439-95-4	
Manganese, Dissolved	**118**	ug/L	10.0	1		05/08/23 15:15	7439-96-5	
Nickel, Dissolved	**10.2J**	ug/L	40.0	1		05/08/23 15:15	7440-02-0	
Potassium, Dissolved	**5520**	ug/L	5000	1		05/08/23 15:15	7440-09-7	
Sodium, Dissolved	**17700**	ug/L	5000	1		05/08/23 15:15	7440-23-5	
Zinc, Dissolved	**7.7J**	ug/L	20.0	1		05/08/23 15:15	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**39800**	ug/L	830	1		05/11/23 17:07		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/12/23 12:02	05/15/23 13:47	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:31	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08A-5/5/23 **Lab ID: 70255436003** Collected: 05/05/23 13:15 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/09/23 21:52	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-00-3	
Chloroform	**1.3**	ug/L	1.0	1		05/09/23 21:52	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-35-4	
cis-1,2-Dichloroethene	**11.5**	ug/L	1.0	1		05/09/23 21:52	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/09/23 21:52	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-09-2	
Tetrachloroethene	**5.5**	ug/L	1.0	1		05/09/23 21:52	127-18-4	v3
Toluene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 21:52	71-55-6	
Trichloroethene	**1.4**	ug/L	1.0	1		05/09/23 21:52	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/09/23 21:52	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/09/23 21:52	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/09/23 21:52	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/09/23 21:52	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	80-120	1		05/09/23 21:52	17060-07-0	
4-Bromofluorobenzene (S)	98	%	73-122	1		05/09/23 21:52	460-00-4	
Toluene-d8 (S)	100	%	75-122	1		05/09/23 21:52	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**11.8**	mg/L	1.0	1		05/16/23 11:58		
Alkalinity,Bicarbonate (CaCO3)	**11.8**	mg/L	1.0	1		05/16/23 11:58		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/16/23 11:58		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**33.5**	mg/L	5.0	1		05/08/23 16:47		
Alkalinity,Bicarbonate (CaCO3)	**33.5**	mg/L	5.0	1		05/08/23 16:47		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-08A-5/5/23 **Lab ID: 70255436003** Collected: 05/05/23 13:15 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/08/23 16:47		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**115**	mg/L	10.0	1		05/10/23 19:01		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/05/23 19:59	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**29.9**	mg/L	5.0	1		05/17/23 20:07	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**0.18**	mg/L	0.10	1	05/10/23 04:46	05/10/23 13:33	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**1.4**	mg/L	0.050	1		05/17/23 17:38	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/05/23 21:50	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/18/23 14:00	05/18/23 16:17	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**30.5**	mg/L	2.0	1		05/10/23 09:56	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**<0.10**	mg/L	0.10	1		05/14/23 14:04	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06B-5/5/23 **Lab ID: 70255436004** Collected: 05/05/23 15:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**43.8J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:10	7429-90-5	
Barium	**83.1J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:10	7440-39-3	
Calcium	**30600**	ug/L	200	1	05/11/23 10:16	05/11/23 17:10	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:10	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/11/23 10:16	05/11/23 17:10	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**76400**	ug/L	500	1	05/11/23 10:16	05/11/23 17:10		
Hardness, Magnesium	**127000**	ug/L	830	1	05/11/23 10:16	05/11/23 17:10		N3
Iron	**20900**	ug/L	100	1	05/11/23 10:16	05/11/23 17:10	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/11/23 10:16	05/11/23 17:10	7439-92-1	
Magnesium	**30900**	ug/L	200	1	05/11/23 10:16	05/11/23 17:10	7439-95-4	
Manganese	**51.3**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:10	7439-96-5	
Nickel	**5.7J**	ug/L	40.0	1	05/11/23 10:16	05/11/23 17:10	7440-02-0	
Potassium	**102000**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:10	7440-09-7	
Sodium	**109000**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:10	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**204000**	ug/L	830	1	05/11/23 10:16	05/11/23 17:10		
Zinc	**<20.0**	ug/L	20.0	1	05/11/23 10:16	05/11/23 17:10	7440-66-6	
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**36.0J**	ug/L	200	1		05/08/23 15:18	7429-90-5	
Barium, Dissolved	**80.6J**	ug/L	200	1		05/08/23 15:18	7440-39-3	
Calcium, Dissolved	**29500**	ug/L	1000	1		05/08/23 15:18	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/08/23 15:18	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/08/23 15:18	7440-50-8	
Iron, Dissolved	**19800**	ug/L	20.0	1		05/08/23 15:18	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/08/23 15:18	7439-92-1	
Magnesium, Dissolved	**28900**	ug/L	1000	1		05/08/23 15:18	7439-95-4	
Manganese, Dissolved	**49.0**	ug/L	10.0	1		05/08/23 15:18	7439-96-5	
Nickel, Dissolved	**6.3J**	ug/L	40.0	1		05/08/23 15:18	7440-02-0	
Potassium, Dissolved	**97300**	ug/L	5000	1		05/08/23 15:18	7440-09-7	
Sodium, Dissolved	**98700**	ug/L	5000	1		05/08/23 15:18	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/08/23 15:18	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**204000**	ug/L	830	1		05/11/23 17:10		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/12/23 12:02	05/15/23 13:48	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:35	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06B-5/5/23 **Lab ID: 70255436004** Collected: 05/05/23 15:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
	Pace Analytical Services - Melville							
Benzene	**3.3**	ug/L	1.0	1		05/09/23 22:13	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/09/23 22:13	56-23-5	
Chlorobenzene	**17.9**	ug/L	1.0	1		05/09/23 22:13	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/09/23 22:13	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	124-48-1	
1,2-Dichlorobenzene	**1.5**	ug/L	1.0	1		05/09/23 22:13	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	541-73-1	
1,4-Dichlorobenzene	**4.6**	ug/L	1.0	1		05/09/23 22:13	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	100-41-4	
Isopropylbenzene (Cumene)	**1.7**	ug/L	1.0	1		05/09/23 22:13	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	127-18-4	v3
Toluene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:13	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/09/23 22:13	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/09/23 22:13	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/09/23 22:13	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/09/23 22:13	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	114	%	80-120	1		05/09/23 22:13	17060-07-0	
4-Bromofluorobenzene (S)	97	%	73-122	1		05/09/23 22:13	460-00-4	
Toluene-d8 (S)	101	%	75-122	1		05/09/23 22:13	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**850**	mg/L	1.0	1		05/16/23 12:31		
Alkalinity,Bicarbonate (CaCO3)	**850**	mg/L	1.0	1		05/16/23 12:31		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/16/23 12:31		
2320B Alkalinity	Analytical Method: SM22 2320B							
	Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**1020**	mg/L	5.0	1		05/08/23 16:51		
Alkalinity,Bicarbonate (CaCO3)	**1020**	mg/L	5.0	1		05/08/23 16:51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06B-5/5/23 **Lab ID: 70255436004** Collected: 05/05/23 15:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/08/23 16:51		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**594**	mg/L	20.0	1		05/10/23 19:02		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/05/23 20:00	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**0.94J**	mg/L	5.0	1		05/19/23 07:35	14808-79-8	B
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**110**	mg/L	5.0	10	05/10/23 04:46	05/10/23 13:43	7727-37-9	M1
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/17/23 18:05	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/05/23 21:55	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/18/23 14:00	05/18/23 16:18	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**69.0**	mg/L	10.0	5		05/10/23 09:57	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**160**	mg/L	10.0	100		05/14/23 14:05	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: BLIND DUPLICATE-1-5/5/23 **Lab ID: 70255436005** Collected: 05/05/23 00:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**41.9J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:13	7429-90-5	
Barium	**81.9J**	ug/L	200	1	05/11/23 10:16	05/11/23 17:13	7440-39-3	
Calcium	**30400**	ug/L	200	1	05/11/23 10:16	05/11/23 17:13	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:13	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/11/23 10:16	05/11/23 17:13	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**75900**	ug/L	500	1	05/11/23 10:16	05/11/23 17:13		
Hardness, Magnesium	**126000**	ug/L	830	1	05/11/23 10:16	05/11/23 17:13		N3
Iron	**20700**	ug/L	100	1	05/11/23 10:16	05/11/23 17:13	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/11/23 10:16	05/11/23 17:13	7439-92-1	
Magnesium	**30600**	ug/L	200	1	05/11/23 10:16	05/11/23 17:13	7439-95-4	
Manganese	**50.8**	ug/L	10.0	1	05/11/23 10:16	05/11/23 17:13	7439-96-5	
Nickel	**5.8J**	ug/L	40.0	1	05/11/23 10:16	05/11/23 17:13	7440-02-0	
Potassium	**100000**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:13	7440-09-7	
Sodium	**107000**	ug/L	5000	1	05/11/23 10:16	05/11/23 17:13	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**202000**	ug/L	830	1	05/11/23 10:16	05/11/23 17:13		
Zinc	**<20.0**	ug/L	20.0	1	05/11/23 10:16	05/11/23 17:13	7440-66-6	
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**36.3J**	ug/L	200	1		05/08/23 15:21	7429-90-5	
Barium, Dissolved	**80.5J**	ug/L	200	1		05/08/23 15:21	7440-39-3	
Calcium, Dissolved	**29600**	ug/L	1000	1		05/08/23 15:21	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/08/23 15:21	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/08/23 15:21	7440-50-8	
Iron, Dissolved	**19800**	ug/L	20.0	1		05/08/23 15:21	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/08/23 15:21	7439-92-1	
Magnesium, Dissolved	**28800**	ug/L	1000	1		05/08/23 15:21	7439-95-4	
Manganese, Dissolved	**48.7**	ug/L	10.0	1		05/08/23 15:21	7439-96-5	
Nickel, Dissolved	**5.8J**	ug/L	40.0	1		05/08/23 15:21	7440-02-0	
Potassium, Dissolved	**97300**	ug/L	5000	1		05/08/23 15:21	7440-09-7	
Sodium, Dissolved	**98500**	ug/L	5000	1		05/08/23 15:21	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/08/23 15:21	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**202000**	ug/L	830	1		05/11/23 17:13		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/12/23 12:02	05/15/23 13:52	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:36	7439-97-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: BLIND DUPLICATE-1-5/5/23 **Lab ID: 70255436005** Collected: 05/05/23 00:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**3.2**	ug/L	1.0	1		05/09/23 22:33	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-25-2	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/09/23 22:33	56-23-5	
Chlorobenzene	**18.4**	ug/L	1.0	1		05/09/23 22:33	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/09/23 22:33	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	124-48-1	
1,2-Dichlorobenzene	**1.2**	ug/L	1.0	1		05/09/23 22:33	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	541-73-1	
1,4-Dichlorobenzene	**4.7**	ug/L	1.0	1		05/09/23 22:33	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	100-41-4	
Isopropylbenzene (Cumene)	**1.5**	ug/L	1.0	1		05/09/23 22:33	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	127-18-4	v3
Toluene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/09/23 22:33	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/09/23 22:33	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/09/23 22:33	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/09/23 22:33	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/09/23 22:33	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	115	%	80-120	1		05/09/23 22:33	17060-07-0	
4-Bromofluorobenzene (S)	98	%	73-122	1		05/09/23 22:33	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/09/23 22:33	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**913**	mg/L	1.0	1		05/16/23 13:06		
Alkalinity,Bicarbonate (CaCO3)	**913**	mg/L	1.0	1		05/16/23 13:06		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/16/23 13:06		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**1010**	mg/L	5.0	1		05/08/23 16:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: BLIND DUPLICATE-1-5/5/23 **Lab ID: 70255436005** Collected: 05/05/23 00:00 Received: 05/05/23 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity,Bicarbonate (CaCO3)	**1010**	mg/L	5.0	1		05/08/23 16:56		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/08/23 16:56		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**606**	mg/L	20.0	1		05/10/23 19:02		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/05/23 19:56	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**0.92J**	mg/L	5.0	1		05/19/23 07:49	14808-79-8	B
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**122**	mg/L	5.0	10	05/11/23 04:33	05/11/23 13:24	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/17/23 17:40	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/05/23 21:17	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/18/23 14:00	05/18/23 16:19	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**69.4**	mg/L	10.0	5		05/10/23 09:58	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**119**	mg/L	10.0	100		05/14/23 14:16	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: STORAGE BLANK - 5/10/23 **Lab ID: 70255436006** Collected: 05/10/23 00:00 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 15:34	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 15:34	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 15:34	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:34	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 15:34	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 15:34	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 15:34	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 15:34	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%	80-120	1		05/12/23 15:34	17060-07-0	
4-Bromofluorobenzene (S)	95	%	73-122	1		05/12/23 15:34	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/12/23 15:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: TRIP BLANK - 5/09/2023 **Lab ID: 70255436007** Collected: 05/09/23 00:00 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 15:56	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 15:56	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 15:56	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 15:56	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 15:56	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 15:56	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 15:56	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 15:56	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%	80-120	1		05/12/23 15:56	17060-07-0	
4-Bromofluorobenzene (S)	96	%	73-122	1		05/12/23 15:56	460-00-4	
Toluene-d8 (S)	103	%	75-122	1		05/12/23 15:56	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06E **Lab ID: 70255436008** Collected: 05/09/23 11:20 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**58.6J**	ug/L	200	1	05/12/23 10:00	05/15/23 13:50	7429-90-5	
Barium	**112J**	ug/L	200	1	05/12/23 10:00	05/15/23 13:50	7440-39-3	
Calcium	**18600**	ug/L	200	1	05/12/23 10:00	05/15/23 13:50	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/12/23 10:00	05/15/23 13:50	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/12/23 10:00	05/15/23 13:50	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**46400**	ug/L	500	1	05/12/23 10:00	05/15/23 13:50		
Hardness, Magnesium	**55600**	ug/L	830	1	05/12/23 10:00	05/15/23 13:50		N3
Iron	**14000**	ug/L	100	1	05/12/23 10:00	05/15/23 13:50	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/12/23 10:00	05/15/23 13:50	7439-92-1	
Magnesium	**13500**	ug/L	200	1	05/12/23 10:00	05/15/23 13:50	7439-95-4	
Manganese	**192**	ug/L	10.0	1	05/12/23 10:00	05/15/23 13:50	7439-96-5	
Nickel	**17.5J**	ug/L	40.0	1	05/12/23 10:00	05/15/23 13:50	7440-02-0	B
Potassium	**29600**	ug/L	5000	1	05/12/23 10:00	05/15/23 13:50	7440-09-7	
Sodium	**126000**	ug/L	5000	1	05/12/23 10:00	05/15/23 13:50	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**102000**	ug/L	830	1	05/12/23 10:00	05/15/23 13:50		
Zinc	**<20.0**	ug/L	20.0	1	05/12/23 10:00	05/15/23 13:50	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**102000**	ug/L	830	1		05/15/23 13:50		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/17/23 07:00	05/18/23 11:00	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:40	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 17:03	56-23-5	v3
Chlorobenzene	**3.2**	ug/L	1.0	1		05/12/23 17:03	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 17:03	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	541-73-1	
1,4-Dichlorobenzene	**1.0**	ug/L	1.0	1		05/12/23 17:03	106-46-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06E **Lab ID: 70255436008** Collected: 05/09/23 11:20 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 17:03	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:03	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:03	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 17:03	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 17:03	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 17:03	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%	80-120	1		05/12/23 17:03	17060-07-0	
4-Bromofluorobenzene (S)	95	%	73-122	1		05/12/23 17:03	460-00-4	
Toluene-d8 (S)	104	%	75-122	1		05/12/23 17:03	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**186**	mg/L	1.0	1		05/19/23 12:14		
Alkalinity,Bicarbonate (CaCO3)	**186**	mg/L	1.0	1		05/19/23 12:14		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/19/23 12:14		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**217**	mg/L	5.0	1		05/11/23 16:36		
Alkalinity,Bicarbonate (CaCO3)	**217**	mg/L	5.0	1		05/11/23 16:36		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/11/23 16:36		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**496**	mg/L	20.0	1		05/15/23 17:00		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:30	18540-29-9	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06E **Lab ID: 70255436008** Collected: 05/09/23 11:20 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**40.6**	mg/L	5.0	1		05/17/23 23:58	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**23.2**	mg/L	1.0	10	05/11/23 04:33	05/11/23 13:26	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**1.9**	mg/L	0.050	1		05/17/23 17:56	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/10/23 21:27	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/23/23 14:20	05/23/23 16:55	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**211**	mg/L	20.0	10		05/14/23 15:01	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**26.5**	mg/L	1.0	10		05/16/23 14:05	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06E DISS **Lab ID: 70255436009** Collected: 05/09/23 11:20 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**57.2J**	ug/L	200	1		05/17/23 12:34	7429-90-5	
Barium, Dissolved	**112J**	ug/L	200	1		05/17/23 12:34	7440-39-3	
Calcium, Dissolved	**19300**	ug/L	1000	1		05/17/23 12:34	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 12:34	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 12:34	7440-50-8	
Iron, Dissolved	**14700**	ug/L	20.0	1		05/17/23 12:34	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 12:34	7439-92-1	
Magnesium, Dissolved	**13800**	ug/L	1000	1		05/17/23 12:34	7439-95-4	
Manganese, Dissolved	**203**	ug/L	10.0	1		05/17/23 12:34	7439-96-5	
Nickel, Dissolved	**8.6J**	ug/L	40.0	1		05/17/23 12:34	7440-02-0	
Potassium, Dissolved	**29800**	ug/L	5000	1		05/17/23 12:34	7440-09-7	
Sodium, Dissolved	**136000**	ug/L	5000	1		05/17/23 12:34	7440-23-5	M1
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 12:34	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:42	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:33	18540-29-9	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06C **Lab ID: 70255436010** Collected: 05/09/23 13:15 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**53.3J**	ug/L	200	1	05/12/23 10:00	05/15/23 13:52	7429-90-5	
Barium	**32.8J**	ug/L	200	1	05/12/23 10:00	05/15/23 13:52	7440-39-3	
Calcium	**55400**	ug/L	200	1	05/12/23 10:00	05/15/23 13:52	7440-70-2	
Chromium	**1.3J**	ug/L	10.0	1	05/12/23 10:00	05/15/23 13:52	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/12/23 10:00	05/15/23 13:52	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**138000**	ug/L	500	1	05/12/23 10:00	05/15/23 13:52		
Hardness, Magnesium	**54400**	ug/L	830	1	05/12/23 10:00	05/15/23 13:52		N3
Iron	**6460**	ug/L	100	1	05/12/23 10:00	05/15/23 13:52	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/12/23 10:00	05/15/23 13:52	7439-92-1	
Magnesium	**13200**	ug/L	200	1	05/12/23 10:00	05/15/23 13:52	7439-95-4	
Manganese	**150**	ug/L	10.0	1	05/12/23 10:00	05/15/23 13:52	7439-96-5	
Nickel	**19.9J**	ug/L	40.0	1	05/12/23 10:00	05/15/23 13:52	7440-02-0	B
Potassium	**55400**	ug/L	5000	1	05/12/23 10:00	05/15/23 13:52	7440-09-7	
Sodium	**246000**	ug/L	5000	1	05/12/23 10:00	05/15/23 13:52	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**193000**	ug/L	830	1	05/12/23 10:00	05/15/23 13:52		
Zinc	**<20.0**	ug/L	20.0	1	05/12/23 10:00	05/15/23 13:52	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**193000**	ug/L	830	1		05/15/23 13:52		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/17/23 07:00	05/18/23 11:02	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**0.57J**	ug/L	1.0	1		05/12/23 17:25	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 17:25	56-23-5	v3
Chlorobenzene	**1.9**	ug/L	1.0	1		05/12/23 17:25	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 17:25	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	541-73-1	
1,4-Dichlorobenzene	**1.6**	ug/L	1.0	1		05/12/23 17:25	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	156-59-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06C **Lab ID: 70255436010** Collected: 05/09/23 13:15 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	100-41-4	
Isopropylbenzene (Cumene)	**2.2**	ug/L	1.0	1		05/12/23 17:25	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:25	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:25	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 17:25	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 17:25	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 17:25	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		05/12/23 17:25	17060-07-0	
4-Bromofluorobenzene (S)	96	%	73-122	1		05/12/23 17:25	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/12/23 17:25	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**659**	mg/L	1.0	1		05/19/23 12:40		
Alkalinity,Bicarbonate (CaCO3)	**659**	mg/L	1.0	1		05/19/23 12:40		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/19/23 12:40		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**708**	mg/L	5.0	1		05/11/23 16:40		
Alkalinity,Bicarbonate (CaCO3)	**708**	mg/L	5.0	1		05/11/23 16:40		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/11/23 16:40		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**950**	mg/L	20.0	1		05/15/23 17:00		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:34	18540-29-9	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**1.7J**	mg/L	5.0	1		05/18/23 00:11	14808-79-8	B
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**49.7**	mg/L	2.5	5	05/11/23 04:33	05/11/23 13:27	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06C **Lab ID: 70255436010** Collected: 05/09/23 13:15 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/17/23 17:59	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/10/23 21:32	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/23/23 14:20	05/23/23 16:58	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**267**	mg/L	20.0	10		05/14/23 15:02	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**56.4**	mg/L	5.0	50		05/16/23 14:06	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06C DISS **Lab ID: 70255436011** Collected: 05/09/23 13:15 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**82.3J**	ug/L	200	1		05/17/23 12:42	7429-90-5	
Barium, Dissolved	**33.3J**	ug/L	200	1		05/17/23 12:42	7440-39-3	
Calcium, Dissolved	**59100**	ug/L	1000	1		05/17/23 12:42	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 12:42	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 12:42	7440-50-8	
Iron, Dissolved	**6990**	ug/L	20.0	1		05/17/23 12:42	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 12:42	7439-92-1	
Magnesium, Dissolved	**13500**	ug/L	1000	1		05/17/23 12:42	7439-95-4	
Manganese, Dissolved	**162**	ug/L	10.0	1		05/17/23 12:42	7439-96-5	
Nickel, Dissolved	**13.0J**	ug/L	40.0	1		05/17/23 12:42	7440-02-0	
Potassium, Dissolved	**56400**	ug/L	5000	1		05/17/23 12:42	7440-09-7	
Sodium, Dissolved	**274000**	ug/L	5000	1		05/17/23 12:42	7440-23-5	M1
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 12:42	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:43	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:35	18540-29-9	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06F **Lab ID: 70255436012** Collected: 05/09/23 17:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**233**	ug/L	200	1	05/15/23 14:53	05/16/23 11:33	7429-90-5	
Barium	**257**	ug/L	200	1	05/15/23 14:53	05/16/23 11:33	7440-39-3	
Calcium	**44000**	ug/L	200	1	05/15/23 14:53	05/16/23 11:33	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:33	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/15/23 14:53	05/16/23 11:33	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**110000**	ug/L	500	1	05/15/23 14:53	05/16/23 11:33		
Hardness, Magnesium	**70000**	ug/L	830	1	05/15/23 14:53	05/16/23 11:33		N3
Iron	**<100**	ug/L	100	1	05/15/23 14:53	05/16/23 11:33	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/15/23 14:53	05/16/23 11:33	7439-92-1	
Magnesium	**17000**	ug/L	200	1	05/15/23 14:53	05/16/23 11:33	7439-95-4	
Manganese	**141**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:33	7439-96-5	
Nickel	**30.6J**	ug/L	40.0	1	05/15/23 14:53	05/16/23 11:33	7440-02-0	
Potassium	**10400**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:33	7440-09-7	
Sodium	**180000**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:33	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**180000**	ug/L	830	1	05/15/23 14:53	05/16/23 11:33		
Zinc	**24.6**	ug/L	20.0	1	05/15/23 14:53	05/16/23 11:33	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**180000**	ug/L	830	1		05/16/23 11:33		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**0.26**	ug/L	0.20	1	05/22/23 07:00	05/22/23 12:08	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 17:47	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-00-3	
Chloroform	**1.1**	ug/L	1.0	1		05/12/23 17:47	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	156-59-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06F **Lab ID: 70255436012** Collected: 05/09/23 17:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 17:47	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 17:47	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 17:47	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 17:47	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 17:47	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 17:47	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		05/12/23 17:47	17060-07-0	
4-Bromofluorobenzene (S)	95	%	73-122	1		05/12/23 17:47	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/12/23 17:47	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0	1		05/19/23 12:44		
Alkalinity,Bicarbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/19/23 12:44		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/19/23 12:44		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**<5.0**	mg/L	5.0	1		05/11/23 16:43		
Alkalinity,Bicarbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/11/23 16:43		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/11/23 16:43		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**692**	mg/L	20.0	1		05/15/23 17:01		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:36	18540-29-9	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**0.23J**	mg/L	5.0	1		05/18/23 00:52	14808-79-8	B
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**0.89**	mg/L	0.10	1	05/11/23 04:33	05/11/23 13:15	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06F **Lab ID: 70255436012** Collected: 05/09/23 17:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**4.1**	mg/L	0.10	2		05/17/23 18:21	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/10/23 21:38	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/23/23 14:20	05/23/23 16:58	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**426**	mg/L	20.0	10		05/14/23 15:03	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**0.17**	mg/L	0.10	1		05/16/23 14:08	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06F DISS **Lab ID: 70255436013** Collected: 05/09/23 17:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**260**	ug/L	200	1		05/17/23 14:16	7429-90-5	B
Barium, Dissolved	**252**	ug/L	200	1		05/17/23 14:16	7440-39-3	
Calcium, Dissolved	**44800**	ug/L	1000	1		05/17/23 14:16	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 14:16	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 14:16	7440-50-8	
Iron, Dissolved	**8.5J**	ug/L	20.0	1		05/17/23 14:16	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 14:16	7439-92-1	
Magnesium, Dissolved	**17100**	ug/L	1000	1		05/17/23 14:16	7439-95-4	
Manganese, Dissolved	**144**	ug/L	10.0	1		05/17/23 14:16	7439-96-5	
Nickel, Dissolved	**30.3J**	ug/L	40.0	1		05/17/23 14:16	7440-02-0	
Potassium, Dissolved	**10200**	ug/L	5000	1		05/17/23 14:16	7440-09-7	
Sodium, Dissolved	**183000**	ug/L	5000	1		05/17/23 14:16	7440-23-5	M1
Zinc, Dissolved	**23.6**	ug/L	20.0	1		05/17/23 14:16	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:45	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:37	18540-29-9	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06A **Lab ID: 70255436014** Collected: 05/09/23 18:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:36	7429-90-5	
Barium	**23.1J**	ug/L	200	1	05/15/23 14:53	05/16/23 11:36	7440-39-3	
Calcium	**1750**	ug/L	200	1	05/15/23 14:53	05/16/23 11:36	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:36	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/15/23 14:53	05/16/23 11:36	7440-50-8	
Ca Hardness as CaCO3 (SM 2340B	**4370**	ug/L	500	1	05/15/23 14:53	05/16/23 11:36		
Hardness, Magnesium	**6630**	ug/L	830	1	05/15/23 14:53	05/16/23 11:36		N3
Iron	**<100**	ug/L	100	1	05/15/23 14:53	05/16/23 11:36	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/15/23 14:53	05/16/23 11:36	7439-92-1	
Magnesium	**1610**	ug/L	200	1	05/15/23 14:53	05/16/23 11:36	7439-95-4	
Manganese	**9.5J**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:36	7439-96-5	
Nickel	**5.8J**	ug/L	40.0	1	05/15/23 14:53	05/16/23 11:36	7440-02-0	
Potassium	**2460J**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:36	7440-09-7	B
Sodium	**7110**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:36	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**11000**	ug/L	830	1	05/15/23 14:53	05/16/23 11:36		
Zinc	**<20.0**	ug/L	20.0	1	05/15/23 14:53	05/16/23 11:36	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**11000**	ug/L	830	1		05/16/23 11:36		
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury	**<0.20**	ug/L	0.20	1	05/22/23 07:00	05/22/23 12:10	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 18:10	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 18:10	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	156-59-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06A **Lab ID: 70255436014** Collected: 05/09/23 18:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 18:10	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:10	71-55-6	
Trichloroethene	**1.5**	ug/L	1.0	1		05/12/23 18:10	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:10	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 18:10	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 18:10	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 18:10	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%	80-120	1		05/12/23 18:10	17060-07-0	
4-Bromofluorobenzene (S)	97	%	73-122	1		05/12/23 18:10	460-00-4	
Toluene-d8 (S)	104	%	75-122	1		05/12/23 18:10	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**3.5**	mg/L	1.0	1		05/22/23 20:59		
Alkalinity,Bicarbonate (CaCO3)	**3.5**	mg/L	1.0	1		05/22/23 20:59		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/22/23 20:59		M1
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**2.1J**	mg/L	5.0	1		05/11/23 16:47		
Alkalinity,Bicarbonate (CaCO3)	**2.1J**	mg/L	5.0	1		05/11/23 16:47		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/11/23 16:47		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**29.0**	mg/L	10.0	1		05/15/23 17:10		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:38	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**6.7**	mg/L	5.0	1		05/18/23 01:06	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**0.23**	mg/L	0.10	1	05/11/23 04:33	05/11/23 13:15	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06A **Lab ID: 70255436014** Collected: 05/09/23 18:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**0.40**	mg/L	0.050	1		05/17/23 18:01	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/10/23 21:39	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/23/23 14:20	05/23/23 16:59	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**10.1**	mg/L	2.0	1		05/14/23 15:03	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**<0.10**	mg/L	0.10	1		05/16/23 14:11	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: MW-06A DISS **Lab ID: 70255436015** Collected: 05/09/23 18:30 Received: 05/10/23 08:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**38.7J**	ug/L	200	1		05/17/23 14:24	7429-90-5	B
Barium, Dissolved	**22.0J**	ug/L	200	1		05/17/23 14:24	7440-39-3	
Calcium, Dissolved	**1680**	ug/L	1000	1		05/17/23 14:24	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 14:24	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 14:24	7440-50-8	
Iron, Dissolved	**8.0J**	ug/L	20.0	1		05/17/23 14:24	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 14:24	7439-92-1	
Magnesium, Dissolved	**1610**	ug/L	1000	1		05/17/23 14:24	7439-95-4	
Manganese, Dissolved	**9.2J**	ug/L	10.0	1		05/17/23 14:24	7439-96-5	
Nickel, Dissolved	**4.4J**	ug/L	40.0	1		05/17/23 14:24	7440-02-0	
Potassium, Dissolved	**1780J**	ug/L	5000	1		05/17/23 14:24	7440-09-7	
Sodium, Dissolved	**7210**	ug/L	5000	1		05/17/23 14:24	7440-23-5	
Zinc, Dissolved	**5.0J**	ug/L	20.0	1		05/17/23 14:24	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:46	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 17:39	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: TRIP BLANK- 5/10/23 **Lab ID: 70255436016** Collected: 05/10/23 00:00 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 16:18	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 16:18	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 16:18	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:18	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 16:18	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 16:18	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 16:18	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 16:18	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	90	%	80-120	1		05/12/23 16:18	17060-07-0	
4-Bromofluorobenzene (S)	96	%	73-122	1		05/12/23 16:18	460-00-4	
Toluene-d8 (S)	103	%	75-122	1		05/12/23 16:18	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-2 -5/10/23 **Lab ID: 70255436017** Collected: 05/10/23 10:35 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**74.6J**	ug/L	200	1	05/15/23 14:53	05/16/23 11:41	7429-90-5	
Barium	**69.0J**	ug/L	200	1	05/15/23 14:53	05/16/23 11:41	7440-39-3	
Calcium	**56500**	ug/L	200	1	05/15/23 14:53	05/16/23 11:41	7440-70-2	
Chromium	**3.6J**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:41	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/15/23 14:53	05/16/23 11:41	7440-50-8	
Iron	**13400**	ug/L	100	1	05/15/23 14:53	05/16/23 11:41	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/15/23 14:53	05/16/23 11:41	7439-92-1	
Magnesium	**31700**	ug/L	200	1	05/15/23 14:53	05/16/23 11:41	7439-95-4	
Manganese	**220**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:41	7439-96-5	
Nickel	**10.6J**	ug/L	40.0	1	05/15/23 14:53	05/16/23 11:41	7440-02-0	
Potassium	**93600**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:41	7440-09-7	
Sodium	**331000**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:41	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**272000**	ug/L	830	1	05/15/23 14:53	05/16/23 11:41		
Zinc	**<20.0**	ug/L	20.0	1	05/15/23 14:53	05/16/23 11:41	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**272000**	ug/L	830	1		05/16/23 11:41		
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**0.75J**	ug/L	1.0	1		05/12/23 18:32	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 18:32	56-23-5	v3
Chlorobenzene	**1.1**	ug/L	1.0	1		05/12/23 18:32	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 18:32	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	541-73-1	
1,4-Dichlorobenzene	**1.1**	ug/L	1.0	1		05/12/23 18:32	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	100-41-4	
Isopropylbenzene (Cumene)	**1.2**	ug/L	1.0	1		05/12/23 18:32	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-2 -5/10/23 **Lab ID: 70255436017** Collected: 05/10/23 10:35 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:32	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:32	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 18:32	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 18:32	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 18:32	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	80-120	1		05/12/23 18:32	17060-07-0	
4-Bromofluorobenzene (S)	97	%	73-122	1		05/12/23 18:32	460-00-4	
Toluene-d8 (S)	103	%	75-122	1		05/12/23 18:32	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**985**	mg/L	1.0	1		05/23/23 13:02		
Alkalinity,Bicarbonate (CaCO3)	**985**	mg/L	1.0	1		05/23/23 13:02		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/23/23 13:02		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**1100**	mg/L	5.0	1		05/12/23 17:03		
Alkalinity,Bicarbonate (CaCO3)	**1100**	mg/L	5.0	1		05/12/23 17:03		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/12/23 17:03		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**690**	mg/L	100	1		05/16/23 18:03		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:19	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**31.8**	mg/L	5.0	1		05/18/23 01:19	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**85.3**	mg/L	5.0	10	05/15/23 04:33	05/15/23 14:44	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/19/23 12:38	7727-37-9	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-2 -5/10/23 **Lab ID: 70255436017** Collected: 05/10/23 10:35 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/11/23 21:48	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/24/23 14:20	05/24/23 16:17	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**240**	mg/L	10.0	5		05/14/23 15:04	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**72.9**	mg/L	10.0	100		05/14/23 14:17	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-2 -5/10/24 DISS **Lab ID: 70255436018** Collected: 05/10/23 10:35 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**83.6J**	ug/L	200	1		05/17/23 12:58	7429-90-5	
Barium, Dissolved	**63.5J**	ug/L	200	1		05/17/23 12:58	7440-39-3	
Calcium, Dissolved	**52800**	ug/L	1000	1		05/17/23 12:58	7440-70-2	
Chromium, Dissolved	**3.3J**	ug/L	10.0	1		05/17/23 12:58	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 12:58	7440-50-8	
Iron, Dissolved	**12700**	ug/L	20.0	1		05/17/23 12:58	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 12:58	7439-92-1	
Magnesium, Dissolved	**29300**	ug/L	1000	1		05/17/23 12:58	7439-95-4	
Manganese, Dissolved	**210**	ug/L	10.0	1		05/17/23 12:58	7439-96-5	
Nickel, Dissolved	**9.2J**	ug/L	40.0	1		05/17/23 12:58	7440-02-0	
Potassium, Dissolved	**93100**	ug/L	5000	1		05/17/23 12:58	7440-09-7	
Sodium, Dissolved	**317000**	ug/L	5000	1		05/17/23 12:58	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 12:58	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:47	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:19	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-1 -5/10/23 **Lab ID: 70255436019** Collected: 05/10/23 16:38 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:44	7429-90-5	
Barium	**54.5J**	ug/L	200	1	05/15/23 14:53	05/16/23 11:44	7440-39-3	
Calcium	**9680**	ug/L	200	1	05/15/23 14:53	05/16/23 11:44	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:44	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/15/23 14:53	05/16/23 11:44	7440-50-8	
Iron	**11200**	ug/L	100	1	05/15/23 14:53	05/16/23 11:44	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/15/23 14:53	05/16/23 11:44	7439-92-1	
Magnesium	**6150**	ug/L	200	1	05/15/23 14:53	05/16/23 11:44	7439-95-4	
Manganese	**1710**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:44	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	05/15/23 14:53	05/16/23 11:44	7440-02-0	
Potassium	**10800**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:44	7440-09-7	
Sodium	**60300**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:44	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**49500**	ug/L	830	1	05/15/23 14:53	05/16/23 11:44		
Zinc	**<20.0**	ug/L	20.0	1	05/15/23 14:53	05/16/23 11:44	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**49500**	ug/L	830	1		05/16/23 11:44		
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 18:54	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 18:54	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 18:54	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-1 -5/10/23 **Lab ID: 70255436019** Collected: 05/10/23 16:38 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 18:54	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 18:54	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 18:54	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 18:54	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 18:54	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	91	%	80-120	1		05/12/23 18:54	17060-07-0	
4-Bromofluorobenzene (S)	94	%	73-122	1		05/12/23 18:54	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/12/23 18:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**41.5**	mg/L	1.0	1		05/23/23 13:09		
Alkalinity,Bicarbonate (CaCO3)	**41.5**	mg/L	1.0	1		05/23/23 13:09		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/23/23 13:09		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**57.4**	mg/L	5.0	1		05/12/23 17:07		
Alkalinity,Bicarbonate (CaCO3)	**57.4**	mg/L	5.0	1		05/12/23 17:07		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/12/23 17:07		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**264**	mg/L	20.0	1		05/16/23 18:03		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:18	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**21.9**	mg/L	5.0	1		05/18/23 01:33	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**0.74**	mg/L	0.10	1	05/15/23 04:33	05/15/23 14:30	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/19/23 12:42	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-1 -5/10/23 **Lab ID: 70255436019** Collected: 05/10/23 16:38 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**0.028J**	mg/L	0.050	1		05/11/23 22:09	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/24/23 14:20	05/24/23 16:20	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**99.4**	mg/L	20.0	10		05/14/23 15:06	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**0.11**	mg/L	0.10	1		05/14/23 14:19	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: LF-1 -5/10/23 DISS **Lab ID: 70255436020** Collected: 05/10/23 16:38 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**48.2J**	ug/L	200	1		05/17/23 13:01	7429-90-5	
Barium, Dissolved	**55.8J**	ug/L	200	1		05/17/23 13:01	7440-39-3	
Calcium, Dissolved	**10100**	ug/L	1000	1		05/17/23 13:01	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 13:01	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 13:01	7440-50-8	
Iron, Dissolved	**11700**	ug/L	20.0	1		05/17/23 13:01	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 13:01	7439-92-1	
Magnesium, Dissolved	**6390**	ug/L	1000	1		05/17/23 13:01	7439-95-4	
Manganese, Dissolved	**1810**	ug/L	10.0	1		05/17/23 13:01	7439-96-5	
Nickel, Dissolved	**4.3J**	ug/L	40.0	1		05/17/23 13:01	7440-02-0	
Potassium, Dissolved	**10900**	ug/L	5000	1		05/17/23 13:01	7440-09-7	
Sodium, Dissolved	**63400**	ug/L	5000	1		05/17/23 13:01	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 13:01	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:49	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:18	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: FIELD BLANK-5/10/23 **Lab ID: 70255436021** Collected: 05/10/23 16:45 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Total	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:46	7429-90-5	
Barium	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:46	7440-39-3	
Calcium	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:46	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:46	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	05/15/23 14:53	05/16/23 11:46	7440-50-8	
Iron	**<100**	ug/L	100	1	05/15/23 14:53	05/16/23 11:46	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	05/15/23 14:53	05/16/23 11:46	7439-92-1	
Magnesium	**<200**	ug/L	200	1	05/15/23 14:53	05/16/23 11:46	7439-95-4	
Manganese	**<10.0**	ug/L	10.0	1	05/15/23 14:53	05/16/23 11:46	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	05/15/23 14:53	05/16/23 11:46	7440-02-0	
Potassium	**1120J**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:46	7440-09-7	B
Sodium	**<5000**	ug/L	5000	1	05/15/23 14:53	05/16/23 11:46	7440-23-5	
Tot Hardness asCaCO3 (SM 2340B	**<830**	ug/L	830	1	05/15/23 14:53	05/16/23 11:46		
Zinc	**<20.0**	ug/L	20.0	1	05/15/23 14:53	05/16/23 11:46	7440-66-6	
2340B Hardness, Total (Calc.)	Analytical Method: SM22 2340B Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B	**<830**	ug/L	830	1		05/16/23 11:46		
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Benzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-25-2	v3
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/12/23 16:40	56-23-5	v3
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/12/23 16:40	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-71-8	v3
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/12/23 16:40	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	127-18-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: FIELD BLANK-5/10/23 **Lab ID: 70255436021** Collected: 05/10/23 16:45 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Toluene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/12/23 16:40	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/12/23 16:40	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/12/23 16:40	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/12/23 16:40	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/12/23 16:40	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	92	%	80-120	1		05/12/23 16:40	17060-07-0	
4-Bromofluorobenzene (S)	97	%	73-122	1		05/12/23 16:40	460-00-4	
Toluene-d8 (S)	102	%	75-122	1		05/12/23 16:40	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0	1		05/23/23 13:13		
Alkalinity,Bicarbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/23/23 13:13		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/23/23 13:13		L2
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	**<5.0**	mg/L	5.0	1		05/12/23 17:10		
Alkalinity,Bicarbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/12/23 17:10		
Alkalinity,Carbonate (CaCO3)	**<5.0**	mg/L	5.0	1		05/12/23 17:10		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	**2.0J**	mg/L	10.0	1		05/16/23 18:11		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:15	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	**0.26J**	mg/L	5.0	1		05/18/23 01:47	14808-79-8	B
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	05/15/23 04:33	05/15/23 14:47	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/19/23 12:43	7727-37-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: FIELD BLANK-5/10/23 **Lab ID: 70255436021** Collected: 05/10/23 16:45 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/11/23 22:10	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C Pace Analytical Services - Melville							
Cyanide	**<10.0**	ug/L	10.0	1	05/24/23 14:20	05/24/23 16:21	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E Pace Analytical Services - Melville							
Chloride	**<2.0**	mg/L	2.0	1		05/14/23 15:07	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	**<0.10**	mg/L	0.10	1		05/14/23 14:10	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

ANALYTICAL RESULTS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Sample: FIELD BLANK-5/10/23 DISS **Lab ID: 70255436022** Collected: 05/10/23 16:45 Received: 05/10/23 18:03 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7 Pace Analytical Services - Melville							
Aluminum, Dissolved	**41.7J**	ug/L	200	1		05/17/23 13:04	7429-90-5	
Barium, Dissolved	**<200**	ug/L	200	1		05/17/23 13:04	7440-39-3	
Calcium, Dissolved	**<1000**	ug/L	1000	1		05/17/23 13:04	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 13:04	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		05/17/23 13:04	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 13:04	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		05/17/23 13:04	7439-92-1	
Magnesium, Dissolved	**<1000**	ug/L	1000	1		05/17/23 13:04	7439-95-4	
Manganese, Dissolved	**<10.0**	ug/L	10.0	1		05/17/23 13:04	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		05/17/23 13:04	7440-02-0	
Potassium, Dissolved	**<5000**	ug/L	5000	1		05/17/23 13:04	7440-09-7	
Sodium, Dissolved	**<5000**	ug/L	5000	1		05/17/23 13:04	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		05/17/23 13:04	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1 Pace Analytical Services - Melville							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	05/23/23 07:00	05/23/23 12:50	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/10/23 20:17	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304224
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1541504 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<200	200	05/08/23 14:38	
Barium, Dissolved	ug/L	<200	200	05/08/23 14:38	
Calcium, Dissolved	ug/L	<1000	1000	05/08/23 14:38	
Chromium, Dissolved	ug/L	<10.0	10.0	05/08/23 14:38	
Copper, Dissolved	ug/L	<25.0	25.0	05/08/23 14:38	
Iron, Dissolved	ug/L	<20.0	20.0	05/08/23 14:38	
Lead, Dissolved	ug/L	<5.0	5.0	05/08/23 14:38	
Magnesium, Dissolved	ug/L	<1000	1000	05/08/23 14:38	
Manganese, Dissolved	ug/L	<10.0	10.0	05/08/23 14:38	
Nickel, Dissolved	ug/L	<40.0	40.0	05/08/23 14:38	
Potassium, Dissolved	ug/L	<5000	5000	05/08/23 14:38	
Sodium, Dissolved	ug/L	<5000	5000	05/08/23 14:38	
Zinc, Dissolved	ug/L	<20.0	20.0	05/08/23 14:38	

LABORATORY CONTROL SAMPLE: 1541505

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	25000	24500	98	85-115	
Barium, Dissolved	ug/L	500	492	98	85-115	
Calcium, Dissolved	ug/L	25000	24800	99	85-115	
Chromium, Dissolved	ug/L	500	491	98	85-115	
Copper, Dissolved	ug/L	500	497	99	85-115	
Iron, Dissolved	ug/L	12500	12300	98	85-115	
Lead, Dissolved	ug/L	500	501	100	85-115	
Magnesium, Dissolved	ug/L	25000	24100	96	85-115	
Manganese, Dissolved	ug/L	500	490	98	85-115	
Nickel, Dissolved	ug/L	500	490	98	85-115	
Potassium, Dissolved	ug/L	25000	24800	99	85-115	
Sodium, Dissolved	ug/L	25000	24100	96	85-115	
Zinc, Dissolved	ug/L	500	503	101	85-115	

MATRIX SPIKE SAMPLE: 1541507

Parameter	Units	70255216001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	<200	12500	17000	135	70-130	M1
Barium, Dissolved	ug/L	<200	500	721	140	70-130	M1
Calcium, Dissolved	ug/L	26100	12500	43100	136	70-130	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1541507

Parameter	Units	70255216001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	21.7	500	687	133	70-130	M1
Copper, Dissolved	ug/L	<25.0	500	651	130	70-130	
Iron, Dissolved	ug/L	0.70 mg/L	5000	7300	132	70-130	M1
Lead, Dissolved	ug/L	<5.0	500	644	129	70-130	
Magnesium, Dissolved	ug/L	50000	12500	64000	112	70-130	
Manganese, Dissolved	ug/L	62.7	500	728	133	70-130	M1
Nickel, Dissolved	ug/L	91.7	500	712	124	70-130	
Potassium, Dissolved	ug/L	266000	12500	266000	0	70-130	M1
Sodium, Dissolved	ug/L	781000	12500	749000	-256	70-130	M1
Zinc, Dissolved	ug/L	<20.0	500	667	133	70-130	M1

SAMPLE DUPLICATE: 1541506

Parameter	Units	70255216001 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	<200	148J		
Barium, Dissolved	ug/L	<200	23.4J		
Calcium, Dissolved	ug/L	26100	26200	0	
Chromium, Dissolved	ug/L	21.7	22.0	1	
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	0.70 mg/L	683	2	
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	50000	50300	1	
Manganese, Dissolved	ug/L	62.7	62.7	0	
Nickel, Dissolved	ug/L	91.7	92.2	1	
Potassium, Dissolved	ug/L	266000	268000	1	
Sodium, Dissolved	ug/L	781000	784000	0	
Zinc, Dissolved	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305445
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436009, 70255436011, 70255436018, 70255436020, 70255436022

METHOD BLANK: 1547791 Matrix: Water
Associated Lab Samples: 70255436009, 70255436011, 70255436018, 70255436020, 70255436022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<200	200	05/17/23 12:28	
Barium, Dissolved	ug/L	<200	200	05/17/23 12:28	
Calcium, Dissolved	ug/L	<1000	1000	05/17/23 12:28	
Chromium, Dissolved	ug/L	<10.0	10.0	05/17/23 12:28	
Copper, Dissolved	ug/L	<25.0	25.0	05/17/23 12:28	
Iron, Dissolved	ug/L	<20.0	20.0	05/17/23 12:28	
Lead, Dissolved	ug/L	<5.0	5.0	05/17/23 12:28	
Magnesium, Dissolved	ug/L	<1000	1000	05/17/23 12:28	
Manganese, Dissolved	ug/L	<10.0	10.0	05/17/23 12:28	
Nickel, Dissolved	ug/L	<40.0	40.0	05/17/23 12:28	
Potassium, Dissolved	ug/L	<5000	5000	05/17/23 12:28	
Sodium, Dissolved	ug/L	<5000	5000	05/17/23 12:28	
Zinc, Dissolved	ug/L	<20.0	20.0	05/17/23 12:28	

LABORATORY CONTROL SAMPLE: 1547792

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	25000	24300	97	85-115	
Barium, Dissolved	ug/L	500	483	97	85-115	
Calcium, Dissolved	ug/L	25000	25200	101	85-115	
Chromium, Dissolved	ug/L	500	483	97	85-115	
Copper, Dissolved	ug/L	500	486	97	85-115	
Iron, Dissolved	ug/L	12500	12300	98	85-115	
Lead, Dissolved	ug/L	500	499	100	85-115	
Magnesium, Dissolved	ug/L	25000	24600	98	85-115	
Manganese, Dissolved	ug/L	500	497	99	85-115	
Nickel, Dissolved	ug/L	500	495	99	85-115	
Potassium, Dissolved	ug/L	25000	23800	95	85-115	
Sodium, Dissolved	ug/L	25000	24800	99	85-115	
Zinc, Dissolved	ug/L	500	496	99	85-115	

MATRIX SPIKE SAMPLE: 1547794

Parameter	Units	70255436009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	57.2J	12500	12400	99	70-130	
Barium, Dissolved	ug/L	112J	500	582	94	70-130	
Calcium, Dissolved	ug/L	19300	12500	30800	92	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1547794

Parameter	Units	70255436009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	<10.0	500	479	96	70-130	
Copper, Dissolved	ug/L	<25.0	500	476	95	70-130	
Iron, Dissolved	ug/L	14700	5000	18700	80	70-130	
Lead, Dissolved	ug/L	<5.0	500	487	97	70-130	
Magnesium, Dissolved	ug/L	13800	12500	24400	85	70-130	
Manganese, Dissolved	ug/L	203	500	676	95	70-130	
Nickel, Dissolved	ug/L	8.6J	500	484	95	70-130	
Potassium, Dissolved	ug/L	29800	12500	40300	84	70-130	
Sodium, Dissolved	ug/L	136000	12500	141000	40	70-130	M1
Zinc, Dissolved	ug/L	<20.0	500	498	99	70-130	

MATRIX SPIKE SAMPLE: 1547796

Parameter	Units	70255436011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	82.3J	12500	12700	101	70-130	
Barium, Dissolved	ug/L	33.3J	500	525	98	70-130	
Calcium, Dissolved	ug/L	59100	12500	69000	79	70-130	
Chromium, Dissolved	ug/L	<10.0	500	495	99	70-130	
Copper, Dissolved	ug/L	<25.0	500	491	98	70-130	
Iron, Dissolved	ug/L	6990	5000	11700	94	70-130	
Lead, Dissolved	ug/L	<5.0	500	492	98	70-130	
Magnesium, Dissolved	ug/L	13500	12500	24500	88	70-130	
Manganese, Dissolved	ug/L	162	500	650	98	70-130	
Nickel, Dissolved	ug/L	13.0J	500	494	96	70-130	
Potassium, Dissolved	ug/L	56400	12500	67400	88	70-130	
Sodium, Dissolved	ug/L	274000	12500	271000	-24	70-130	M1
Zinc, Dissolved	ug/L	<20.0	500	504	101	70-130	

SAMPLE DUPLICATE: 1547793

Parameter	Units	70255436009 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	57.2J	58.2J		
Barium, Dissolved	ug/L	112J	111J		
Calcium, Dissolved	ug/L	19300	19100	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	14700	14600	1	
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	13800	13600	1	
Manganese, Dissolved	ug/L	203	201	1	
Nickel, Dissolved	ug/L	8.6J	8.8J		
Potassium, Dissolved	ug/L	29800	29400	1	
Sodium, Dissolved	ug/L	136000	135000	1	
Zinc, Dissolved	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1547795

Parameter	Units	70255436011 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	82.3J	73.5J		
Barium, Dissolved	ug/L	33.3J	33.5J		
Calcium, Dissolved	ug/L	59100	59600	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	6990	7030	1	
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	13500	13500	0	
Manganese, Dissolved	ug/L	162	163	1	
Nickel, Dissolved	ug/L	13.0J	12.3J		
Potassium, Dissolved	ug/L	56400	57000	1	
Sodium, Dissolved	ug/L	274000	275000	0	
Zinc, Dissolved	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305446
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436013, 70255436015

METHOD BLANK: 1547798 Matrix: Water
Associated Lab Samples: 70255436013, 70255436015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	35.8J	200	05/17/23 14:10	
Barium, Dissolved	ug/L	<200	200	05/17/23 14:10	
Calcium, Dissolved	ug/L	<1000	1000	05/17/23 14:10	
Chromium, Dissolved	ug/L	<10.0	10.0	05/17/23 14:10	
Copper, Dissolved	ug/L	<25.0	25.0	05/17/23 14:10	
Iron, Dissolved	ug/L	<20.0	20.0	05/17/23 14:10	
Lead, Dissolved	ug/L	<5.0	5.0	05/17/23 14:10	
Magnesium, Dissolved	ug/L	<1000	1000	05/17/23 14:10	
Manganese, Dissolved	ug/L	<10.0	10.0	05/17/23 14:10	
Nickel, Dissolved	ug/L	<40.0	40.0	05/17/23 14:10	
Potassium, Dissolved	ug/L	<5000	5000	05/17/23 14:10	
Sodium, Dissolved	ug/L	<5000	5000	05/17/23 14:10	
Zinc, Dissolved	ug/L	<20.0	20.0	05/17/23 14:10	

LABORATORY CONTROL SAMPLE: 1547799

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	25000	24200	97	85-115	
Barium, Dissolved	ug/L	500	479	96	85-115	
Calcium, Dissolved	ug/L	25000	25200	101	85-115	
Chromium, Dissolved	ug/L	500	479	96	85-115	
Copper, Dissolved	ug/L	500	481	96	85-115	
Iron, Dissolved	ug/L	12500	12300	98	85-115	
Lead, Dissolved	ug/L	500	495	99	85-115	
Magnesium, Dissolved	ug/L	25000	24500	98	85-115	
Manganese, Dissolved	ug/L	500	494	99	85-115	
Nickel, Dissolved	ug/L	500	491	98	85-115	
Potassium, Dissolved	ug/L	25000	23800	95	85-115	
Sodium, Dissolved	ug/L	25000	25300	101	85-115	
Zinc, Dissolved	ug/L	500	494	99	85-115	

MATRIX SPIKE SAMPLE: 1547801

Parameter	Units	70255436013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	260	12500	12800	100	70-130	
Barium, Dissolved	ug/L	252	500	727	95	70-130	
Calcium, Dissolved	ug/L	44800	12500	55600	86	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1547801

Parameter	Units	70255436013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	<10.0	500	487	97	70-130	
Copper, Dissolved	ug/L	<25.0	500	484	97	70-130	
Iron, Dissolved	ug/L	8.5J	5000	4960	99	70-130	
Lead, Dissolved	ug/L	<5.0	500	498	100	70-130	
Magnesium, Dissolved	ug/L	17100	12500	28200	89	70-130	
Manganese, Dissolved	ug/L	144	500	630	97	70-130	
Nickel, Dissolved	ug/L	30.3J	500	509	96	70-130	
Potassium, Dissolved	ug/L	10200	12500	23100	103	70-130	
Sodium, Dissolved	ug/L	183000	12500	188000	40	70-130	M1
Zinc, Dissolved	ug/L	23.6	500	525	100	70-130	

MATRIX SPIKE SAMPLE: 1547803

Parameter	Units	70255436015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	38.7J	12500	12700	101	70-130	
Barium, Dissolved	ug/L	22.0J	500	515	99	70-130	
Calcium, Dissolved	ug/L	1680	12500	14900	106	70-130	
Chromium, Dissolved	ug/L	<10.0	500	499	100	70-130	
Copper, Dissolved	ug/L	<25.0	500	500	100	70-130	
Iron, Dissolved	ug/L	8.0J	5000	5100	102	70-130	
Lead, Dissolved	ug/L	<5.0	500	511	102	70-130	
Magnesium, Dissolved	ug/L	1610	12500	13800	98	70-130	
Manganese, Dissolved	ug/L	9.2J	500	517	102	70-130	
Nickel, Dissolved	ug/L	4.4J	500	498	99	70-130	
Potassium, Dissolved	ug/L	1780J	12500	13700	95	70-130	
Sodium, Dissolved	ug/L	7210	12500	19500	98	70-130	
Zinc, Dissolved	ug/L	5.0J	500	525	104	70-130	

SAMPLE DUPLICATE: 1547800

Parameter	Units	70255436013 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	260	259	0	
Barium, Dissolved	ug/L	252	252	0	
Calcium, Dissolved	ug/L	44800	45000	0	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	8.5J	6.5J		
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	17100	17100	0	
Manganese, Dissolved	ug/L	144	144	0	
Nickel, Dissolved	ug/L	30.3J	30.6J		
Potassium, Dissolved	ug/L	10200	10300	1	
Sodium, Dissolved	ug/L	183000	184000	1	
Zinc, Dissolved	ug/L	23.6	23.4	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1547802

Parameter	Units	70255436015 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	38.7J	34.5J		
Barium, Dissolved	ug/L	22.0J	22.0J		
Calcium, Dissolved	ug/L	1680	1670	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	8.0J	7.3J		
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	1610	1600	1	
Manganese, Dissolved	ug/L	9.2J	9.2J		
Nickel, Dissolved	ug/L	4.4J	5.3J		
Potassium, Dissolved	ug/L	1780J	1750J		
Sodium, Dissolved	ug/L	7210	7070	2	
Zinc, Dissolved	ug/L	5.0J	4.9J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304868 — Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 — Analysis Description: 245.1 Mercury
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1544767 — Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	05/15/23 13:19	

LABORATORY CONTROL SAMPLE: 1544768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.2	115	85-115	

MATRIX SPIKE SAMPLE: 1544769

Parameter	Units	70255214001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	1.2	116	70-130	

MATRIX SPIKE SAMPLE: 1544771

Parameter	Units	70255223001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.96	96	70-130	

SAMPLE DUPLICATE: 1544770

Parameter	Units	70255214001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

SAMPLE DUPLICATE: 1544772

Parameter	Units	70255223001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305426
QC Batch Method: EPA 245.1
Analysis Method: EPA 245.1
Analysis Description: 245.1 Mercury
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010

METHOD BLANK: 1547678 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	05/18/23 10:21	

LABORATORY CONTROL SAMPLE: 1547679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	104	85-115	

MATRIX SPIKE SAMPLE: 1547680

Parameter	Units	70255740001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	1.0	95	70-130	

MATRIX SPIKE SAMPLE: 1547682

Parameter	Units	70256020001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	1.0	95	70-130	

SAMPLE DUPLICATE: 1547681

Parameter	Units	70255740001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

SAMPLE DUPLICATE: 1547683

Parameter	Units	70256020001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305978
QC Batch Method: EPA 245.1
Analysis Method: EPA 245.1
Analysis Description: 245.1 Mercury
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436012, 70255436014

METHOD BLANK: 1550648 Matrix: Water
Associated Lab Samples: 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	05/22/23 12:00	

LABORATORY CONTROL SAMPLE: 1550649

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.0	100	85-115	

MATRIX SPIKE SAMPLE: 1550650

Parameter	Units	30577182001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	1.0	100	70-130	H3

MATRIX SPIKE SAMPLE: 1550652

Parameter	Units	70256266001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	1.0	101	70-130	

SAMPLE DUPLICATE: 1550651

Parameter	Units	30577182001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	<0.20		H3

SAMPLE DUPLICATE: 1550653

Parameter	Units	70256266001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 306122
QC Batch Method: EPA 245.1
Analysis Method: EPA 245.1
Analysis Description: 245.1 Mercury - Dissolved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436009, 70255436011, 70255436013, 70255436015, 70255436018, 70255436020, 70255436022

METHOD BLANK: 1551256 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436009, 70255436011, 70255436013, 70255436015, 70255436018, 70255436020, 70255436022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.20	0.20	05/23/23 12:24	

LABORATORY CONTROL SAMPLE: 1551257

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	1	0.98	98	85-115	

MATRIX SPIKE SAMPLE: 1551258

Parameter	Units	70255436002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	<0.20	1	0.99	97	70-130	

MATRIX SPIKE SAMPLE: 1551260

Parameter	Units	70255436003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	<0.20	1	0.98	98	70-130	

SAMPLE DUPLICATE: 1551259

Parameter	Units	70255436002 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	<0.20	<0.20		

SAMPLE DUPLICATE: 1551261

Parameter	Units	70255436003 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	<0.20	<0.20		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304480
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70255436002

METHOD BLANK: 1542861 Matrix: Water
Associated Lab Samples: 70255436002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	49.6J	200	05/11/23 11:44	
Barium	ug/L	<200	200	05/11/23 11:44	
Ca Hardness as CaCO3 (SM 2340B	ug/L	<500	500	05/11/23 11:44	
Calcium	ug/L	158J	200	05/11/23 11:44	
Chromium	ug/L	<10.0	10.0	05/11/23 11:44	
Copper	ug/L	<25.0	25.0	05/11/23 11:44	
Hardness, Magnesium	ug/L	<830	830	05/11/23 11:44	N3
Iron	ug/L	35.1J	100	05/11/23 11:44	
Lead	ug/L	<5.0	5.0	05/11/23 11:44	
Magnesium	ug/L	36.7J	200	05/11/23 11:44	
Manganese	ug/L	<10.0	10.0	05/11/23 11:44	
Nickel	ug/L	<40.0	40.0	05/11/23 11:44	
Potassium	ug/L	<5000	5000	05/11/23 11:44	
Sodium	ug/L	<5000	5000	05/11/23 11:44	
Tot Hardness asCaCO3 (SM 2340B	ug/L	<830	830	05/11/23 11:44	
Zinc	ug/L	<20.0	20.0	05/11/23 11:44	

LABORATORY CONTROL SAMPLE: 1542862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	24200	97	85-115	
Barium	ug/L	500	483	97	85-115	
Ca Hardness as CaCO3 (SM 2340B	ug/L		60900			
Calcium	ug/L	25000	24400	98	85-115	
Chromium	ug/L	500	473	95	85-115	
Copper	ug/L	500	475	95	85-115	
Hardness, Magnesium	ug/L		100000			N3
Iron	ug/L	12500	12000	96	85-115	
Lead	ug/L	500	476	95	85-115	
Magnesium	ug/L	25000	24300	97	85-115	
Manganese	ug/L	500	480	96	85-115	
Nickel	ug/L	500	468	94	85-115	
Potassium	ug/L	25000	23000	92	85-115	
Sodium	ug/L	25000	23800	95	85-115	
Tot Hardness asCaCO3 (SM 2340B	ug/L		161000			
Zinc	ug/L	500	473	95	85-115	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1542864

Parameter	Units	70252429001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	12500	11900	95	70-130	
Barium	ug/L	<200	500	474	94	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	45400		75900			
Calcium	ug/L	18200	12500	30400	98	70-130	
Chromium	ug/L	<10.0	500	464	93	70-130	
Copper	ug/L	<25.0	500	472	93	70-130	
Hardness, Magnesium	ug/L	13000		60100			N3
Iron	ug/L	<100	5000	4730	94	70-130	
Lead	ug/L	<5.0	500	463	92	70-130	
Magnesium	ug/L	3150	12500	14600	92	70-130	
Manganese	ug/L	14.3	500	479	93	70-130	
Nickel	ug/L	<40.0	500	452	88	70-130	
Potassium	ug/L	9200	12500	20800	93	70-130	
Sodium	ug/L	35400	12500	47600	98	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L	58400		136000			
Zinc	ug/L	67.1	500	533	93	70-130	

MATRIX SPIKE SAMPLE: 1542866

Parameter	Units	70255144001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	12500	11300	90	70-130	
Barium	ug/L	<200	500	470	89	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	10300		39200			
Calcium	ug/L	4140	12500	15700	92	70-130	
Chromium	ug/L	<10.0	500	440	88	70-130	
Copper	ug/L	<25.0	500	442	88	70-130	
Hardness, Magnesium	ug/L	3900		48200			N3
Iron	ug/L	<100	5000	4460	89	70-130	
Lead	ug/L	<5.0	500	437	87	70-130	
Magnesium	ug/L	947	12500	11700	86	70-130	
Manganese	ug/L	140	500	574	87	70-130	
Nickel	ug/L	<40.0	500	419	83	70-130	
Potassium	ug/L	<5000	12500	11300	81	70-130	
Sodium	ug/L	6200	12500	16500	82	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L	14200		87400			
Zinc	ug/L	<20.0	500	442	88	70-130	

SAMPLE DUPLICATE: 1542863

Parameter	Units	70252429001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	<200		
Barium	ug/L	<200	<200		

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1542863

Parameter	Units	70252429001 Result	Dup Result	RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	ug/L	45400	44700	2	
Calcium	ug/L	18200	17900	2	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	<25.0	8.1J		
Hardness, Magnesium	ug/L	13000	13000	0	N3
Iron	ug/L	<100	40.3J		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	3150	3150	0	
Manganese	ug/L	14.3	14.4	1	
Nickel	ug/L	<40.0	12.7J		
Potassium	ug/L	9200	9210	0	
Sodium	ug/L	35400	35300	0	
Tot Hardness asCaCO3 (SM 2340B	ug/L	58400	57700	1	
Zinc	ug/L	67.1	66.9	0	

SAMPLE DUPLICATE: 1542865

Parameter	Units	70255144001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	98.7J		
Barium	ug/L	<200	23.8J		
Ca Hardness as CaCO3 (SM 2340B	ug/L	10300	10600	3	
Calcium	ug/L	4140	4250	3	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	<25.0	<25.0		
Hardness, Magnesium	ug/L	3900	3990	2	N3
Iron	ug/L	<100	<100		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	947	970	2	
Manganese	ug/L	140	137	2	
Nickel	ug/L	<40.0	5.3J		
Potassium	ug/L	<5000	<5000		
Sodium	ug/L	6200	5920	5	
Tot Hardness asCaCO3 (SM 2340B	ug/L	14200	14600	3	
Zinc	ug/L	<20.0	<20.0		

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Pace Analytical Services, LLC
575 Broad Hollow Road
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304682
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436003, 70255436004, 70255436005

METHOD BLANK: 1543680 Matrix: Water
Associated Lab Samples: 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	05/11/23 16:18	
Barium	ug/L	<200	200	05/11/23 16:18	
Ca Hardness as CaCO3 (SM 2340B	ug/L	<500	500	05/11/23 16:18	
Calcium	ug/L	<200	200	05/11/23 16:18	
Chromium	ug/L	<10.0	10.0	05/11/23 16:18	
Copper	ug/L	<25.0	25.0	05/11/23 16:18	
Hardness, Magnesium	ug/L	<830	830	05/11/23 16:18	N3
Iron	ug/L	<100	100	05/11/23 16:18	
Lead	ug/L	<5.0	5.0	05/11/23 16:18	
Magnesium	ug/L	<200	200	05/11/23 16:18	
Manganese	ug/L	<10.0	10.0	05/11/23 16:18	
Nickel	ug/L	<40.0	40.0	05/11/23 16:18	
Potassium	ug/L	<5000	5000	05/11/23 16:18	
Sodium	ug/L	<5000	5000	05/11/23 16:18	
Tot Hardness asCaCO3 (SM 2340B	ug/L	<830	830	05/11/23 16:18	
Zinc	ug/L	<20.0	20.0	05/11/23 16:18	

LABORATORY CONTROL SAMPLE: 1543681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	25000	100	85-115	
Barium	ug/L	500	501	100	85-115	
Ca Hardness as CaCO3 (SM 2340B	ug/L		63700			
Calcium	ug/L	25000	25500	102	85-115	
Chromium	ug/L	500	499	100	85-115	
Copper	ug/L	500	500	100	85-115	
Hardness, Magnesium	ug/L		104000			N3
Iron	ug/L	12500	12700	102	85-115	
Lead	ug/L	500	502	100	85-115	
Magnesium	ug/L	25000	25300	101	85-115	
Manganese	ug/L	500	513	103	85-115	
Nickel	ug/L	500	505	101	85-115	
Potassium	ug/L	25000	25500	102	85-115	
Sodium	ug/L	25000	26100	104	85-115	
Tot Hardness asCaCO3 (SM 2340B	ug/L		168000			
Zinc	ug/L	500	506	101	85-115	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1543683

Parameter	Units	70255450002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	12500	11800	94	70-130	
Barium	ug/L	<200	500	477	92	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	66900		97600			
Calcium	ug/L	26800	12500	39100	98	70-130	
Chromium	ug/L	<10.0	500	462	91	70-130	
Copper	ug/L	<25.0	500	480	92	70-130	
Hardness, Magnesium	ug/L	33100		79500			N3
Iron	ug/L	<100	5000	4760	94	70-130	
Lead	ug/L	<5.0	500	459	92	70-130	
Magnesium	ug/L	8030	12500	19300	90	70-130	
Manganese	ug/L	41.0	500	507	93	70-130	
Nickel	ug/L	<40.0	500	459	90	70-130	
Potassium	ug/L	24100	12500	37400	106	70-130	
Sodium	ug/L	101000	12500	116000	120	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L	100000		177000			
Zinc	ug/L	50.8	500	508	91	70-130	

MATRIX SPIKE SAMPLE: 1544129

Parameter	Units	70255770001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	12500	11600	92	70-130	
Barium	ug/L	<200	500	470	91	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	12900		42900			
Calcium	ug/L	5180	12500	17200	96	70-130	
Chromium	ug/L	<0.010 mg/L	500	459	92	70-130	
Copper	ug/L	0.067 mg/L	500	521	91	70-130	
Hardness, Magnesium	ug/L	4820		51100			N3
Iron	ug/L	<100	5000	4690	93	70-130	
Lead	ug/L	<0.0050 mg/L	500	460	92	70-130	
Magnesium	ug/L	1170	12500	12400	90	70-130	
Manganese	ug/L	15.2	500	482	93	70-130	
Nickel	ug/L	<0.040 mg/L	500	452	90	70-130	
Potassium	ug/L	<5000	12500	12200	93	70-130	
Sodium	ug/L	9190	12500	21200	96	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L	17800		94000			
Zinc	ug/L	<0.020 mg/L	500	478	93	70-130	

SAMPLE DUPLICATE: 1543682

Parameter	Units	70255450002 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	37.3J		
Barium	ug/L	<200	16.2J		

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1543682

Parameter	Units	70255450002 Result	Dup Result	RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	ug/L	66900	67900	1	
Calcium	ug/L	26800	27200	1	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	<25.0	16.8J		
Hardness, Magnesium	ug/L	33100	33500	1	N3
Iron	ug/L	<100	77.6J		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	8030	8130	1	
Manganese	ug/L	41.0	41.4	1	
Nickel	ug/L	<40.0	9.4J		
Potassium	ug/L	24100	24400	1	
Sodium	ug/L	101000	102000	1	
Tot Hardness asCaCO3 (SM 2340B	ug/L	100000	101000	1	
Zinc	ug/L	50.8	41.1	21	D6

SAMPLE DUPLICATE: 1544128

Parameter	Units	70255770001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	39.6J		
Barium	ug/L	<200	<200		
Ca Hardness as CaCO3 (SM 2340B	ug/L	12900	12900	1	
Calcium	ug/L	5180	5150	1	
Chromium	ug/L	<0.010 mg/L	<10.0		
Copper	ug/L	0.067 mg/L	66.6	1	
Hardness, Magnesium	ug/L	4820	4820	0	N3
Iron	ug/L	<100	31.3J		
Lead	ug/L	<0.0050 mg/L	<5.0		
Magnesium	ug/L	1170	1170	0	
Manganese	ug/L	15.2	15.1	1	
Nickel	ug/L	<0.040 mg/L	<40.0		
Potassium	ug/L	<5000	<5000		
Sodium	ug/L	9190	9120	1	
Tot Hardness asCaCO3 (SM 2340B	ug/L	17800	17700	0	
Zinc	ug/L	<0.020 mg/L	11.3J		

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REPORT OF LABORATORY ANALYSIS

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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304864
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010

METHOD BLANK: 1544750 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	05/15/23 12:12	
Barium	ug/L	<200	200	05/15/23 12:12	
Ca Hardness as CaCO3 (SM 2340B	ug/L	<500	500	05/15/23 12:12	
Calcium	ug/L	<200	200	05/15/23 12:12	
Chromium	ug/L	<10.0	10.0	05/15/23 12:12	
Copper	ug/L	<25.0	25.0	05/15/23 12:12	
Hardness, Magnesium	ug/L	<830	830	05/15/23 12:12	N3
Iron	ug/L	<100	100	05/15/23 12:12	
Lead	ug/L	<5.0	5.0	05/15/23 12:12	
Magnesium	ug/L	<200	200	05/15/23 12:12	
Manganese	ug/L	<10.0	10.0	05/15/23 12:12	
Nickel	ug/L	7.3J	40.0	05/15/23 12:12	
Potassium	ug/L	<5000	5000	05/15/23 12:12	
Sodium	ug/L	<5000	5000	05/15/23 12:12	
Tot Hardness asCaCO3 (SM 2340B	ug/L	<830	830	05/15/23 12:12	
Zinc	ug/L	<20.0	20.0	05/15/23 12:12	

LABORATORY CONTROL SAMPLE: 1544751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	24300	97	85-115	
Barium	ug/L	500	476	95	85-115	
Ca Hardness as CaCO3 (SM 2340B	ug/L		59900			
Calcium	ug/L	25000	24000	96	85-115	
Chromium	ug/L	500	464	93	85-115	
Copper	ug/L	500	467	93	85-115	
Hardness, Magnesium	ug/L		98400			N3
Iron	ug/L	12500	11700	94	85-115	
Lead	ug/L	500	465	93	85-115	
Magnesium	ug/L	25000	23900	96	85-115	
Manganese	ug/L	500	468	94	85-115	
Nickel	ug/L	500	469	94	85-115	
Potassium	ug/L	25000	23000	92	85-115	
Sodium	ug/L	25000	23500	94	85-115	
Tot Hardness asCaCO3 (SM 2340B	ug/L		158000			
Zinc	ug/L	500	476	95	85-115	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1544755

Parameter	Units	70255811001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	248	12500	12400	97	70-130	
Barium	ug/L	<200	500	504	94	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	121000		150000			
Calcium	ug/L	48400	12500	59900	92	70-130	
Chromium	ug/L	<10.0	500	447	89	70-130	
Copper	ug/L	31.3	500	485	91	70-130	
Hardness, Magnesium	ug/L	51500		95900			N3
Iron	ug/L	119	5000	4570	89	70-130	
Lead	ug/L	<5.0	500	442	88	70-130	
Magnesium	ug/L	12500	12500	23300	86	70-130	
Manganese	ug/L	10.5	500	455	89	70-130	
Nickel	ug/L	<40.0	500	443	86	70-130	
Potassium	ug/L	5140	12500	21000	127	70-130	
Sodium	ug/L	848000	12500	863000	120	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L	172000		246000			
Zinc	ug/L	<20.0	500	456	91	70-130	

MATRIX SPIKE SAMPLE: 1545160

Parameter	Units	70255738001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<0.20 mg/L	12500	12000	96	70-130	
Barium	ug/L	<0.20 mg/L	500	473	92	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	112 mg/L		135000			
Calcium	ug/L	44.8 mg/L	12500	54000	74	70-130	
Chromium	ug/L	<0.010 mg/L	500	453	90	70-130	
Copper	ug/L	<0.025 mg/L	500	463	90	70-130	
Hardness, Magnesium	ug/L	60.9 mg/L		103000			N3
Iron	ug/L	0.11 mg/L	5000	4590	90	70-130	
Lead	ug/L	<0.0050 mg/L	500	444	89	70-130	
Magnesium	ug/L	14.8 mg/L	12500	25000	82	70-130	
Manganese	ug/L	0.042 mg/L	500	485	89	70-130	
Nickel	ug/L	<0.040 mg/L	500	444	85	70-130	
Potassium	ug/L	23.8 mg/L	12500	34400	85	70-130	
Sodium	ug/L	155 mg/L	12500	158000	24	70-130	M1
Tot Hardness asCaCO3 (SM 2340B	ug/L	173 mg/L		238000			
Zinc	ug/L	0.035 mg/L	500	489	91	70-130	

SAMPLE DUPLICATE: 1544754

Parameter	Units	70255811001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	248	248	0	
Barium	ug/L	<200	32.1J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1544754

Parameter	Units	70255811001 Result	Dup Result	RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	ug/L	121000	121000	0	
Calcium	ug/L	48400	48600	0	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	31.3	30.3	3	
Hardness, Magnesium	ug/L	51500	51500	0	N3
Iron	ug/L	119	92.9J		
Lead	ug/L	<5.0	<5.0		
Magnesium	ug/L	12500	12500	0	
Manganese	ug/L	10.5	10.5	0	
Nickel	ug/L	<40.0	10.2J		
Potassium	ug/L	5140	5090	1	
Sodium	ug/L	848000	852000	0	
Tot Hardness asCaCO3 (SM 2340B	ug/L	172000	173000	0	
Zinc	ug/L	<20.0	<20.0		

SAMPLE DUPLICATE: 1545159

Parameter	Units	70255738001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<0.20 mg/L	57.3J		
Barium	ug/L	<0.20 mg/L	<200		
Ca Hardness as CaCO3 (SM 2340B	ug/L	112 mg/L	108000	3	
Calcium	ug/L	44.8 mg/L	43300	3	
Chromium	ug/L	<0.010 mg/L	<10.0		
Copper	ug/L	<0.025 mg/L	11.9J		
Hardness, Magnesium	ug/L	60.9 mg/L	59300	3	N3
Iron	ug/L	0.11 mg/L	106	6	
Lead	ug/L	<0.0050 mg/L	<5.0		
Magnesium	ug/L	14.8 mg/L	14400	3	
Manganese	ug/L	0.042 mg/L	40.3	4	
Nickel	ug/L	<0.040 mg/L	16.6J		
Potassium	ug/L	23.8 mg/L	22700	5	
Sodium	ug/L	155 mg/L	150000	3	
Tot Hardness asCaCO3 (SM 2340B	ug/L	173 mg/L	167000	3	
Zinc	ug/L	0.035 mg/L	33.7	4	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305197
QC Batch Method: EPA 200.7
Analysis Method: EPA 200.7
Analysis Description: 200.7 Metals, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

METHOD BLANK: 1546370 Matrix: Water
Associated Lab Samples: 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	05/16/23 11:07	
Barium	ug/L	<200	200	05/16/23 11:07	
Ca Hardness as CaCO3 (SM 2340B	ug/L	<500	500	05/16/23 11:07	
Calcium	ug/L	<200	200	05/16/23 11:07	
Chromium	ug/L	<10.0	10.0	05/16/23 11:07	
Copper	ug/L	<25.0	25.0	05/16/23 11:07	
Hardness, Magnesium	ug/L	<830	830	05/16/23 11:07	N3
Iron	ug/L	<100	100	05/16/23 11:07	
Lead	ug/L	<5.0	5.0	05/16/23 11:07	
Magnesium	ug/L	<200	200	05/16/23 11:07	
Manganese	ug/L	<10.0	10.0	05/16/23 11:07	
Nickel	ug/L	<40.0	40.0	05/16/23 11:07	
Potassium	ug/L	1030J	5000	05/16/23 11:07	
Sodium	ug/L	<5000	5000	05/16/23 11:07	
Tot Hardness asCaCO3 (SM 2340B	ug/L	<830	830	05/16/23 11:07	
Zinc	ug/L	<20.0	20.0	05/16/23 11:07	

LABORATORY CONTROL SAMPLE: 1546371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	24300	97	85-115	
Barium	ug/L	500	490	98	85-115	
Ca Hardness as CaCO3 (SM 2340B	ug/L		62400			
Calcium	ug/L	25000	25000	100	85-115	
Chromium	ug/L	500	479	96	85-115	
Copper	ug/L	500	487	97	85-115	
Hardness, Magnesium	ug/L		101000			N3
Iron	ug/L	12500	12300	98	85-115	
Lead	ug/L	500	490	98	85-115	
Magnesium	ug/L	25000	24600	98	85-115	
Manganese	ug/L	500	489	98	85-115	
Nickel	ug/L	500	486	97	85-115	
Potassium	ug/L	25000	23400	94	85-115	
Sodium	ug/L	25000	24800	99	85-115	
Tot Hardness asCaCO3 (SM 2340B	ug/L		164000			
Zinc	ug/L	500	493	99	85-115	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE SAMPLE: 1546373

Parameter	Units	70256302002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	249	12500	11700	92	70-130	
Barium	ug/L	<200	500	477	90	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L	124000		158000			
Calcium	ug/L	49800	12500	63200	107	70-130	
Chromium	ug/L	<10.0	500	436	87	70-130	
Copper	ug/L	25.5	500	473	90	70-130	
Hardness, Magnesium	ug/L	38800		83600			N3
Iron	ug/L	1430	5000	5940	90	70-130	
Lead	ug/L	43.9	500	489	89	70-130	
Magnesium	ug/L	9410	12500	20300	87	70-130	
Manganese	ug/L	168	500	616	90	70-130	
Nickel	ug/L	<40.0	500	432	85	70-130	
Potassium	ug/L	7300	12500	19500	98	70-130	
Sodium	ug/L	255000	12500	278000	184	70-130	M1
Tot Hardness asCaCO3 (SM 2340B	ug/L	163000		241000			
Zinc	ug/L	58.2	500	506	90	70-130	

MATRIX SPIKE SAMPLE: 1546375

Parameter	Units	70256148001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L		12500	14100	99	70-130	
Barium	ug/L		500	558	97	70-130	
Ca Hardness as CaCO3 (SM 2340B	ug/L			52200			
Calcium	ug/L		12500	20900	98	70-130	
Chromium	ug/L		500	494	95	70-130	
Copper	ug/L		500	583	98	70-130	
Hardness, Magnesium	ug/L			71200			N3
Iron	ug/L		5000	7890	97	70-130	
Lead	ug/L		500	490	96	70-130	
Magnesium	ug/L		12500	17300	92	70-130	
Manganese	ug/L		500	574	94	70-130	
Nickel	ug/L		500	479	91	70-130	
Potassium	ug/L		12500	101000	108	70-130	
Sodium	ug/L	57200	12500	69900	102	70-130	
Tot Hardness asCaCO3 (SM 2340B	ug/L			123000			
Zinc	ug/L		500	2070	94	70-130	

SAMPLE DUPLICATE: 1546372

Parameter	Units	70256302002 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	249	263	5	
Barium	ug/L	<200	30.9J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

SAMPLE DUPLICATE: 1546372

Parameter	Units	70256302002 Result	Dup Result	RPD	Qualifiers
Ca Hardness as CaCO3 (SM 2340B	ug/L	124000	132000	6	
Calcium	ug/L	49800	52800	6	
Chromium	ug/L	<10.0	<10.0		
Copper	ug/L	25.5	26.8	5	
Hardness, Magnesium	ug/L	38800	41200	6	N3
Iron	ug/L	1430	1530	7	
Lead	ug/L	43.9	47.8	9	
Magnesium	ug/L	9410	10000	6	
Manganese	ug/L	168	179	6	
Nickel	ug/L	<40.0	7.9J		
Potassium	ug/L	7300	7830	7	
Sodium	ug/L	255000	272000	6	
Tot Hardness asCaCO3 (SM 2340B	ug/L	163000	173000	6	
Zinc	ug/L	58.2	61.9	6	

SAMPLE DUPLICATE: 1546374

Parameter	Units	70256148001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L		1680	5	
Barium	ug/L		71.8J		
Ca Hardness as CaCO3 (SM 2340B	ug/L		20400	5	
Calcium	ug/L		8150	5	
Chromium	ug/L		15.2	11	
Copper	ug/L		90.0	3	
Hardness, Magnesium	ug/L		23100	4	N3
Iron	ug/L		2900	5	
Lead	ug/L		10.6	4	
Magnesium	ug/L		5610	4	
Manganese	ug/L		98.7	4	
Nickel	ug/L		21.3J		
Potassium	ug/L		83800	4	
Sodium	ug/L	57200	55100	4	
Tot Hardness asCaCO3 (SM 2340B	ug/L		43500	5	
Zinc	ug/L		1530	4	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304329
QC Batch Method: EPA 8260C/5030C
Analysis Method: EPA 8260C/5030C
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436001, 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1542099 Matrix: Water
Associated Lab Samples: 70255436001, 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	05/09/23 17:13	
1,1-Dichloroethane	ug/L	<1.0	1.0	05/09/23 17:13	
1,1-Dichloroethene	ug/L	<1.0	1.0	05/09/23 17:13	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	05/09/23 17:13	
1,2-Dichloroethane	ug/L	<1.0	1.0	05/09/23 17:13	
1,2-Dichloropropane	ug/L	<1.0	1.0	05/09/23 17:13	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	05/09/23 17:13	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	05/09/23 17:13	
Benzene	ug/L	<1.0	1.0	05/09/23 17:13	
Bromodichloromethane	ug/L	<1.0	1.0	05/09/23 17:13	
Bromoform	ug/L	<1.0	1.0	05/09/23 17:13	
Carbon tetrachloride	ug/L	<1.0	1.0	05/09/23 17:13	
Chlorobenzene	ug/L	<1.0	1.0	05/09/23 17:13	
Chloroethane	ug/L	<1.0	1.0	05/09/23 17:13	
Chloroform	ug/L	<1.0	1.0	05/09/23 17:13	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	05/09/23 17:13	
Dibromochloromethane	ug/L	<1.0	1.0	05/09/23 17:13	
Dichlorodifluoromethane	ug/L	<1.0	1.0	05/09/23 17:13	v3
Ethylbenzene	ug/L	<1.0	1.0	05/09/23 17:13	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	05/09/23 17:13	
m&p-Xylene	ug/L	<2.0	2.0	05/09/23 17:13	
Methylene Chloride	ug/L	<1.0	1.0	05/09/23 17:13	
n-Butylbenzene	ug/L	<1.0	1.0	05/09/23 17:13	
o-Xylene	ug/L	<1.0	1.0	05/09/23 17:13	
tert-Butylbenzene	ug/L	<1.0	1.0	05/09/23 17:13	
Tetrachloroethene	ug/L	<1.0	1.0	05/09/23 17:13	v3
Toluene	ug/L	<1.0	1.0	05/09/23 17:13	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	05/09/23 17:13	
Trichloroethene	ug/L	<1.0	1.0	05/09/23 17:13	
Vinyl chloride	ug/L	<1.0	1.0	05/09/23 17:13	
Xylene (Total)	ug/L	<3.0	3.0	05/09/23 17:13	
1,2-Dichloroethane-d4 (S)	%	109	80-120	05/09/23 17:13	
4-Bromofluorobenzene (S)	%	97	73-122	05/09/23 17:13	
Toluene-d8 (S)	%	103	75-122	05/09/23 17:13	

LABORATORY CONTROL SAMPLE: 1542100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.3	115	66-121	

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REPORT OF LABORATORY ANALYSIS

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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

LABORATORY CONTROL SAMPLE: 1542100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethane	ug/L	50	55.6	111	61-127	
1,1-Dichloroethene	ug/L	50	51.7	103	51-133	
1,2-Dichlorobenzene	ug/L	50	47.9	96	78-116	
1,2-Dichloroethane	ug/L	50	58.0	116	70-127	
1,2-Dichloropropane	ug/L	50	51.9	104	73-121	
1,3-Dichlorobenzene	ug/L	50	48.2	96	76-116	
1,4-Dichlorobenzene	ug/L	50	47.4	95	77-115	
Benzene	ug/L	50	44.9	90	72-122	
Bromodichloromethane	ug/L	50	54.4	109	79-118	
Bromoform	ug/L	50	63.8	128	61-139	v1
Carbon tetrachloride	ug/L	50	62.1	124	57-124	v1
Chlorobenzene	ug/L	50	49.6	99	72-125	
Chloroethane	ug/L	50	55.4	111	51-136	
Chloroform	ug/L	50	52.6	105	69-124	
cis-1,2-Dichloroethene	ug/L	50	46.6	93	65-126	
Dibromochloromethane	ug/L	50	60.4	121	72-134	v1
Dichlorodifluoromethane	ug/L	50	28.8	58	13-154	v3
Ethylbenzene	ug/L	50	45.4	91	72-120	
Isopropylbenzene (Cumene)	ug/L	50	46.7	93	68-122	
m&p-Xylene	ug/L	100	89.9	90	69-121	
Methylene Chloride	ug/L	50	47.3	95	59-127	
n-Butylbenzene	ug/L	50	51.4	103	65-124	
o-Xylene	ug/L	50	45.6	91	70-121	
tert-Butylbenzene	ug/L	50	48.1	96	69-118	
Tetrachloroethene	ug/L	50	38.0	76	60-134	v3
Toluene	ug/L	50	46.4	93	75-120	
trans-1,2-Dichloroethene	ug/L	50	49.7	99	54-132	
Trichloroethene	ug/L	50	46.3	93	74-118	
Vinyl chloride	ug/L	50	46.9	94	39-127	
Xylene (Total)	ug/L	150	136	90	70-121	
1,2-Dichloroethane-d4 (S)	%			114	80-120	
4-Bromofluorobenzene (S)	%			99	73-122	
Toluene-d8 (S)	%			101	75-122	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304935
QC Batch Method: EPA 8260C/5030C
Analysis Method: EPA 8260C/5030C
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436006, 70255436007, 70255436008, 70255436010, 70255436012, 70255436014, 70255436016, 70255436017, 70255436019, 70255436021

METHOD BLANK: 1545055
Matrix: Water
Associated Lab Samples: 70255436006, 70255436007, 70255436008, 70255436010, 70255436012, 70255436014, 70255436016, 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	05/12/23 14:05	
1,1-Dichloroethane	ug/L	<1.0	1.0	05/12/23 14:05	
1,1-Dichloroethene	ug/L	<1.0	1.0	05/12/23 14:05	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	05/12/23 14:05	
1,2-Dichloroethane	ug/L	<1.0	1.0	05/12/23 14:05	
1,2-Dichloropropane	ug/L	<1.0	1.0	05/12/23 14:05	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	05/12/23 14:05	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	05/12/23 14:05	
Benzene	ug/L	<1.0	1.0	05/12/23 14:05	
Bromodichloromethane	ug/L	<1.0	1.0	05/12/23 14:05	
Bromoform	ug/L	<1.0	1.0	05/12/23 14:05	v3
Carbon tetrachloride	ug/L	<1.0	1.0	05/12/23 14:05	v3
Chlorobenzene	ug/L	<1.0	1.0	05/12/23 14:05	
Chloroethane	ug/L	<1.0	1.0	05/12/23 14:05	
Chloroform	ug/L	<1.0	1.0	05/12/23 14:05	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	05/12/23 14:05	
Dibromochloromethane	ug/L	<1.0	1.0	05/12/23 14:05	
Dichlorodifluoromethane	ug/L	<1.0	1.0	05/12/23 14:05	v3
Ethylbenzene	ug/L	<1.0	1.0	05/12/23 14:05	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	05/12/23 14:05	
m&p-Xylene	ug/L	<2.0	2.0	05/12/23 14:05	
Methylene Chloride	ug/L	<1.0	1.0	05/12/23 14:05	
n-Butylbenzene	ug/L	<1.0	1.0	05/12/23 14:05	
o-Xylene	ug/L	<1.0	1.0	05/12/23 14:05	
tert-Butylbenzene	ug/L	<1.0	1.0	05/12/23 14:05	
Tetrachloroethene	ug/L	<1.0	1.0	05/12/23 14:05	
Toluene	ug/L	<1.0	1.0	05/12/23 14:05	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	05/12/23 14:05	
Trichloroethene	ug/L	<1.0	1.0	05/12/23 14:05	
Vinyl chloride	ug/L	<1.0	1.0	05/12/23 14:05	
Xylene (Total)	ug/L	<3.0	3.0	05/12/23 14:05	
1,2-Dichloroethane-d4 (S)	%	92	80-120	05/12/23 14:05	
4-Bromofluorobenzene (S)	%	95	73-122	05/12/23 14:05	
Toluene-d8 (S)	%	102	75-122	05/12/23 14:05	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

LABORATORY CONTROL SAMPLE: 1545056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	42.8	86	66-121	
1,1-Dichloroethane	ug/L	50	54.3	109	61-127	
1,1-Dichloroethene	ug/L	50	60.8	122	51-133	
1,2-Dichlorobenzene	ug/L	50	50.0	100	78-116	
1,2-Dichloroethane	ug/L	50	54.1	108	70-127	
1,2-Dichloropropane	ug/L	50	53.8	108	73-121	
1,3-Dichlorobenzene	ug/L	50	48.9	98	76-116	
1,4-Dichlorobenzene	ug/L	50	50.4	101	77-115	
Benzene	ug/L	50	50.7	101	72-122	
Bromodichloromethane	ug/L	50	46.1	92	79-118	
Bromoform	ug/L	50	41.0	82	61-139	v3
Carbon tetrachloride	ug/L	50	39.9	80	57-124	v3
Chlorobenzene	ug/L	50	50.8	102	72-125	
Chloroethane	ug/L	50	54.7	109	51-136	
Chloroform	ug/L	50	57.6	115	69-124	
cis-1,2-Dichloroethene	ug/L	50	59.5	119	65-126	
Dibromochloromethane	ug/L	50	44.3	89	72-134	
Dichlorodifluoromethane	ug/L	50	24.1	48	13-154	v3
Ethylbenzene	ug/L	50	49.2	98	72-120	
Isopropylbenzene (Cumene)	ug/L	50	50.0	100	68-122	
m&p-Xylene	ug/L	100	98.6	99	69-121	
Methylene Chloride	ug/L	50	55.3	111	59-127	
n-Butylbenzene	ug/L	50	50.7	101	65-124	
o-Xylene	ug/L	50	49.3	99	70-121	
tert-Butylbenzene	ug/L	50	46.9	94	69-118	
Tetrachloroethene	ug/L	50	46.8	94	60-134	
Toluene	ug/L	50	51.4	103	75-120	
trans-1,2-Dichloroethene	ug/L	50	55.9	112	54-132	
Trichloroethene	ug/L	50	49.2	98	74-118	
Vinyl chloride	ug/L	50	50.0	100	39-127	
Xylene (Total)	ug/L	150	148	99	70-121	
1,2-Dichloroethane-d4 (S)	%			88	80-120	
4-Bromofluorobenzene (S)	%			96	73-122	
Toluene-d8 (S)	%			105	75-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1545524 1545525

Parameter	Units	70256222002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichloroethane	ug/L	<1.0	50	50	48.1	48.5	96	97	68-134	1	
1,1-Dichloroethane	ug/L	<1.0	50	50	66.4	66.1	133	132	54-145	0	
1,1-Dichloroethene	ug/L	<1.0	50	50	70.3	70.0	141	140	53-147	0	
1,2-Dichlorobenzene	ug/L	<1.0	50	50	51.1	51.1	102	102	75-120	0	
1,2-Dichloroethane	ug/L	<1.0	50	50	57.4	57.5	115	115	58-141	0	
1,2-Dichloropropane	ug/L	<1.0	50	50	55.7	57.0	111	114	64-136	2	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1545524 1545525

Parameter	Units	70256222002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,3-Dichlorobenzene	ug/L	<1.0	50	50	51.3	52.3	103	105	67-129	2	
1,4-Dichlorobenzene	ug/L	<1.0	50	50	51.6	53.0	103	106	75-119	3	
Benzene	ug/L	<1.0	50	50	56.4	56.1	113	112	67-139	1	
Bromodichloromethane	ug/L	<1.0	50	50	46.9	48.0	94	96	70-127	2	
Bromoform	ug/L	<1.0	50	50	37.3	39.0	75	78	47-138	5	v3
Carbon tetrachloride	ug/L	<1.0	50	50	44.7	44.7	89	89	61-136	0	v3
Chlorobenzene	ug/L	<1.0	50	50	54.3	55.2	109	110	73-130	2	
Chloroethane	ug/L	<1.0	50	50	70.8	70.9	142	142	48-152	0	
Chloroform	ug/L	<1.0	50	50	63.6	63.3	127	127	58-143	0	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	65.9	64.7	132	129	58-142	2	
Dibromochloromethane	ug/L	<1.0	50	50	44.6	45.2	89	90	65-133	1	
Dichlorodifluoromethane	ug/L	<1.0	50	50	58.6	58.9	117	118	15-152	0	v3
Ethylbenzene	ug/L	<1.0	50	50	54.3	54.1	109	108	63-139	0	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	55.7	56.3	111	113	67-137	1	
m&p-Xylene	ug/L	<2.0	100	100	107	109	107	109	60-138	1	
Methylene Chloride	ug/L	<1.0	50	50	60.8	61.1	122	122	47-142	0	
n-Butylbenzene	ug/L	<1.0	50	50	51.9	53.4	104	107	46-148	3	
o-Xylene	ug/L	<1.0	50	50	52.2	52.7	104	105	64-135	1	
tert-Butylbenzene	ug/L	<1.0	50	50	51.1	53.5	102	107	64-134	5	
Tetrachloroethene	ug/L	<1.0	50	50	51.4	51.4	103	103	64-144	0	
Toluene	ug/L	<1.0	50	50	56.3	56.8	113	114	72-136	1	
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	64.1	64.6	128	129	47-151	1	
Trichloroethene	ug/L	<1.0	50	50	55.0	53.9	110	108	76-130	2	
Vinyl chloride	ug/L	<1.0	50	50	74.3	73.8	149	148	43-135	1	M1
Xylene (Total)	ug/L	<3.0	150	150	159	161	106	108	63-136	1	
1,2-Dichloroethane-d4 (S)	%						91	90	80-120		
4-Bromofluorobenzene (S)	%						96	96	73-122		
Toluene-d8 (S)	%						104	104	75-122		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Melville, NY 11747
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305250
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1546760 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/16/23 08:54	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/16/23 08:54	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/16/23 08:54	

LABORATORY CONTROL SAMPLE: 1546761

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	24.8	99	85-115	
Alkalinity,Bicarbonate (CaCO3)	mg/L		0.97J			
Alkalinity,Carbonate (CaCO3)	mg/L	25	23.8	95	85-115	

MATRIX SPIKE SAMPLE: 1546763

Parameter	Units	70256161006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	312	50	347	70	75-125	M1
Alkalinity,Bicarbonate (CaCO3)	mg/L	312		347			
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	50	<1.0	0	75-125	M1

SAMPLE DUPLICATE: 1546762

Parameter	Units	70256161006 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	312	309	1	
Alkalinity,Bicarbonate (CaCO3)	mg/L	312	309	1	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305806
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012

METHOD BLANK: 1549652 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/19/23 08:59	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/19/23 08:59	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/19/23 08:59	

LABORATORY CONTROL SAMPLE: 1549653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	23.6	95	85-115	
Alkalinity,Bicarbonate (CaCO3)	mg/L		2.8			
Alkalinity,Carbonate (CaCO3)	mg/L	25	20.9	83	85-115	L2

MATRIX SPIKE SAMPLE: 1549657

Parameter	Units	70255658011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	195	50	247	103	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	195		223			
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	50	23.4	47	75-125	M0

SAMPLE DUPLICATE: 1549656

Parameter	Units	70255658011 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	195	199	2	
Alkalinity,Bicarbonate (CaCO3)	mg/L	195	199	2	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 306101
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436014

METHOD BLANK: 1551177 Matrix: Water
Associated Lab Samples: 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/22/23 20:40	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/22/23 20:40	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/22/23 20:40	

LABORATORY CONTROL SAMPLE: 1551178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	25.1	100	85-115	
Alkalinity,Bicarbonate (CaCO3)	mg/L		3.3			
Alkalinity,Carbonate (CaCO3)	mg/L	25	21.8	87	85-115	

MATRIX SPIKE SAMPLE: 1551180

Parameter	Units	70255436014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	3.5	50	54.8	103	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	3.5		29.0			
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	50	25.8	52	75-125	M1

SAMPLE DUPLICATE: 1551179

Parameter	Units	70255436014 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	3.5	4.0	14	
Alkalinity,Bicarbonate (CaCO3)	mg/L	3.5	4.0	14	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 306176 | Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B | Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1551405 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/23/23 12:01	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/23/23 12:01	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/23/23 12:01	

LABORATORY CONTROL SAMPLE: 1551406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	24.1	97	85-115	
Alkalinity,Bicarbonate (CaCO3)	mg/L		3.7			
Alkalinity,Carbonate (CaCO3)	mg/L	25	20.4	82	85-115	L2

MATRIX SPIKE SAMPLE: 1551408

Parameter	Units	70256103001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	47.3	50	98.0	101	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	47.3		52.6			
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	50	45.4	91	75-125	

SAMPLE DUPLICATE: 1551407

Parameter	Units	70256103001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	47.3	47.9	1	
Alkalinity,Bicarbonate (CaCO3)	mg/L	47.3	47.9	1	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304233
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity, High Level
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1541528 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.5	05/08/23 14:11	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	2.5	05/08/23 14:11	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	2.5	05/08/23 14:11	

LABORATORY CONTROL SAMPLE: 1541529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	125	130	104	80-120	
Alkalinity,Bicarbonate (CaCO3)	mg/L		<5.0			
Alkalinity,Carbonate (CaCO3)	mg/L	125	126	101	80-120	

MATRIX SPIKE SAMPLE: 1541531

Parameter	Units	70255411005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5920	625	5730	-30	75-125	M1
Alkalinity,Bicarbonate (CaCO3)	mg/L	5920		5730			
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	625	<5.0	0	75-125	M1

SAMPLE DUPLICATE: 1541530

Parameter	Units	70255411005 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5920	5450	8	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5920	5450	8	
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	<5.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304736
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity, High Level
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1544093 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.5	05/11/23 14:11	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	2.5	05/11/23 14:11	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	2.5	05/11/23 14:11	

LABORATORY CONTROL SAMPLE: 1544094

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	125	131	105	80-120	
Alkalinity,Bicarbonate (CaCO3)	mg/L		<5.0			
Alkalinity,Carbonate (CaCO3)	mg/L	125	127	102	80-120	

MATRIX SPIKE SAMPLE: 1544098

Parameter	Units	70255846001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	6150	625	6660	83	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	6150		6660			
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	625	<5.0	0	75-125	M1

SAMPLE DUPLICATE: 1544097

Parameter	Units	70255846001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	6150	6120	0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	6150	6120	0	
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	<5.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304940
QC Batch Method: SM22 2320B
Analysis Method: SM22 2320B
Analysis Description: 2320B Alkalinity, High Level
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1545076 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	2.5	05/12/23 14:13	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	2.5	05/12/23 14:13	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	2.5	05/12/23 14:13	

LABORATORY CONTROL SAMPLE: 1545077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	125	130	104	80-120	
Alkalinity,Bicarbonate (CaCO3)	mg/L		<5.0			
Alkalinity,Carbonate (CaCO3)	mg/L	125	126	101	80-120	

MATRIX SPIKE SAMPLE: 1545079

Parameter	Units	70256081004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5770	625	6270	81	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5770		6270			
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	625	<5.0	0	75-125	M1

SAMPLE DUPLICATE: 1545078

Parameter	Units	70256081004 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5770	5570	4	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5770	5570	4	
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	<5.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304598 — Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C — Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1543417 — Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	05/10/23 17:09	

LABORATORY CONTROL SAMPLE: 1543418

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	472	94	85-115	

MATRIX SPIKE SAMPLE: 1543420

Parameter	Units	70255230002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	156	300	408	84	75-125	

MATRIX SPIKE SAMPLE: 1543422

Parameter	Units	70255436002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	394	300	666	91	75-125	

SAMPLE DUPLICATE: 1543419

Parameter	Units	70255230002 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	156	151	3	

SAMPLE DUPLICATE: 1543421

Parameter	Units	70255436002 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	394	390	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305191 | Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1546351 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	05/15/23 16:25	

LABORATORY CONTROL SAMPLE: 1546352

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	470	94	85-115	

MATRIX SPIKE SAMPLE: 1546354

Parameter	Units	70255658007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	141	300	432	97	75-125	

MATRIX SPIKE SAMPLE: 1546356

Parameter	Units	70255658011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	383	300	706	108	75-125	

SAMPLE DUPLICATE: 1546353

Parameter	Units	70255658007 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	141	145	3	

SAMPLE DUPLICATE: 1546355

Parameter	Units	70255658011 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	383	383	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305342
QC Batch Method: SM22 2540C
Analysis Method: SM22 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1547171 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	05/16/23 17:42	

LABORATORY CONTROL SAMPLE: 1547172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	436	87	85-115	

MATRIX SPIKE SAMPLE: 1547174

Parameter	Units	70255866001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	70.0	300	363	98	75-125	

MATRIX SPIKE SAMPLE: 1547176

Parameter	Units	70255830001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	60.0	300	358	99	75-125	

SAMPLE DUPLICATE: 1547173

Parameter	Units	70255866001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	70.0	84.0	18	D6

SAMPLE DUPLICATE: 1547175

Parameter	Units	70255830001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	60.0	72.0	18	D6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304070 | Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B | Analysis Description: Chromium, Hexavalent by 3500
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1540929 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/05/23 19:53	

LABORATORY CONTROL SAMPLE: 1540930

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.20	102	85-115	

MATRIX SPIKE SAMPLE: 1540931

Parameter	Units	70255436002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.18	92	75-125	

SAMPLE DUPLICATE: 1540932

Parameter	Units	70255436002 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304575 | Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B | Analysis Description: Chromium, Hexavalent by 3500
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436009, 70255436010, 70255436011, 70255436012, 70255436013, 70255436014, 70255436015

METHOD BLANK: 1543258 Matrix: Water
Associated Lab Samples: 70255436008, 70255436009, 70255436010, 70255436011, 70255436012, 70255436013, 70255436014, 70255436015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/10/23 17:28	

LABORATORY CONTROL SAMPLE: 1543259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.21	104	85-115	

MATRIX SPIKE SAMPLE: 1543260

Parameter	Units	70255436008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.21	103	75-125	H1

SAMPLE DUPLICATE: 1543261

Parameter	Units	70255436008 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		H1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304655 | Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B | Analysis Description: Chromium, Hexavalent by 3500
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436018, 70255436019, 70255436020, 70255436021, 70255436022

METHOD BLANK: 1543618 Matrix: Water
Associated Lab Samples: 70255436017, 70255436018, 70255436019, 70255436020, 70255436021, 70255436022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/10/23 20:11	

LABORATORY CONTROL SAMPLE: 1543619

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.20	100	85-115	

MATRIX SPIKE SAMPLE: 1544441

Parameter	Units	70255436021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.22	110	75-125	

SAMPLE DUPLICATE: 1544442

Parameter	Units	70255436019 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305459 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436010, 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

METHOD BLANK: 1547843 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436010, 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	0.20J	5.0	05/17/23 19:26	

LABORATORY CONTROL SAMPLE: 1547844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	10	10.8	108	90-110	

MATRIX SPIKE SAMPLE: 1547845

Parameter	Units	70256200002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	394	50	386	-17	90-110	M1

MATRIX SPIKE SAMPLE: 1547847

Parameter	Units	70256309001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	11.8	10	22.4	106	90-110	

SAMPLE DUPLICATE: 1547846

Parameter	Units	70256200002 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	394	375	5	

SAMPLE DUPLICATE: 1547848

Parameter	Units	70256309001 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	11.8	11.6	2	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304456
QC Batch Method: EPA 351.2
Analysis Method: EPA 351.2
Analysis Description: 351.2 TKN
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004

METHOD BLANK: 1542788 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	ND	0.094	05/10/23 13:11	

LABORATORY CONTROL SAMPLE: 1542789

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.2	105	90-110	

MATRIX SPIKE SAMPLE: 1542790

Parameter	Units	70255528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	4	4.5	79	90-110	M1

MATRIX SPIKE SAMPLE: 1542792

Parameter	Units	70255436004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	110	20	137	135	90-110	M1

SAMPLE DUPLICATE: 1542791

Parameter	Units	70255528002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	1.2	15	

SAMPLE DUPLICATE: 1542793

Parameter	Units	70255436004 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	110	110	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304667 | Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 | Analysis Description: 351.2 TKN
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436005, 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1543635 Matrix: Water
Associated Lab Samples: 70255436005, 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	ND	0.094	05/11/23 12:50	

LABORATORY CONTROL SAMPLE: 1543636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.1	103	90-110	

MATRIX SPIKE SAMPLE: 1543637

Parameter	Units	70255736002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	6.4	4	10.2	94	90-110	

MATRIX SPIKE SAMPLE: 1543639

Parameter	Units	70255742002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.3	4	5.3	101	90-110	

SAMPLE DUPLICATE: 1543638

Parameter	Units	70255736002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	6.4	6.4	1	

SAMPLE DUPLICATE: 1543640

Parameter	Units	70255742002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.3	1.1	17	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305073 | Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 | Analysis Description: 351.2 TKN
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1545929 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	ND	0.094	05/15/23 14:18	

LABORATORY CONTROL SAMPLE: 1545930

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.0	99	90-110	

MATRIX SPIKE SAMPLE: 1545931

Parameter	Units	70256009002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	10.9	4	15.0	104	90-110	

MATRIX SPIKE SAMPLE: 1545933

Parameter	Units	70256050002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.7	4	5.8	102	90-110	

SAMPLE DUPLICATE: 1545932

Parameter	Units	70256009002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	10.9	11.0	1	

SAMPLE DUPLICATE: 1545934

Parameter	Units	70256050002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.7	1.7	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304088
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436005

METHOD BLANK: 1540954 Matrix: Water
Associated Lab Samples: 70255436002, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/05/23 21:05	

LABORATORY CONTROL SAMPLE: 1540955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 1540956

Parameter	Units	70255348003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.52	100	90-110	

MATRIX SPIKE SAMPLE: 1540958

Parameter	Units	70255320001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.50	99	90-110	

SAMPLE DUPLICATE: 1540957

Parameter	Units	70255348003 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1540959

Parameter	Units	70255320001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304089
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436003, 70255436004

METHOD BLANK: 1540960 Matrix: Water
Associated Lab Samples: 70255436003, 70255436004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/05/23 21:41	

LABORATORY CONTROL SAMPLE: 1540961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 1540962

Parameter	Units	70255441001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.35	70	90-110	M1

SAMPLE DUPLICATE: 1540963

Parameter	Units	70255441001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304651 — Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 — Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1543598 — Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/10/23 21:15	

LABORATORY CONTROL SAMPLE: 1543599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	0.99	99	90-110	

MATRIX SPIKE SAMPLE: 1543600

Parameter	Units	70255658013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.50	100	90-110	

MATRIX SPIKE SAMPLE: 1543602

Parameter	Units	70255658011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.030J	0.5	0.56	106	90-110	

SAMPLE DUPLICATE: 1543601

Parameter	Units	70255658013 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1543603

Parameter	Units	70255658011 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	0.030J	0.031J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304828
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017

METHOD BLANK: 1544630 Matrix: Water
Associated Lab Samples: 70255436017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/11/23 21:13	

LABORATORY CONTROL SAMPLE: 1544631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	105	90-110	

MATRIX SPIKE SAMPLE: 1544632

Parameter	Units	70256074003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.51	102	90-110	H1

MATRIX SPIKE SAMPLE: 1544634

Parameter	Units	70255920002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.55	106	90-110	

SAMPLE DUPLICATE: 1544633

Parameter	Units	70256074003 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		H1

SAMPLE DUPLICATE: 1544635

Parameter	Units	70255920002 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304829
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436019, 70255436021

METHOD BLANK: 1544636 Matrix: Water
Associated Lab Samples: 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.027	05/11/23 21:49	

LABORATORY CONTROL SAMPLE: 1544637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	110	90-110	

MATRIX SPIKE SAMPLE: 1544638

Parameter	Units	70255981001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.55	107	90-110	

MATRIX SPIKE SAMPLE: 1544640

Parameter	Units	70255436021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.55	108	90-110	

SAMPLE DUPLICATE: 1544639

Parameter	Units	70255981001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1544641

Parameter	Units	70255436021 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305506
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1548148 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	ND	0.037	05/17/23 17:28	

LABORATORY CONTROL SAMPLE: 1548149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	104	90-110	

MATRIX SPIKE SAMPLE: 1548150

Parameter	Units	70256556001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	3.5	1	3.6	10	90-110	M1

MATRIX SPIKE SAMPLE: 1548152

Parameter	Units	70256274001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	15.7	5	21.3	113	90-110	M1

SAMPLE DUPLICATE: 1548151

Parameter	Units	70256556001 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	3.5	3.9	10	

SAMPLE DUPLICATE: 1548153

Parameter	Units	70256274001 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	15.7	15.8	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305853
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1549844 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	ND	0.037	05/19/23 12:17	

LABORATORY CONTROL SAMPLE: 1549845

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	103	90-110	

MATRIX SPIKE SAMPLE: 1549846

Parameter	Units	70255898006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	3.0	1	4.0	104	90-110	

MATRIX SPIKE SAMPLE: 1549848

Parameter	Units	70255436017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.5	0.40	81	90-110	M1

SAMPLE DUPLICATE: 1549847

Parameter	Units	70255898006 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	3.0	3.0	1	

SAMPLE DUPLICATE: 1549849

Parameter	Units	70255436017 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305557 | Analysis Method: SM22 4500-CN-E
QC Batch Method: SM20/22 4500-CN-C | Analysis Description: 4500 CNE Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1548377 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	ND	5.0	05/18/23 16:01	

LABORATORY CONTROL SAMPLE: 1548378

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	74.9	100	85-115	

MATRIX SPIKE SAMPLE: 1548379

Parameter	Units	70255859001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	108	99	75-125	

SAMPLE DUPLICATE: 1548380

Parameter	Units	70255859001 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 306154 | Analysis Method: SM22 4500-CN-E
QC Batch Method: SM20/22 4500-CN-C | Analysis Description: 4500 CNE Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1551359 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	ND	5.0	05/23/23 16:53	

LABORATORY CONTROL SAMPLE: 1551360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	80.4	107	85-115	

MATRIX SPIKE SAMPLE: 1551361

Parameter	Units	70255436008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	119	116	75-125	

SAMPLE DUPLICATE: 1551362

Parameter	Units	70255436008 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 306330
QC Batch Method: SM20/22 4500-CN-C
Analysis Method: SM22 4500-CN-E
Analysis Description: 4500 CNE Cyanide, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436017, 70255436019, 70255436021

METHOD BLANK: 1552234 Matrix: Water
Associated Lab Samples: 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	ND	5.0	05/24/23 16:16	

LABORATORY CONTROL SAMPLE: 1552235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	80.8	108	85-115	

MATRIX SPIKE SAMPLE: 1552236

Parameter	Units	70255436017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	126	121	75-125	

SAMPLE DUPLICATE: 1552237

Parameter	Units	70255436017 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 304475 | Analysis Method: SM22 4500-Cl-E
QC Batch Method: SM22 4500-Cl-E | Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

METHOD BLANK: 1542846 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	05/10/23 09:53	

LABORATORY CONTROL SAMPLE: 1542847

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	

MATRIX SPIKE SAMPLE: 1542848

Parameter	Units	70255536001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	218	125	324	85	80-120	

SAMPLE DUPLICATE: 1542849

Parameter	Units	70255536001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	218	216	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305069
QC Batch Method: SM22 4500-Cl-E
Analysis Method: SM22 4500-Cl-E
Analysis Description: 4500 Chloride
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

METHOD BLANK: 1545916 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014, 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	05/14/23 15:00	

LABORATORY CONTROL SAMPLE: 1545917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.2	96	90-110	

MATRIX SPIKE SAMPLE: 1545918

Parameter	Units	70256092001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	216	125	330	91	80-120	

SAMPLE DUPLICATE: 1545919

Parameter	Units	70256092001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	216	215	0	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305065
QC Batch Method: SM22 4500 NH3 H
Analysis Method: SM22 4500 NH3 H
Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436017, 70255436019, 70255436021

METHOD BLANK: 1545904 Matrix: Water
Associated Lab Samples: 70255436002, 70255436003, 70255436004, 70255436005, 70255436017, 70255436019, 70255436021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.050	05/14/23 13:38	

LABORATORY CONTROL SAMPLE: 1545905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.91	91	90-110	

MATRIX SPIKE SAMPLE: 1545906

Parameter	Units	70256089001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	17.7	10	29.3	116	75-125	

SAMPLE DUPLICATE: 1545907

Parameter	Units	70256089001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	17.7	17.5	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

QC Batch: 305272 | Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H | Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

METHOD BLANK: 1546833 Matrix: Water
Associated Lab Samples: 70255436008, 70255436010, 70255436012, 70255436014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.050	05/16/23 13:59	

LABORATORY CONTROL SAMPLE: 1546834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.98	98	90-110	

MATRIX SPIKE SAMPLE: 1546835

Parameter	Units	70256328001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	26.7	10	37.1	104	75-125	

SAMPLE DUPLICATE: 1546836

Parameter	Units	70256328001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	26.7	24.9	7	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALIFIERS

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70255436002	**MW-08B-5/5/23**	EPA 200.7	304480	EPA 200.7	304564
70255436003	**MW-08A-5/5/23**	EPA 200.7	304682	EPA 200.7	304748
70255436004	**MW-06B-5/5/23**	EPA 200.7	304682	EPA 200.7	304748
70255436005	**BLIND DUPLICATE-1-5/5/23**	EPA 200.7	304682	EPA 200.7	304748
70255436008	**MW-06E**	EPA 200.7	304864	EPA 200.7	304954
70255436010	**MW-06C**	EPA 200.7	304864	EPA 200.7	304954
70255436012	**MW-06F**	EPA 200.7	305197	EPA 200.7	305261
70255436014	**MW-06A**	EPA 200.7	305197	EPA 200.7	305261
70255436017	**LF-2 -5/10/23**	EPA 200.7	305197	EPA 200.7	305261
70255436019	**LF-1 -5/10/23**	EPA 200.7	305197	EPA 200.7	305261
70255436021	**FIELD BLANK-5/10/23**	EPA 200.7	305197	EPA 200.7	305261
70255436002	**MW-08B-5/5/23**	EPA 200.7	304224		
70255436003	**MW-08A-5/5/23**	EPA 200.7	304224		
70255436004	**MW-06B-5/5/23**	EPA 200.7	304224		
70255436005	**BLIND DUPLICATE-1-5/5/23**	EPA 200.7	304224		
70255436009	**MW-06E DISS**	EPA 200.7	305445		
70255436011	**MW-06C DISS**	EPA 200.7	305445		
70255436013	**MW-06F DISS**	EPA 200.7	305446		
70255436015	**MW-06A DISS**	EPA 200.7	305446		
70255436018	**LF-2 -5/10/24 DISS**	EPA 200.7	305445		
70255436020	**LF-1 -5/10/23 DISS**	EPA 200.7	305445		
70255436022	**FIELD BLANK-5/10/23 DISS**	EPA 200.7	305445		
70255436002	**MW-08B-5/5/23**	SM22 2340B	305125		
70255436003	**MW-08A-5/5/23**	SM22 2340B	305125		
70255436004	**MW-06B-5/5/23**	SM22 2340B	305125		
70255436005	**BLIND DUPLICATE-1-5/5/23**	SM22 2340B	305125		
70255436008	**MW-06E**	SM22 2340B	306047		
70255436010	**MW-06C**	SM22 2340B	306047		
70255436012	**MW-06F**	SM22 2340B	306047		
70255436014	**MW-06A**	SM22 2340B	306047		
70255436017	**LF-2 -5/10/23**	SM22 2340B	306047		
70255436019	**LF-1 -5/10/23**	SM22 2340B	306047		
70255436021	**FIELD BLANK-5/10/23**	SM22 2340B	306047		
70255436002	**MW-08B-5/5/23**	EPA 245.1	304868	EPA 245.1	304965
70255436003	**MW-08A-5/5/23**	EPA 245.1	304868	EPA 245.1	304965
70255436004	**MW-06B-5/5/23**	EPA 245.1	304868	EPA 245.1	304965
70255436005	**BLIND DUPLICATE-1-5/5/23**	EPA 245.1	304868	EPA 245.1	304965
70255436008	**MW-06E**	EPA 245.1	305426	EPA 245.1	305723
70255436010	**MW-06C**	EPA 245.1	305426	EPA 245.1	305723
70255436012	**MW-06F**	EPA 245.1	305978	EPA 245.1	305993
70255436014	**MW-06A**	EPA 245.1	305978	EPA 245.1	305993
70255436002	**MW-08B-5/5/23**	EPA 245.1	306122	EPA 245.1	306138

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70255436003	MW-08A-5/5/23	EPA 245.1	306122	EPA 245.1	306138
70255436004	MW-06B-5/5/23	EPA 245.1	306122	EPA 245.1	306138
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 245.1	306122	EPA 245.1	306138
70255436008	MW-06E	EPA 245.1	306122	EPA 245.1	306138
70255436009	MW-06E DISS	EPA 245.1	306122	EPA 245.1	306138
70255436011	MW-06C DISS	EPA 245.1	306122	EPA 245.1	306138
70255436013	MW-06F DISS	EPA 245.1	306122	EPA 245.1	306138
70255436015	MW-06A DISS	EPA 245.1	306122	EPA 245.1	306138
70255436018	LF-2 -5/10/24 DISS	EPA 245.1	306122	EPA 245.1	306138
70255436020	LF-1 -5/10/23 DISS	EPA 245.1	306122	EPA 245.1	306138
70255436022	FIELD BLANK-5/10/23 DISS	EPA 245.1	306122	EPA 245.1	306138
70255436001	TRIP BLANK	EPA 8260C/5030C	304329		
70255436002	MW-08B-5/5/23	EPA 8260C/5030C	304329		
70255436003	MW-08A-5/5/23	EPA 8260C/5030C	304329		
70255436004	MW-06B-5/5/23	EPA 8260C/5030C	304329		
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 8260C/5030C	304329		
70255436006	STORAGE BLANK - 5/10/23	EPA 8260C/5030C	304935		
70255436007	TRIP BLANK - 5/09/2023	EPA 8260C/5030C	304935		
70255436008	MW-06E	EPA 8260C/5030C	304935		
70255436010	MW-06C	EPA 8260C/5030C	304935		
70255436012	MW-06F	EPA 8260C/5030C	304935		
70255436014	MW-06A	EPA 8260C/5030C	304935		
70255436016	TRIP BLANK- 5/10/23	EPA 8260C/5030C	304935		
70255436017	LF-2 -5/10/23	EPA 8260C/5030C	304935		
70255436019	LF-1 -5/10/23	EPA 8260C/5030C	304935		
70255436021	FIELD BLANK-5/10/23	EPA 8260C/5030C	304935		
70255436002	MW-08B-5/5/23	SM22 2320B	305250		
70255436003	MW-08A-5/5/23	SM22 2320B	305250		
70255436004	MW-06B-5/5/23	SM22 2320B	305250		
70255436005	BLIND DUPLICATE-1-5/5/23	SM22 2320B	305250		
70255436008	MW-06E	SM22 2320B	305806		
70255436010	MW-06C	SM22 2320B	305806		
70255436012	MW-06F	SM22 2320B	305806		
70255436014	MW-06A	SM22 2320B	306101		
70255436017	LF-2 -5/10/23	SM22 2320B	306176		
70255436019	LF-1 -5/10/23	SM22 2320B	306176		
70255436021	FIELD BLANK-5/10/23	SM22 2320B	306176		
70255436002	MW-08B-5/5/23	SM22 2320B	304233		
70255436003	MW-08A-5/5/23	SM22 2320B	304233		
70255436004	MW-06B-5/5/23	SM22 2320B	304233		
70255436005	BLIND DUPLICATE-1-5/5/23	SM22 2320B	304233		
70255436008	MW-06E	SM22 2320B	304736		
70255436010	MW-06C	SM22 2320B	304736		
70255436012	MW-06F	SM22 2320B	304736		
70255436014	MW-06A	SM22 2320B	304736		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70255436017	LF-2 -5/10/23	SM22 2320B	304940		
70255436019	LF-1 -5/10/23	SM22 2320B	304940		
70255436021	FIELD BLANK-5/10/23	SM22 2320B	304940		
70255436002	MW-08B-5/5/23	SM22 2540C	304598		
70255436003	MW-08A-5/5/23	SM22 2540C	304598		
70255436004	MW-06B-5/5/23	SM22 2540C	304598		
70255436005	BLIND DUPLICATE-1-5/5/23	SM22 2540C	304598		
70255436008	MW-06E	SM22 2540C	305191		
70255436010	MW-06C	SM22 2540C	305191		
70255436012	MW-06F	SM22 2540C	305191		
70255436014	MW-06A	SM22 2540C	305191		
70255436017	LF-2 -5/10/23	SM22 2540C	305342		
70255436019	LF-1 -5/10/23	SM22 2540C	305342		
70255436021	FIELD BLANK-5/10/23	SM22 2540C	305342		
70255436002	MW-08B-5/5/23	SM22 3500-Cr B	304070		
70255436003	MW-08A-5/5/23	SM22 3500-Cr B	304070		
70255436004	MW-06B-5/5/23	SM22 3500-Cr B	304070		
70255436005	BLIND DUPLICATE-1-5/5/23	SM22 3500-Cr B	304070		
70255436008	MW-06E	SM22 3500-Cr B	304575		
70255436009	MW-06E DISS	SM22 3500-Cr B	304575		
70255436010	MW-06C	SM22 3500-Cr B	304575		
70255436011	MW-06C DISS	SM22 3500-Cr B	304575		
70255436012	MW-06F	SM22 3500-Cr B	304575		
70255436013	MW-06F DISS	SM22 3500-Cr B	304575		
70255436014	MW-06A	SM22 3500-Cr B	304575		
70255436015	MW-06A DISS	SM22 3500-Cr B	304575		
70255436017	LF-2 -5/10/23	SM22 3500-Cr B	304655		
70255436018	LF-2 -5/10/24 DISS	SM22 3500-Cr B	304655		
70255436019	LF-1 -5/10/23	SM22 3500-Cr B	304655		
70255436020	LF-1 -5/10/23 DISS	SM22 3500-Cr B	304655		
70255436021	FIELD BLANK-5/10/23	SM22 3500-Cr B	304655		
70255436022	FIELD BLANK-5/10/23 DISS	SM22 3500-Cr B	304655		
70255436002	MW-08B-5/5/23	EPA 300.0	305459		
70255436003	MW-08A-5/5/23	EPA 300.0	305459		
70255436004	MW-06B-5/5/23	EPA 300.0	305459		
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 300.0	305459		
70255436008	MW-06E	EPA 300.0	305459		
70255436010	MW-06C	EPA 300.0	305459		
70255436012	MW-06F	EPA 300.0	305459		
70255436014	MW-06A	EPA 300.0	305459		
70255436017	LF-2 -5/10/23	EPA 300.0	305459		
70255436019	LF-1 -5/10/23	EPA 300.0	305459		
70255436021	FIELD BLANK-5/10/23	EPA 300.0	305459		
70255436002	MW-08B-5/5/23	EPA 351.2	304456	EPA 351.2	304463

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70255436003	MW-08A-5/5/23	EPA 351.2	304456	EPA 351.2	304463
70255436004	MW-06B-5/5/23	EPA 351.2	304456	EPA 351.2	304463
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 351.2	304667	EPA 351.2	304669
70255436008	MW-06E	EPA 351.2	304667	EPA 351.2	304669
70255436010	MW-06C	EPA 351.2	304667	EPA 351.2	304669
70255436012	MW-06F	EPA 351.2	304667	EPA 351.2	304669
70255436014	MW-06A	EPA 351.2	304667	EPA 351.2	304669
70255436017	LF-2 -5/10/23	EPA 351.2	305073	EPA 351.2	305075
70255436019	LF-1 -5/10/23	EPA 351.2	305073	EPA 351.2	305075
70255436021	FIELD BLANK-5/10/23	EPA 351.2	305073	EPA 351.2	305075
70255436002	MW-08B-5/5/23	EPA 353.2	305506		
70255436003	MW-08A-5/5/23	EPA 353.2	305506		
70255436004	MW-06B-5/5/23	EPA 353.2	305506		
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 353.2	305506		
70255436008	MW-06E	EPA 353.2	305506		
70255436010	MW-06C	EPA 353.2	305506		
70255436012	MW-06F	EPA 353.2	305506		
70255436014	MW-06A	EPA 353.2	305506		
70255436017	LF-2 -5/10/23	EPA 353.2	305853		
70255436019	LF-1 -5/10/23	EPA 353.2	305853		
70255436021	FIELD BLANK-5/10/23	EPA 353.2	305853		
70255436002	MW-08B-5/5/23	EPA 353.2	304088		
70255436003	MW-08A-5/5/23	EPA 353.2	304089		
70255436004	MW-06B-5/5/23	EPA 353.2	304089		
70255436005	BLIND DUPLICATE-1-5/5/23	EPA 353.2	304088		
70255436008	MW-06E	EPA 353.2	304651		
70255436010	MW-06C	EPA 353.2	304651		
70255436012	MW-06F	EPA 353.2	304651		
70255436014	MW-06A	EPA 353.2	304651		
70255436017	LF-2 -5/10/23	EPA 353.2	304828		
70255436019	LF-1 -5/10/23	EPA 353.2	304829		
70255436021	FIELD BLANK-5/10/23	EPA 353.2	304829		
70255436002	MW-08B-5/5/23	SM20/22 4500-CN-C	305557	SM22 4500-CN-E	305724
70255436003	MW-08A-5/5/23	SM20/22 4500-CN-C	305557	SM22 4500-CN-E	305724
70255436004	MW-06B-5/5/23	SM20/22 4500-CN-C	305557	SM22 4500-CN-E	305724
70255436005	BLIND DUPLICATE-1-5/5/23	SM20/22 4500-CN-C	305557	SM22 4500-CN-E	305724
70255436008	MW-06E	SM20/22 4500-CN-C	306154	SM22 4500-CN-E	306230
70255436010	MW-06C	SM20/22 4500-CN-C	306154	SM22 4500-CN-E	306230
70255436012	MW-06F	SM20/22 4500-CN-C	306154	SM22 4500-CN-E	306230
70255436014	MW-06A	SM20/22 4500-CN-C	306154	SM22 4500-CN-E	306230
70255436017	LF-2 -5/10/23	SM20/22 4500-CN-C	306330	SM22 4500-CN-E	306403
70255436019	LF-1 -5/10/23	SM20/22 4500-CN-C	306330	SM22 4500-CN-E	306403

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
516-370-6000

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Old Bethpage Landfill 5/5
Pace Project No.: 70255436

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70255436021	**FIELD BLANK-5/10/23**	SM20/22 4500-CN-C	306330	SM22 4500-CN-E	306403
70255436002	**MW-08B-5/5/23**	SM22 4500-Cl-E	304475		
70255436003	**MW-08A-5/5/23**	SM22 4500-Cl-E	304475		
70255436004	**MW-06B-5/5/23**	SM22 4500-Cl-E	304475		
70255436005	**BLIND DUPLICATE-1-5/5/23**	SM22 4500-Cl-E	304475		
70255436008	**MW-06E**	SM22 4500-Cl-E	305069		
70255436010	**MW-06C**	SM22 4500-Cl-E	305069		
70255436012	**MW-06F**	SM22 4500-Cl-E	305069		
70255436014	**MW-06A**	SM22 4500-Cl-E	305069		
70255436017	**LF-2 -5/10/23**	SM22 4500-Cl-E	305069		
70255436019	**LF-1 -5/10/23**	SM22 4500-Cl-E	305069		
70255436021	**FIELD BLANK-5/10/23**	SM22 4500-Cl-E	305069		
70255436002	**MW-08B-5/5/23**	SM22 4500 NH3 H	305065		
70255436003	**MW-08A-5/5/23**	SM22 4500 NH3 H	305065		
70255436004	**MW-06B-5/5/23**	SM22 4500 NH3 H	305065		
70255436005	**BLIND DUPLICATE-1-5/5/23**	SM22 4500 NH3 H	305065		
70255436008	**MW-06E**	SM22 4500 NH3 H	305272		
70255436010	**MW-06C**	SM22 4500 NH3 H	305272		
70255436012	**MW-06F**	SM22 4500 NH3 H	305272		
70255436014	**MW-06A**	SM22 4500 NH3 H	305272		
70255436017	**LF-2 -5/10/23**	SM22 4500 NH3 H	305065		
70255436019	**LF-1 -5/10/23**	SM22 4500 NH3 H	305065		
70255436021	**FIELD BLANK-5/10/23**	SM22 4500 NH3 H	305065		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be co

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.co

WO# : 70255436

70255436

Section A	Section B	Section C
Required Client Information:	**Required Project Information:**	**Invoice Information:**
Company: Town of Oyster Bay	Report To: Russo, Matt	Attention: MATT Russo
Address: 150 Miller Place	Copy To: Keith Robins (D+B Engineers)	Company Name: Town of Oyster Bay
Syosset, NY 11791		Address: 150 Miller Place, Syosset NY 11791
Email: mrusso@tobays.net	Purchase Order #:	Pace Quote:
Phone: NONE Fax:	Project Name: Old Bethpage Landfill	Pace Project Manager: giovanna.deloca@pacelabs.com,
Requested Due Date: Standard	Project #: 3617 '07 First Qui Groundwater Event - 2023	Pace Profile #: 6466

State / Location
NY

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2, TDS					Residual Chlorine (Y/N)
	Requested Analysis Filtered (Y/N)																		N	N	N	N	Y	N	N	N					
1	Trip Blank - 5/5/2023	WT		5/5/23	—	5/5/23	—		2	—	—	—	2	—	—	—	—		✓	—	—	—	—	—	—					N
2	MW-108B - 5/5/23	WT	G	5/5/23	1205 pm	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓					N
3	MW-08A - 5/5/23	WT	G	5/5/23	1155 pm	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓					N
4	MW-06B - 5/5/23	WT	G	5/5/23	300 pm	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓					N
5	Blind Duplicate-1 - 5/5/23	WT	G	5/5/23	0000	5/5/23	—		9	3	1	N	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓					N
6																															
7																															
8																															
9																															
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/5/2023	4:45 pm		5.5.23	1655	6.2	Y	Y	
Provide category "B" and EDDs deliverables										
Send data to Lab Data@db-engineers.com										
Sample bottles denoted with (F) were field filtered for dissolved metals, Cr+6										

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Keith Robins					
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5/5/2023				

Pace Analytical®

Client Name: D+B

WO#: 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☑ Yes ☐ No ☐ N/A

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: TH0 TH148 Correction Factor: -3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 5.2 Cooler Temperature Corrected(°C): 4.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample)

Date and Initials of person examining contents: TH 5-5-23 1655

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☐Yes	☐No		1.
Chain of Custody Filled Out:	☐Yes	☐No		2.
Chain of Custody Relinquished:	☐Yes	☐No		3.
Sampler Name & Signature on COC:	☐Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☐Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☐No		6.
Rush Turn Around Time Requested:	☐Yes	☐No		7.
Sufficient Volume: (Triple volume provided for I	☐Yes	☐No		8.
Correct Containers Used:	☐Yes	☐No		9.
-Pace Containers Used:	☐Yes	☐No		
Containers Intact:	☐Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☐N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Matrix: SL WT OIL	☐Yes	☐No		12.
All containers needing preservation have been checked?	☐Yes	☐No	☐N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐Yes	☐No	☐N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☐Yes	☐No	☐N/A	14.
KI starch test strips Lot #.				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☐Yes	☐No	☐N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☐N/A	16.
Trip Blank Present:	☐Yes	☐No	☐N/A	17.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024-01

CHAIN-OF-CUSTODY / Analytical Request D

WO#: 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Pace

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pa

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Town of Oyster Bay	Report To: Russo, Matt	Attention: MATT Russo
Address: 150 Miller Place	Copy To: Keith Robins (D+B Engineers)	Company Name: Town of Oyster Bay
Syosset, NY 11791		Address: 150 Miller Place Syosset NY 11791
Email: mrusso@tobays.net	Purchase Order #:	Pace Quote:
Phone: NONE Fax	Project Name: Old Bethpage Landfill	Pace Project Manager: giovanna.deloca@pacelabs.com,
Requested Due Date: Standard	Project #: 3617-07 First Semiannual Event - 2023	Pace Profile #: 6466

Regulatory Agency	State / Location
	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Y/N	N	N	N	N	N	N	N	N	
1	TRIP Blank - 5/09/2023	WT	-	5/9/23	-	5/9/23	-		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-	-	N
2	MW-06E	WT	G	5/9/23	1120 am	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
3	MW-06C	WT	G	5/9/23	115 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
4	MW-06F	WT	G	5/9/23	530 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
5	MW-06A	WT	G	5/9/23	630 pm	5/9/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/10/23	0828		5/10/23	08:28	5.2	Y	Y	Y
Provide Category "B" and EQuIS deliverable										
Send data to Lab data @ d6-env.com										
Sample bottles denoted with "F" were field filtered for dissolved metals										

SAMPLER NAME AND SIGNATURE		
PRINT Name of SAMPLER:	Keith Robins	
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed: 5-10-23

Pace Analytical®

Client Name: Town of Oyster Bay

Pro

WO#: 70255436

PM: KMM **Due Date: 05/22/23**

CLIENT: TOY

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☐ No Seals intact: ☐ Yes ☐ No ☑ N/A

Temperature Blank Present: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: THO TH148 Correction Factor: -0.3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 5.2 Cooler Temperature Corrected(°C): 4.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Date and Initials of person examining contents: M.C. 5/10/23

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source (including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample labels match COC:	☐ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL	☑ Yes			
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC298085				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☑ Yes	☐ No	☐ N/A	14.
KI starch test strips Lot # 14-862				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 14-860				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☑ Yes	☐ No	☐ N/A	17.
Trip Blank Custody Seals Present	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0029-01

WO#: 70255436

PM: KMM **Due Date: 05/24/23**

CLIENT: TOY

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

...constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Section C

Required Client Information:		roject Information:	Invoice Information:
Company: Town of Oyster Bay		Report To: Russo, Matt	Attention: MATT RUSSO
Address: 150 Miller Place		Copy To: Keith Robins (D+B Engineers)	Company Name: Town of Oyster Bay
Syosset, NY 11791			Address: 150 Miller Place, Syosset, NY 11791
Email: mrusso@tobays.net		Purchase Order #:	Pace Quote:
Phone: NONE	Fax:	Project Name: Old Bethpage Landfill	Pace Project Manager: giovanna.deloca@pacelabs.com,
Requested Due Date: Standard		Project #: 3617-07 First Semiannual Groundwater Event 2023	Pace Profile #: 6466

Regulatory Agency	State / Location
	NY

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	NH3,NO3,Phenols,TKN	Cyanide	Total Metals & Hardness	Dissolved Metals (field filter)	Dissolved Cr+6	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)
1	TRIP Blank - 5/10/23	WT	-	5/10/23	-	5/10/23	-		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-	✓	N
2	LF-2 - 5/10/23	WT	G	5/10/23	1035	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
3	LF-1 - 5/10/23	WT	G	5/10/23	1130	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
4	Field Blank - 5/10/23	WT	G	5/10/23	1145	5/10/23	-		9	3	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Old Bethpage Landfill	Keith Robins / D+B Engineers	5/10/2023	6:00 PM	SJ FOCC I-J	5/10/23	6:03	1.2	Y	N	Y
Sample bottles denoted with (F) were field filtered for dissolved metals										
Send data to Lab data@dbengineers.com Provide Category "B" on EDDs										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Keith Robins

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 5/10/2023

WO#: 70255436

PM: KMM **Due Date: 05/24/23**

CLIENT: TOY

Pace Analytical®

Client Name: Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No ☑ N/A

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: THO TH148 Correction Factor: -0.3

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 1.2 Cooler Temperature Corrected(°C): 0.9

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Date and Initials of person examining contents: A.S 5/10

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☑ Yes	☐ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☑ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL AR Oil				
All containers needing preservation have been checked?	☑ Yes	☐ No	☐ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot # HC 943088				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #.				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☑ Yes	☐ No	☐ N/A	15.
Lead Acetate Strips Lot # 14-800				Positive for Sulfide? Y (N)
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☑ Yes	☑ No A.S 5/10/23	☐ N/A	17.
Trip Blank Custody Seals Present	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

PM (Project Manager) review is documented electronically in LIMS

ENV-FRM-MELV-0029-01

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

70255436

For:

LATOYA SOBRATIE

Pace Analytical Melville

575 BROAD HOLLOW RD

MELVILLE, NY 11747

Project State of Origin: New York

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	10861	NY State Department of Health

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 05/25/2023

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.0°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-08B-5/5/23			**Collection Date:**	05/05/2023 12:05
Laboratory ID:	M3E0662-01			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	0.0034	0.0025	0.0050	J	

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-08A-5/5/23			**Collection Date:**	05/05/2023 13:15
Laboratory ID:	M3E0662-02			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-06B-5/5/23			**Collection Date:**	05/05/2023 15:00
Laboratory ID:	M3E0662-03			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	**0.0278**	0.0025	0.0050		

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	BLIND DUPLICATE-1-5/5/23			**Collection Date:**	05/05/2023 00:01
Laboratory ID:	M3E0662-04			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	**0.0153**	0.0028	0.0055		

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Notes and Definitions

J: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L: Milligrams per Liter
MDL: Method Detection Limit
RL: Reporting Limit

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70255436 **Workorder Name:** Old Bethpage Landfill 5/5 **Results Requested By:** 5/22/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70255436KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Requested Analysis: Phenol	LAB USE ONLY
1	MW-08B-5/5/23	5/5/2023 12:05	70255436002	Water		X	
2	MW-08A-5/5/23	5/5/2023 13:15	70255436003	Water		X	
3	MW-06B-5/5/23	5/5/2023 15:00	70255436004	Water		X	
4	BLIND DUPLICATE-1-5/5/23	5/5/2023 00:00	70255436005	Water		X	
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace Lab	5/8/23		
2				
3			Stephanie Murphy	5/10/23 10:10

Comments

Cooler Temperature on Receipt 2.0 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

M 3 E 0 6 6 2

Pace Analytical - Melville, NY
Rec'd: 05/10/2023 10:10
By: Stephanie Murphy Temp: 2 (Signature)

MICROBAC®

Work Order # MBE0462

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5/10/2023 SM

pH Lot # HC205981

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5/10/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

5/10/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

70255436

For:

LATOYA SOBRATIE

Pace Analytical Melville

575 BROAD HOLLOW RD

MELVILLE, NY 11747

Project State of Origin: New York

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	10861	NY State Department of Health

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 05/25/2023

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.4°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-06E			**Collection Date:**	05/09/2023 11:20
Laboratory ID:	M3E0868-01			**Prep Date:**	05/23/2023 09:05
Matrix:	Aqueous			**Analyzed:**	05/24/2023 16:53
Batch / Sequence:	B3E1219 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1219_230524103028.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	0.0037	0.0025	0.0050	J	

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-06C			**Collection Date:**	05/09/2023 13:15
Laboratory ID:	M3E0868-02			**Prep Date:**	05/23/2023 09:05
Matrix:	Aqueous			**Analyzed:**	05/24/2023 16:53
Batch / Sequence:	B3E1219 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1219_230524103028.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	**0.0151**	0.0025	0.0050		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-06F			**Collection Date:**	05/09/2023 17:30
Laboratory ID:	M3E0868-03			**Prep Date:**	05/23/2023 09:05
Matrix:	Aqueous			**Analyzed:**	05/24/2023 16:53
Batch / Sequence:	B3E1219 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1219_230524103028.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	MW-06A			**Collection Date:**	05/09/2023 18:30
Laboratory ID:	M3E0868-04			**Prep Date:**	05/24/2023 09:02
Matrix:	Aqueous			**Analyzed:**	05/25/2023 15:54
Batch / Sequence:	B3E1295 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1295_230525025029.xls
Analyst:	APH	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0028	0.0055		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	LF-2-5/10/23			**Collection Date:**	05/10/2023 10:35
Laboratory ID:	M3E0868-05			**Prep Date:**	05/24/2023 09:02
Matrix:	Aqueous			**Analyzed:**	05/25/2023 15:54
Batch / Sequence:	B3E1295 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1295_230525025029.xls
Analyst:	APH	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0028	0.0055		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	LF-1-5/10/23			**Collection Date:**	05/10/2023 16:38
Laboratory ID:	M3E0868-06			**Prep Date:**	05/24/2023 09:02
Matrix:	Aqueous			**Analyzed:**	05/25/2023 15:54
Batch / Sequence:	B3E1295 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1295_230525025029.xls
Analyst:	APH	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0028	0.0055		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	FIELD BLANK			**Collection Date:**	05/10/2023 16:45
Laboratory ID:	M3E0868-07			**Prep Date:**	05/24/2023 09:02
Matrix:	Aqueous			**Analyzed:**	05/25/2023 15:54
Batch / Sequence:	B3E1295 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1295_230525025029.xls
Analyst:	APH	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0028	0.0055		

Laboratory Report Number: M3E0868

Client Project ID: 70255436

Notes and Definitions

J: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L: Milligrams per Liter
MDL: Method Detection Limit
RL: Reporting Limit

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70255436 **Workorder Name:** Old Bethpage Landfill 5/5 **Results Requested By:** 5/24/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70255436KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: Unpreserved	Requested Analysis: Phenol	LAB USE ONLY
1	MW-08B-5/5/23	5/5/2023 12:05	70255436002	Water			X	
2	MW-08A-5/5/23	5/5/2023 13:15	70255436003	Water			X	
3	MW-06B-5/5/23	5/5/2023 15:00	70255436004	Water			X	
4	BLIND DUPLICATE-1-5/5/23	5/5/2023 00:00	70255436005	Water			X	
5	MW-06E	5/9/2023 11:20	70255436008	Water			X	
6	MW-06C	5/9/2023 13:15	70255436010	Water			X	
7	MW-06F	5/9/2023 17:30	70255436012	Water			X	
8	MW-06A	5/9/2023 18:30	70255436014	Water			X	
9								
10								
11								
12								

M 3 E 0 8 6 8

Analytical - Melville, NY

5/12/2023 10:10

ada Gregory Temp: 1.4 (Signature)

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace LI	5/11/23 15:40	Blenda Gregory	5/12/23 1010
2				
3				

Comments

THE FIRST 4 SAMPLES WERE SHIPPED PREVIOUSLY
THIS SHIPMENT IS THE LAST 4 SAMPLES (5-8)

Cooler Temperature on Receipt 1.4 °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

MICROBAC®

Work Order # M3E0805

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5-12-23 EMP

pH Lot # HC205981 pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5-12-23 EMP

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

5-12-23 EMP

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Chain of Custody

PASI New York Laboratory

Pace Analytical
www.pacelabs.com

Workorder: 70255436 **Workorder Name:** Old Bethpage Landfill 5/5 **Results Requested By:** 5/25/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70255436KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: Unpreserved	Requested Analysis: Phenol	LAB USE ONLY
1	MW-08B-5/5/23	5/5/2023 12:05	70255436002	Water			X	
2	MW-08A-5/5/23	5/5/2023 13:15	70255436003	Water			X	
3	MW-06B-5/5/23	5/5/2023 15:00	70255436004	Water			X	
4	BLIND DUPLICATE-1-5/5/23	5/5/2023 00:00	70255436005	Water			X	
5	MW-06E	5/9/2023 11:20	70255436008	Water			X	
6	MW-06C	5/9/2023 13:15	70255436010	Water			X	
7	MW-06F	5/9/2023 17:30	70255436012	Water			X	
8	MW-06A	5/9/2023 18:30	70255436014	Water			X	
9	LF-2 -5/10/23	5/10/2023 10:35	70255436017	Water			X	
10	LF-1 -5/10/23	5/10/2023 16:38	70255436019	Water			X	
11	FIELD BLANK-5/10/23	5/10/2023 16:45	70255436021	Water			X	
12								
13								
14								
15								

5/9/23

M 3 E 0 8 6 8

Pace Analytical - Melville, NY
Rec'd: 05/12/2023 10:10
By: Brenda Gregory Temp: 1.4 (Signature)

Append to previous project.
Samples previously sent.

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1		1800 5/5/23			
2					
3				5/6/2023	0455

Cooler Temperature on Receipt 2.2 °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70255436 **Workorder Name:** Old Bethpage Landfill 5/5 **Results Requested By:** 5/24/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70255436KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: Unpreserved	Requested Analysis: Phenol	LAB USE ONLY
1	MW-08B-5/5/23	5/5/2023 12:05	70255436002	Water			X	
2	MW-08A-5/5/23	5/5/2023 13:15	70255436003	Water			X	
3	MW-06B-5/5/23	5/5/2023 15:00	70255436004	Water			X	
4	BLIND-DUPLICATE-1-5/5/23	5/5/2023 00:00	70255436005	Water			X	
5	MW-06E	5/9/2023 11:20	70255436008	Water			X	
6	MW-06C	5/9/2023 13:15	70255436010	Water			X	
7	MW-06F	5/9/2023 17:30	70255436012	Water			X	
8	MW-06A	5/9/2023 18:30	70255436014	Water			X	
9								
10								
11								
12								

M 3 E 0 8 6 8

Analytical - Melville, NY

5/12/2023 10:10

ada Gregory Temp: 1.4 (Signature)

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace LI	5/11/23 15:45	Brenda Gregory	5/12/23 1010
2				
3				

Comments

THE FIRST 4 SAMPLES WERE SHIPPED PREVIOUSLY
THIS SHIPMENT IS THE LAST 4 SAMPLES (5-8)

Cooler Temperature on Receipt 1.4 °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

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Work Order # M3E0828

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5-12-23 EMP

pH Lot # HC205981

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5-12-23 EMP

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

5-12-23 EMP

Microbac Laboratories Inc., - Marietta, OH

Level IV QA/QC Data Package

Laboratory Report Number:

M3E0662

Client Project ID:

70255436

For:

LATOYA SOBRATIE

Pace Analytical Melville

575 BROAD HOLLOW RD

MELVILLE, NY 11747

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	10861	NY State Department of Health

Project State of Origin: New York

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received. ***The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.***

Laboratory Project Manager:

Michelle Taylor

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Michelle Taylor

Project Manager

Issued: 05/25/2023

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Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.0 °C

Cooler Inspection Checklist

Ice Present or not required?	Yes	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

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Sample Summary

Sample Summary

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Client Sample ID:	Lab Sample ID:	Sampled:
MW-08B-5/5/23	M3E0662-01	05/05/23 12:05
MW-08A-5/5/23	M3E0662-02	05/05/23 13:15
MW-06B-5/5/23	M3E0662-03	05/05/23 15:00
BLIND DUPLICATE-1-5/5/23	M3E0662-04	05/05/23 00:01

Holding Time Summary

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Specific Method: EPA 420.1 **Hold Time**

Laboratory Report Number: M3E0662

Matrix: Aqueous

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Laboratory ID	Date Collected	Date Received	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
MW-08B-5/5/23	05/05/23 12:05	05/10/23 10:10	05/24/23 15:50	19.16	28.00	
MW-08A-5/5/23	05/05/23 13:15	05/10/23 10:10	05/24/23 15:50	19.11	28.00	
MW-06B-5/5/23	05/05/23 15:00	05/10/23 10:10	05/24/23 15:50	19.03	28.00	
BLIND DUPLICATE-1-5/5/23	05/05/23 00:01	05/10/23 10:10	05/24/23 15:50	19.66	28.00	

* - Holding time exceeded.

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Analysis Class

Wet Chemistry

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Wet Chemistry - Class Narrative and Notes

All test results meet the requirements of the QAPP and other applicable contract terms and conditions . Any exceptions are listed below in the sample and qc notes sections. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request.

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Wet Chemistry
EPA 420.1

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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FORM I:
Wet Chemistry
EPA 420.1
RESULTS SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0662

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	MW-08B-5/5/23			**Collection Date:**	05/05/2023 12:05
Laboratory ID:	M3E0662-01			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	0.0034	0.0025	0.0050	J	

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
J: The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
mg/L: Milligrams per Liter

MICROBAC®

Laboratory Report Number: M3E0662

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	MW-08A-5/5/23			**Collection Date:**	05/05/2023 13:15
Laboratory ID:	M3E0662-02			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	ND	0.0025	0.0050		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

MICROBAC®

Laboratory Report Number: M3E0662

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

CERTIFICATE OF ANALYSIS
FORM I

Client ID:	MW-06B-5/5/23			**Collection Date:**	05/05/2023 15:00
Laboratory ID:	M3E0662-03			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	**0.0278**	0.0025	0.0050		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

MICROBAC®

Laboratory Report Number: M3E0662

CERTIFICATE OF ANALYSIS
FORM I

Client Project ID: 70255436

Microbac Laboratories Inc., - Marietta, OH

Inorganics Total

Client ID:	BLIND DUPLICATE-1-5/5/23			**Collection Date:**	05/05/2023 00:01
Laboratory ID:	M3E0662-04			**Prep Date:**	05/23/2023 08:52
Matrix:	Aqueous			**Analyzed:**	05/24/2023 15:50
Batch / Sequence:	B3E1218 /	**Analytical Method:**	EPA 420.1	**Calibration:**	NA
Instrument:	UV-2600	**Units:**	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3E1218_230524102854.xls
Analyst:	TTB	**Dilution:**	1.1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Phenolics, Total	TOTPHEN	**0.0153**	0.0028	0.0055		

Notes and Definitions

MDL: Method Detection Limit
RL: Reporting Limit
mg/L: Milligrams per Liter

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FORM II:
Wet Chemistry
EPA 420.1
ICV/CCV SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0662
Client Project ID: 70255436

INITIAL AND CONTINUING CALIBRATION CHECK
FORM II

Instrument: UV-2600
Sequence:
Control Limt: +/- 10.00%

Method: EPA 420.1
Calibration:
File ID: Phenols_UV2600_2023-04-25_B
Analyst: TTB

Lab Sample ID	Analyte	True	Found	%R	Units	Date/Time	Q
B3E1218-CCV2	Phenolics, Total	0.0300	0.0313	104	mg/L	05/24/23 15:50	
B3E1218-CCV4	Phenolics, Total	0.0300	0.0281	93.7	mg/L	05/24/23 15:50	

* Values outside of QC limits

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FORM III:
Wet Chemistry
EPA 420.1
ICB/CCB/PREP BLANK SUMMARY

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

MICROBAC®

Laboratory Report Number: M3E0662

Client Project ID: 70255436

METHOD BLANK SUMMARY
FORM IIIA

Blank ID:	B3E1218-BLK1	**Batch:**	B3E1218
Blank File ID:	Phenols_UV2600_2023-04-25	**Instrument:**	UV-2600
Prepared:	05/23/2023 8:52	**Method:**	EPA 420.1
Analyzed:	05/24/2023 15:50	**Analyst:**	TTB

This Method Blank Applies To The Following Samples:

Client Sample ID	Laboratory Sample ID	Lab File ID	Time Analyzed
Blank	B3E1218-BLK1	600_2023-04-25_B3E1218_230	05/24/2023 15:50
LCS	B3E1218-BS2	600_2023-04-25_B3E1218_230	05/24/2023 15:50
Calibration Check	B3E1218-CCV2	600_2023-04-25_B3E1218_230	05/24/2023 15:50
Calibration Check	B3E1218-CCV4	600_2023-04-25_B3E1218_230	05/24/2023 15:50
MW-08B-5/5/23	M3E0662-01	600_2023-04-25_B3E1218_230	05/24/2023 15:50
MW-08A-5/5/23	M3E0662-02	600_2023-04-25_B3E1218_230	05/24/2023 15:50
MW-06B-5/5/23	M3E0662-03	600_2023-04-25_B3E1218_230	05/24/2023 15:50
BLIND DUPLICATE-1-5/5/23	M3E0662-04	600_2023-04-25_B3E1218_230	05/24/2023 15:50

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Laboratory Report Number: M3E0662

METHOD BLANK
FORM IIIB

Client Project ID: 70255436

Sample ID:	B3E1218-BLK1	**Prep Date:**	05/23/23 08:52	**Matrix:**	Aqueous
Instrument:	UV-2600	**Analyzed:**	05/24/23 15:50	**Method:**	EPA 420.1
File ID:	Phenols_UV2600_2023	**Sequence:**		**Analyst:**	TTB
Batch:	B3E1218	**Units:**	mg/L	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Phenolics, Total	0.0025	0.0025	0.0050	1	U	

Notes and Definitions

* - Detected in the associated method Blank at a concentration >= RL

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FORM VII:
Wet Chemistry
EPA 420.1
LCS/LCSD

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158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

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Laboratory Report Number: M3E0662

Client Project ID: 70255436

BLANK SPIKE (BS)
FORM VII

Method:	EPA 420.1		**Blank Spike**
Batch:	B3E1218	**Spike ID:**	B3E1218-BS2
Analyst:	TTB	**Prepared:**	05/23/23 08:52
Matrix:	Aqueous	**Analyzed:**	05/24/23 15:50
Units:	mg/L	**File ID:**	Phenols_UV2600_2023-04-25_B3
Instrument:	UV-2600	**Initial/Final:**	50mL/50mL
Calibration:			

Analyte	BS Spiked	BS Found	BS %Rec	%Rec Limts	Q
Phenolics, Total	0.0500	0.0405	80.9	80 - 120	

* - Does not meet %Rec acceptance criteria.
\# - Does not meet RPD acceptance criteria.

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Section A:
Wet Chemistry
EPA 420.1
Batch / Sequence Raw Data

Microbac Laboratories, Inc.
158 Starlite Drive | Marietta, OH 45750 | 800.373.4071 | www.microbac.com

Phenols

Laboratory: Microbac - OVD

Method:	EPA 420.1
Batch:	B3E1218
SOP:	K4201 rev 22
Instrument:	UV-2600
Balance ID:	

Analyst	Date	Time	Temp ºC	
	5/23/2023		NA	Distilled
TTB				
	5/24/2023	15:50	NA	Spec. Run

Curve ID:	2023/04/25 TTB	2023/04/25 TTB
Range:	Low	High
Slope:	3.15791	0.102902
Y Intercept:	0.00320	-0.00068

Calculation: Result = [(Absorbance-Intercept)/Slope] * Final Vol./Initial Vol.*Instument Dilution

#	Sample ID	Sample Name	Sample Date	Initial Vol. (mL)	Final Vol. (mL)	Low Response (Abs)	High Response (Abs)	Instrument Dilution	Final Dilution Factor	Spike Amt. mg/L	Slope (m)	Y Intercept (b)	Phenols mg/L	Recovery %
	B3E1218-CCV1	Calibration Check		50.00	50.00			1.0	1.00	1.00				#VALUE!
	B3E1218-BLK1	Blank		50.00	50.00	0.0000		1.0	1.00		3.15791	0.00320	-0.00101	
	B3E1218-BS1	LCS		50.00	50.00			1.0	1.00	0.50				#VALUE!
	B3E1218-BS2	LCS		50.00	50.00	0.1310		1.0	1.00	0.05	3.15791	0.00320	0.04047	80.9388
	B3E1218-CCV3	Calibration Check		50.00	50.00			1.0	1.00	1.00				#VALUE!
	B3E1218-CCV4	Calibration Check		50.00	50.00	0.0920		1.0	1.00	0.03	3.15791	0.00320	0.02812	93.73157
	B3E1218-DUP1	Duplicate M3E0896-04		50.00	50.00	0.0100		1.0	1.00		3.15791	0.00320	0.00215	
	B3E1218-MS1	Matrix Spike M3E0896-04		50.00	50.00	0.1100		1.0	1.00	0.05	3.15791	0.00320	0.03382	67.63887
	M3E0659-01	W2027-2 NATURAL I	5/8/23 12:00	50.00	50.00	0.0030		1.0	1.00		3.15791	0.00320	-0.00006	
	M3E0662-01	MW-08B-5/5/23	5/5/23 12:05	50.00	50.00	0.0140		1.0	1.00		3.15791	0.00320	0.00342	
	M3E0662-02	MW-08A-5/5/23	5/5/23 13:15	50.00	50.00	0.0090		1.0	1.00		3.15791	0.00320	0.00184	
	M3E0662-03	MW-06B-5/5/23	5/5/23 15:00	50.00	50.00	0.0910		1.0	1.00		3.15791	0.00320	0.02780	
	M3E0662-04	BLIND DUPLICATE-1	5/5/23 0:01	50.00	50.00	0.0470		1.1	1.10		3.15791	0.00320	0.01526	
	M3E0896-01	3033912-01 (Well # 2	5/10/23 8:45	50.00	50.00	0.0120		1.0	1.00		3.15791	0.00320	0.00279	
	M3E0896-02	3033912-02 (Well # 2	5/10/23 8:30	50.00	50.00	0.0010		1.0	1.00		3.15791	0.00320	-0.00070	
	M3E0896-03	3033912-03 (Well # 1	5/10/23 8:00	50.00	50.00	0.0170		1.0	1.00		3.15791	0.00320	0.00437	
	M3E0896-04	3033912-04 (Well # 4	5/10/23 9:15	50.00	50.00	0.0090		1.0	1.00		3.15791	0.00320	0.00184	
	M3E0896-05	3033912-05 (Well # 4	5/10/23 9:30	50.00	50.00	0.0080		1.0	1.00		3.15791	0.00320	0.00152	
	M3E0896-06	3033912-06 (Well # 3	5/10/23 9:00	50.00	50.00	0.0000		1.0	1.00		3.15791	0.00320	-0.00101	
	M3E0896-07	3033912-07 (Well # 1	5/10/23 8:15	50.00	50.00	0.0120		1.0	1.00		3.15791	0.00320	0.00279	
	M3E0896-08	3033912-08 (Downstr	5/10/23 10:00	50.00	50.00	0.0300		1.0	1.00		3.15791	0.00320	0.00849	
	M3E0896-09	3033912-09 (Upstrea	5/10/23 9:45	50.00	50.00	0.0110		1.0	1.00		3.15791	0.00320	0.00247	
	M3E0896-10	3033912-10 (Blind Du	5/10/23 8:15	50.00	50.00	0.0010		1.0	1.00		3.15791	0.00320	-0.00070	
	B3E1218-CCV2	Calibration Check		50.00	50.00	0.1020		1.0	1.00	0.03	3.15791	0.00320	0.03129	104.2871
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					
				50.00	50.00			1.0	1.00					

Linear Calibration Model **y = mx + b**
Phenols - Low

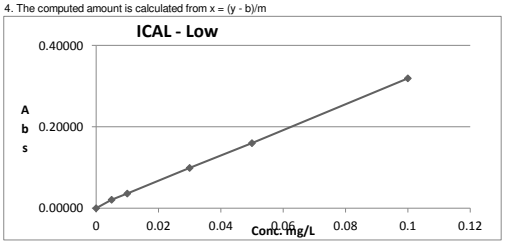
Instrument:	UV-2600
Curve ID:	2023/04/25 TTB
ICV (Abs):	0.1630
ICV Conc (mg/L):	0.05060
ICV %REC	101%

ICV Standard ID:	2000387/ 2010707
ICV Initial Volume:	50
ICV Final Volume:	50
ICV Working Conc:	0.05
Cell Size (cm):	1
Wavelength (nm):	460

Concentration (x)	Absorbance (OD) (y)	Calculated Amount	% Relative Error	Response Factor	Standard ID
0	0.00000	-0.00101			
0.005	0.02100	0.00564	-12.7253	4.20000	
0.01	0.03600	0.01039	-3.8624	3.60000	
0.03	0.09900	0.03034	-1.1204	3.30000	
0.05	0.16000	0.04965	0.6946	3.20000	
0.1	0.31900	0.10000	-0.0024	3.19000	
		-0.00101		#DIV/0!	

COC (r):	0.99987	Must be > 0.995
SLOPE (m):	3.15791	
y - INTERCEPT (b)	0.00320	
INTERCEPT TEST:	6.56012	Ratio should be > 5
% RELATIVE ERROR TEST:	-12.72534	Should be less than two times CCV criteria

1. R is the coefficient of correlation
2. The intercept test is the ratio of the response (y) of the low standard to the intercept (b):
3. Relative Error (%RE) = (X'i - Xi / Xi) * 100. Where Xi = True value for the calibration standard X'i = Measured concentration of the calibration standard.
4. The computed amount is calculated from x = (y - b)/m



Linear Calibration Model **y = mx + b**
Phenols - High

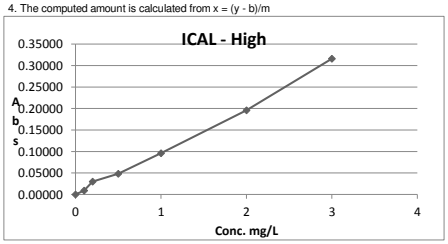
Instrument:	UV-2600
Curve ID:	2023/04/25 TTB
ICV (Abs):	0.0510
ICV Conc (mg/L):	0.50219
ICV %REC	100%

ICV Standard ID:	2000387/ 2010707
ICV Initial Volume:	50
ICV Final Volume:	50
ICV Working Conc:	0.50
Cell Size (cm):	1
Wavelength (nm):	510

Concentration (x)	Absorbance (OD) (y)	Calculated Amount	% Relative Error	Response Factor	Standard ID
0	0.00000	0.00657		#DIV/0!	
0.1	0.00900	0.09403	5.9668	0.09000	
0.2	0.03000	0.29811	-49.0554	0.15000	
0.5	0.04800	0.47303	5.3931	0.09600	
1	0.09600	0.93950	6.0502	0.09600	
2	0.19600	1.91130	4.4352	0.09800	
3	0.31600	3.07746	-2.5818	0.10533	

COC (r):	0.99819	Must be > 0.995
SLOPE (m):	0.10290	
y - INTERCEPT (b)	-0.00068	
INTERCEPT TEST:	13.30972	Ratio should be > 5
% RELATIVE ERROR TEST:	5.96684	Should be less than two times CCV criteria

1. R is the coefficient of correlation
2. The intercept test is the ratio of the response (y) of the low standard to the intercept (b):
3. Relative Error (%RE) = (X'i - Xi / Xi) * 100. Where Xi = True value for the calibration standard X'i = Measured concentration of the calibration standard.
4. The computed amount is calculated from x = (y - b)/m



MICROBAC®

Laboratory Report Number: M3E0662

Client Project ID: 70255436

BATCH LOG SUMMARY
SECTION A1

Batch: B3E1218
Matrix: Aqueous
Method: EPA 420.1

Prepared: 5/23/2023 8:52:00AM
Prepared By: TTB

Laboratory ID	Client / Source ID	Initial	Final						Spike(s)
M3E0662-01	MW-08B-5/5/23	50.0 mL	50.0 mL						
M3E0662-02	MW-08A-5/5/23	50.0 mL	50.0 mL						
M3E0662-03	MW-06B-5/5/23	50.0 mL	50.0 mL						
B3E1218-BS2		50.0 mL	50.0 mL						2010707 2.5µL
B3E1218-CCV4		50.0 mL	50.0 mL						2000387 1.5µL
B3E1218-CCV2		50.0 mL	50.0 mL						2000387 1.5µL
M3E0662-04	BLIND DUPLICATE-1-5/5/23	50.0 mL	50.0 mL						
B3E1218-BLK1		50.0 mL	50.0 mL						

Standards used in the batch:

Standard ID	Description	Date Prepared	Prepared By
2000387	Phenol Calibration Standard (1000 mg/L)	1/19/2022 8:27:26AM	** Vendor **
2010707	Phenol BS/ICV Stock, 1000 mg/L Lot 4211D00	12/28/2022 9:35:14AM	** Vendor **

Reagents used in the batch:

Reagent ID	Description	Prepared	Prepared By
3000747	Phenol Copper Sulfate Solution	1/30/2023 8:35:29AM	Ethan Tidd
3001993	Ammonia Buffer Solution (Phenol)	3/8/2023 12:00:55PM	Andrew Hout
3002493	Chloroform Lot # 225934	3/24/2023 1:28:13PM	** Vendor **
3004299	Phenol 4AAP Daily Solution	5/23/2023 8:48:14AM	Thomas Burch
3004300	Phenol Potassium Ferricyanide Daily Solution	5/23/2023 8:49:10AM	Thomas Burch

Chain of Custody

PASI New York Laboratory

Pace Analytical®
www.pacelabs.com

Workorder: 70255436 **Workorder Name:** Old Bethpage Landfill 5/5 **Results Requested By:** 5/22/2023

Report / Invoice To	Subcontract To
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com	Microbac Laboratories, Inc. 158 Starlite Drive Marietta, OH 45750 P.O. 70255436KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Requested Analysis: Phenol	LAB USE ONLY
1	MW-08B-5/5/23	5/5/2023 12:05	70255436002	Water		X	
2	MW-08A-5/5/23	5/5/2023 13:15	70255436003	Water		X	
3	MW-06B-5/5/23	5/5/2023 15:00	70255436004	Water		X	
4	BLIND DUPLICATE-1-5/5/23	5/5/2023 00:00	70255436005	Water		X	
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] Pace Lab	5/8/23		
2				
3			Stephanie Murphy	5/10/23 10:10

Comments

Cooler Temperature on Receipt 2.0 °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

M 3 E 0 6 6 2

Pace Analytical - Melville, NY
Rec'd: 05/10/2023 10:10
By: Stephanie Murphy Temp: 2 (Signature)

MICROBAC®

Work Order # MBE0462

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5/10/2023 SM

pH Lot # HC205981

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5/10/2023 SM

PRESERVATIVE EXCEPTIONS

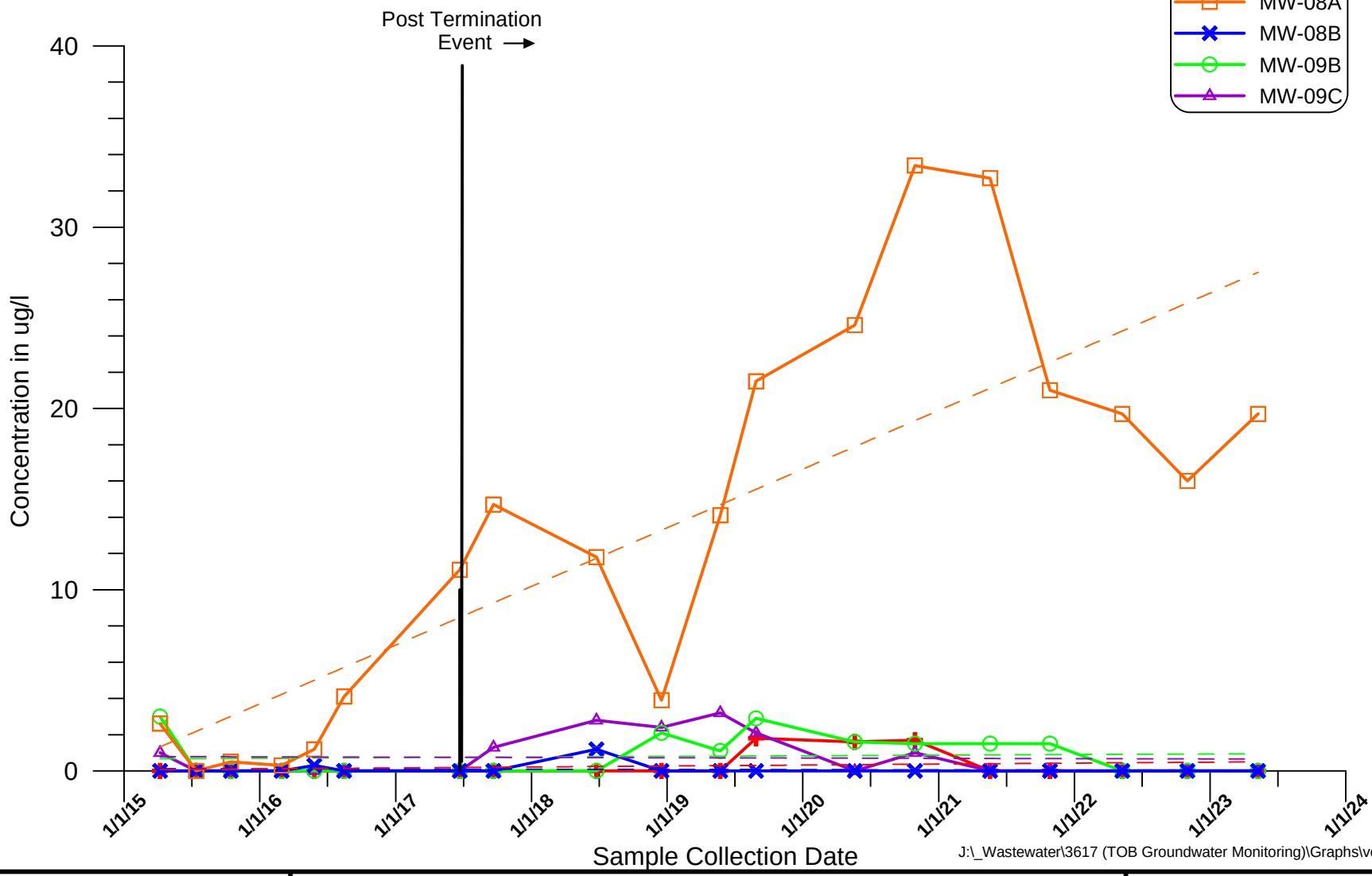
✓ NONE

AS NOTED

5/10/2023 SM

APPENDIX E

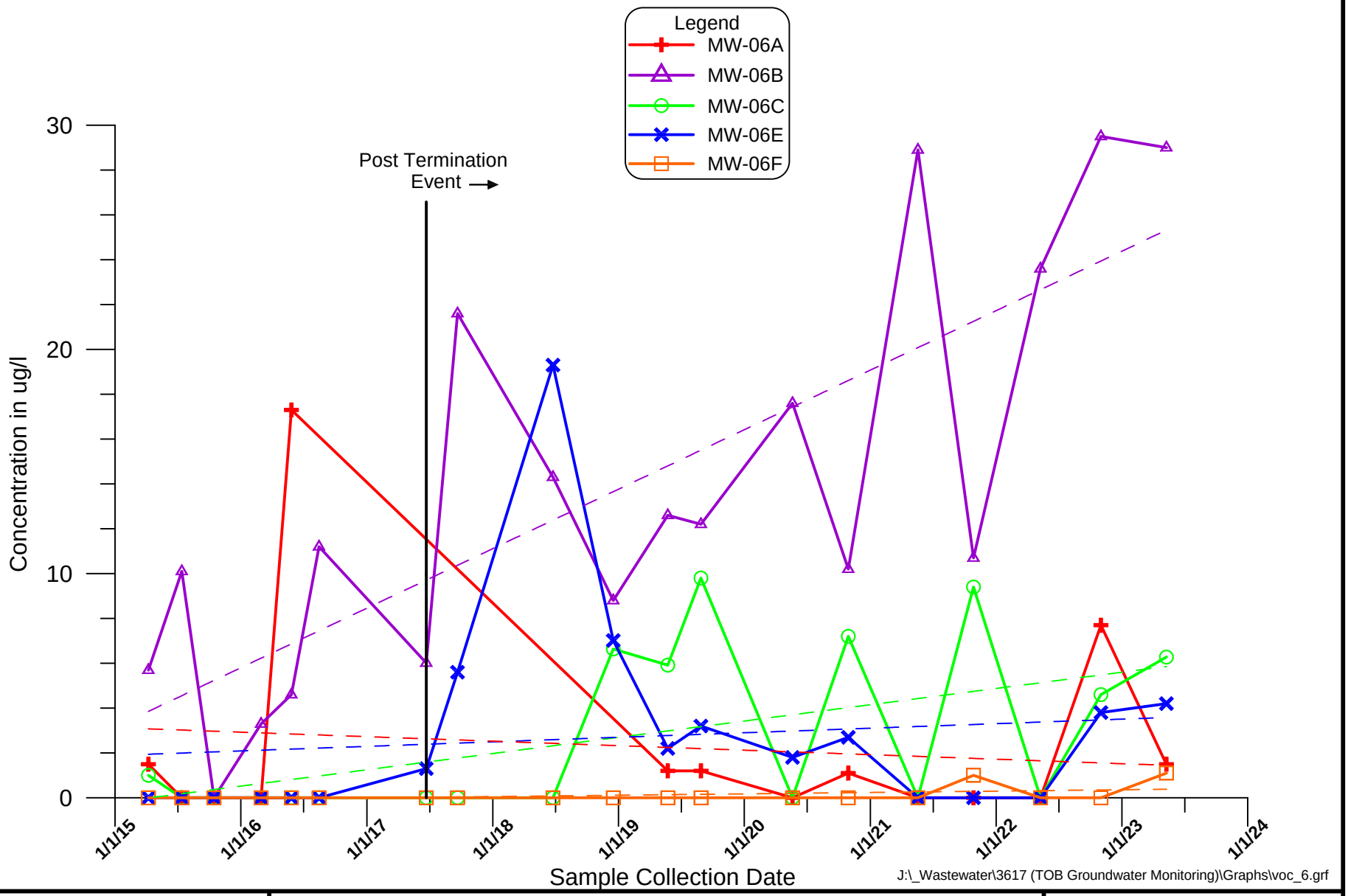
POST-TERMINATION HISTORICAL GROUNDWATER TREND GRAPHS



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Monitoring Wells 5, 8, & 9

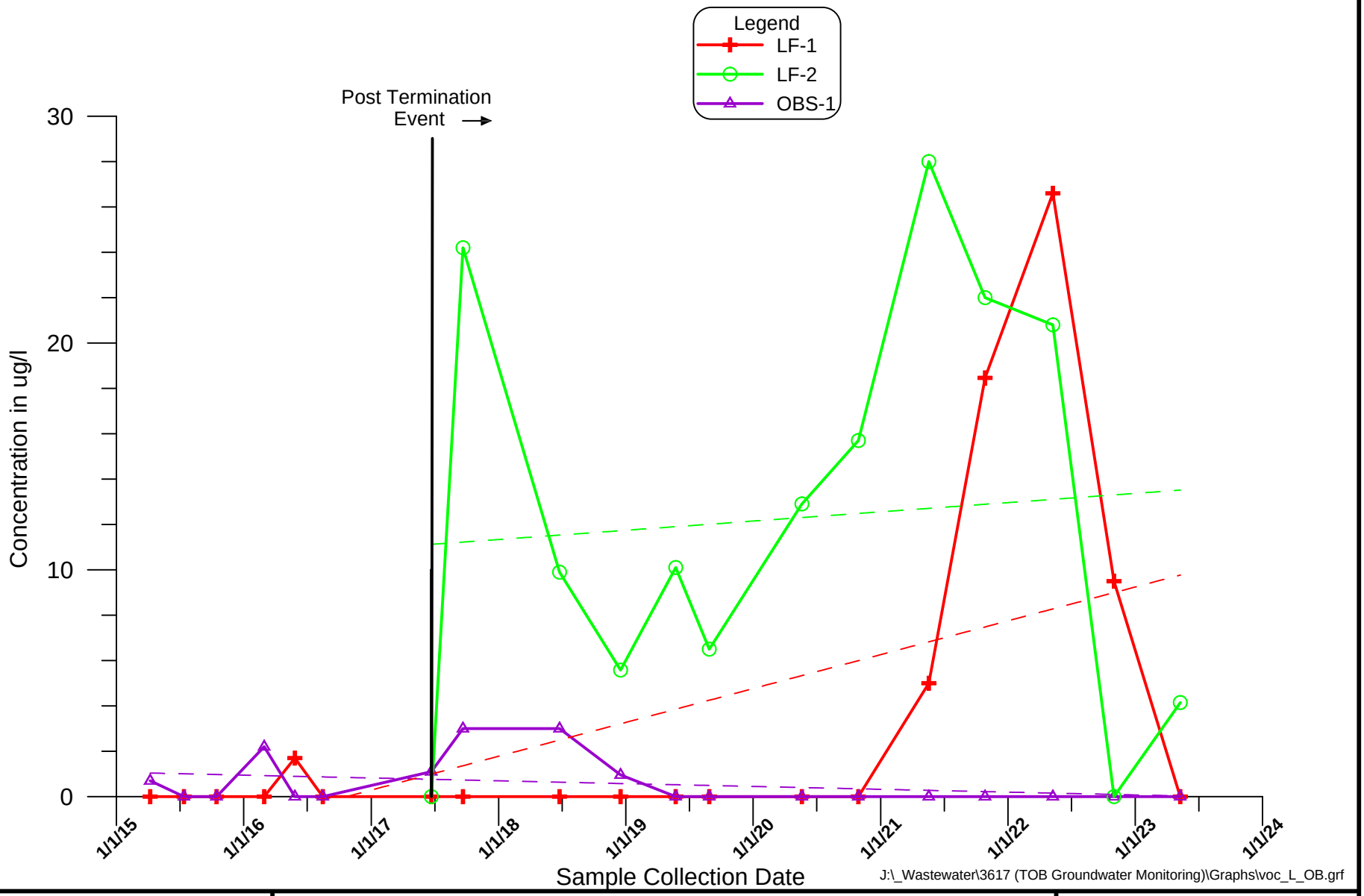
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Monitoring Well Cluster 6

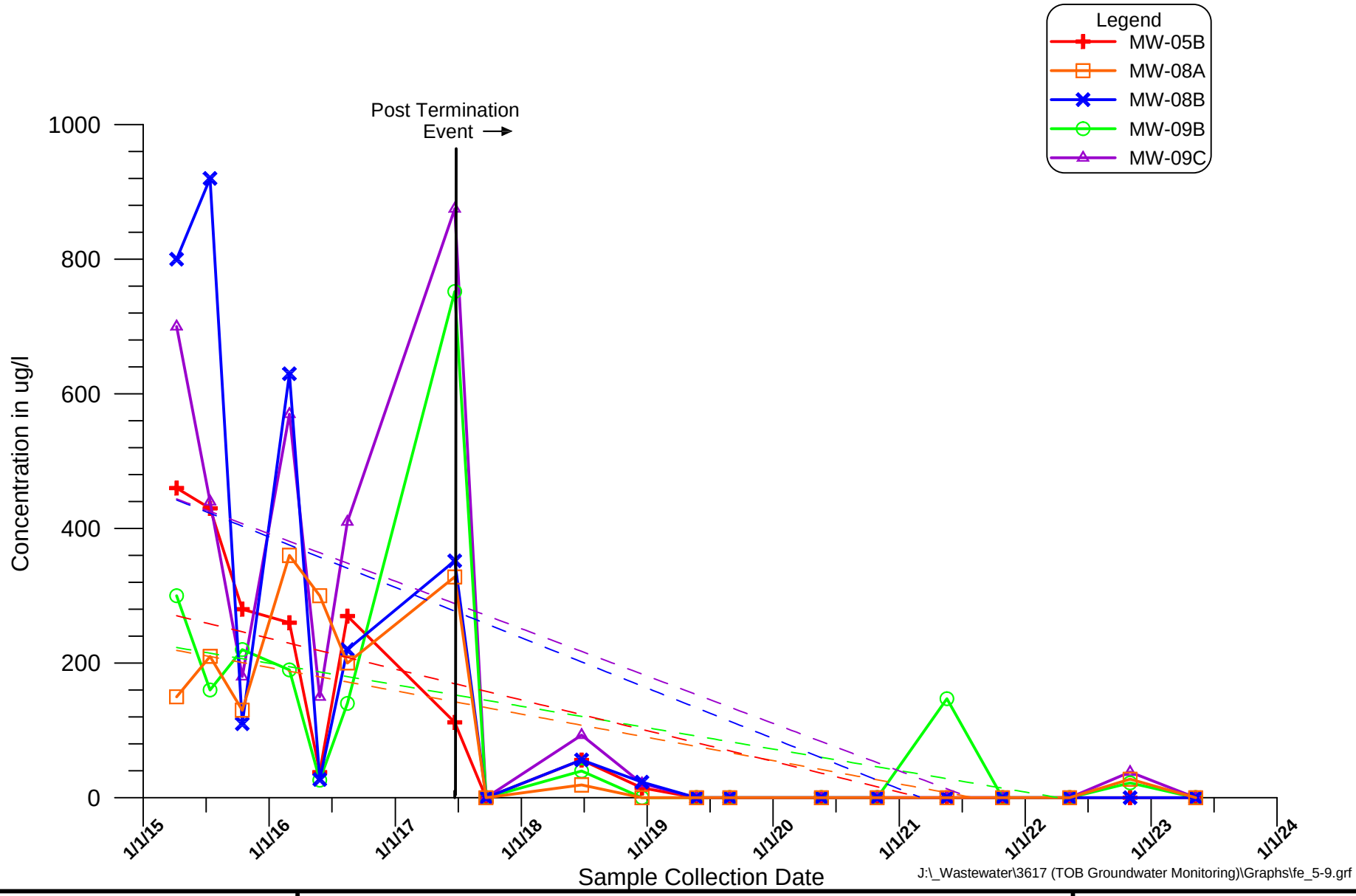
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Wells LF-1, LF-2 & OBS-1

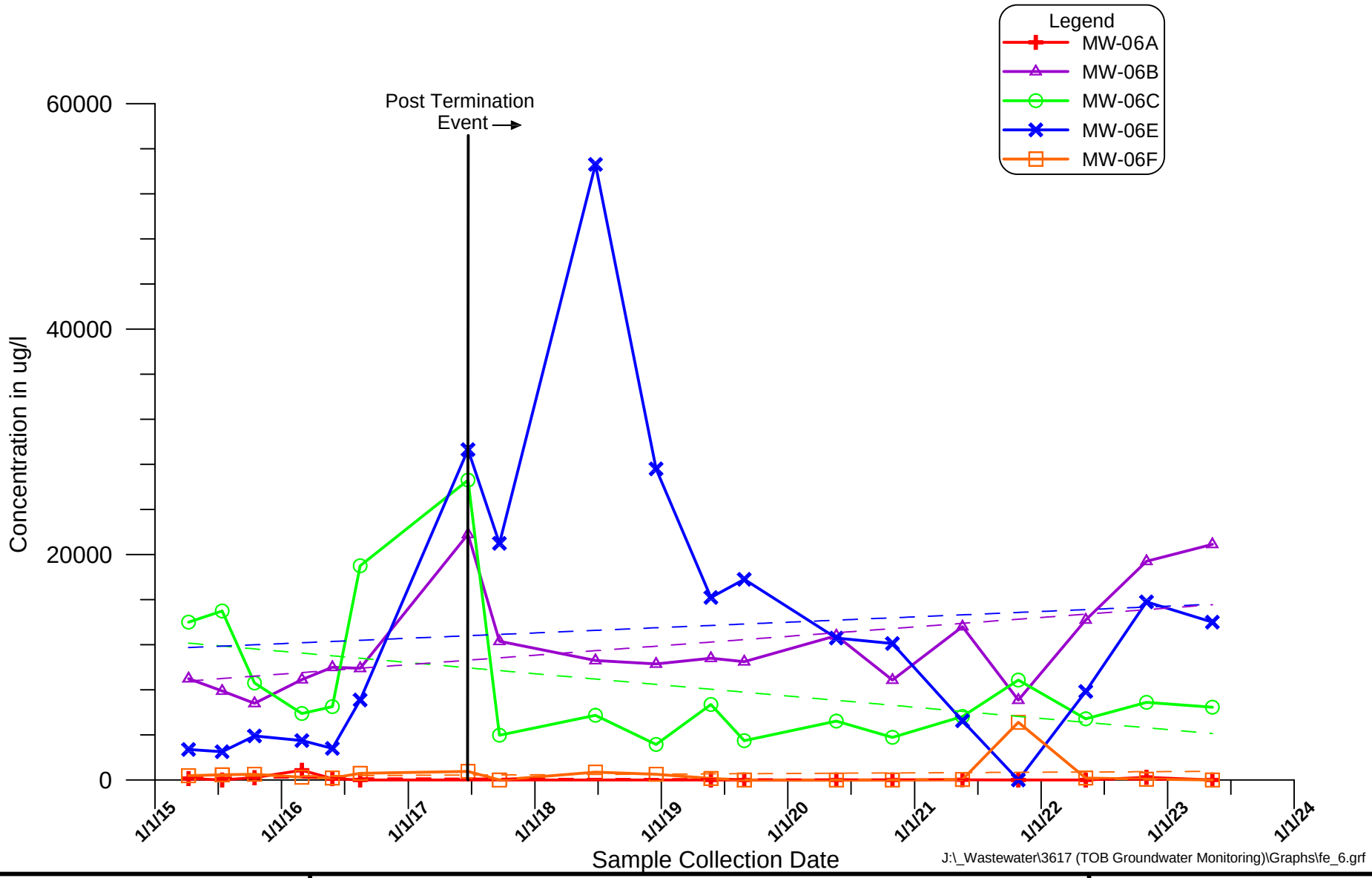
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Monitoring Wells 5, 8, & 9

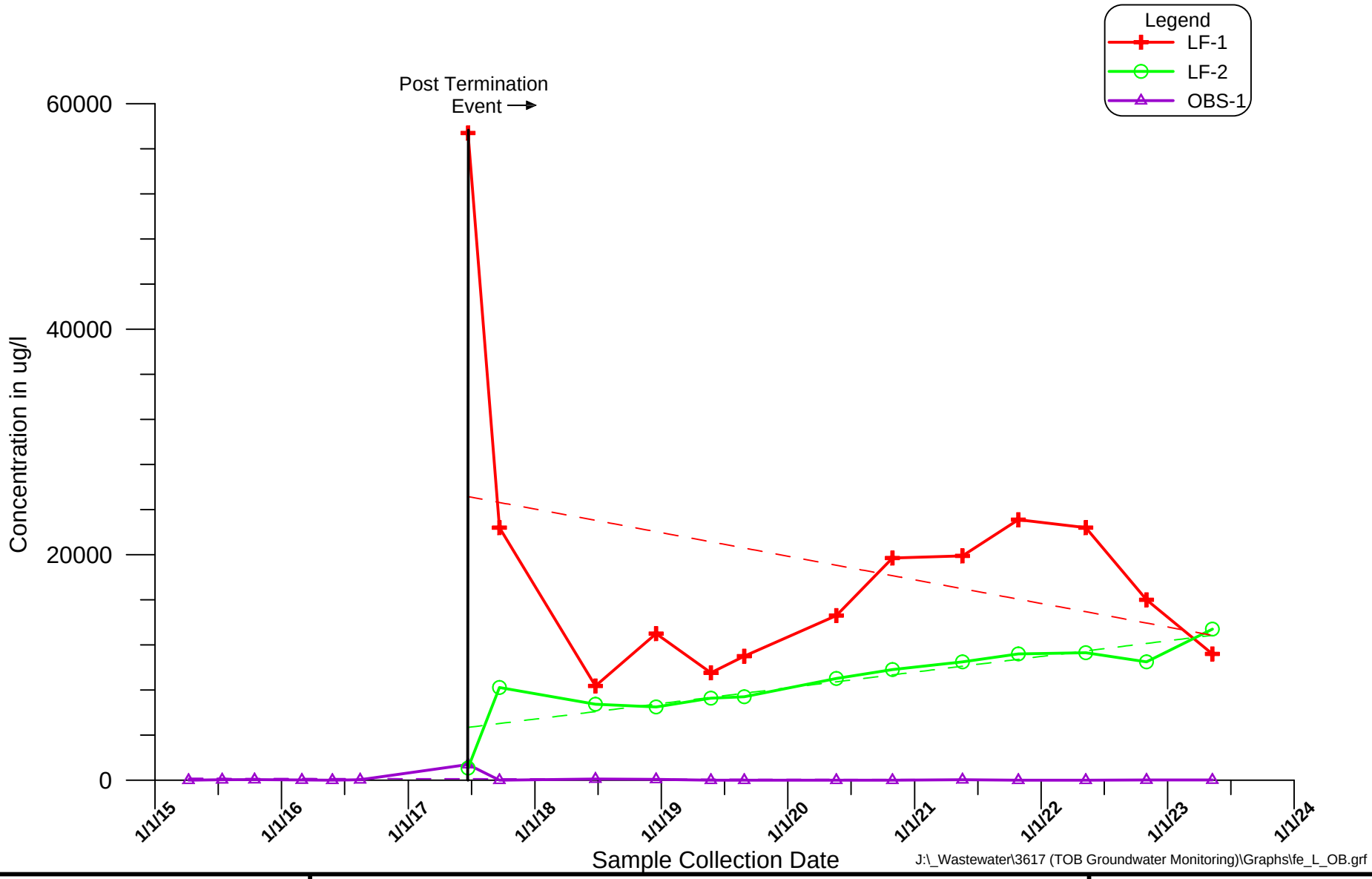
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Monitoring Well Cluster 6

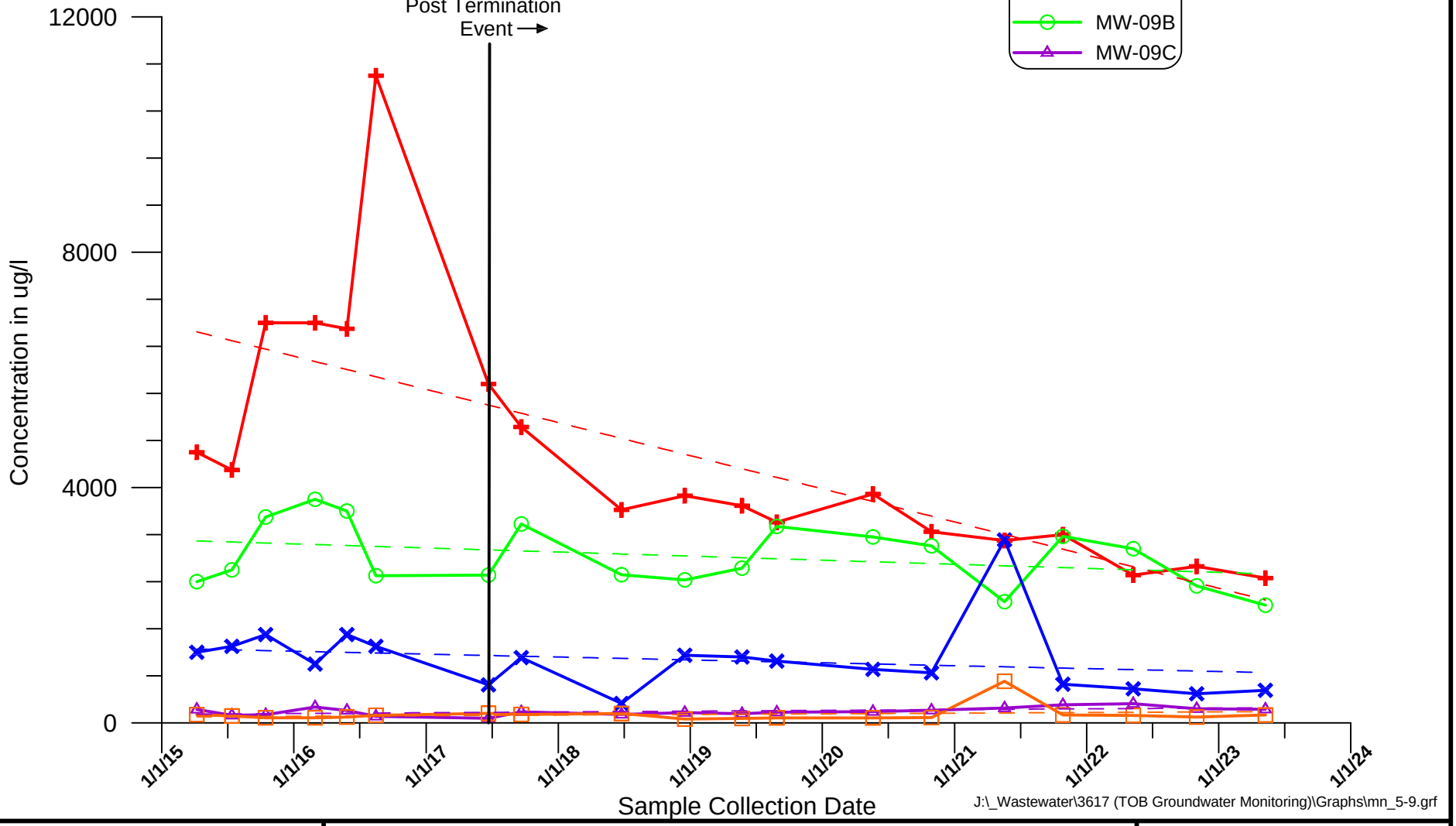
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Wells LF-1, LF-2 & OBS-1

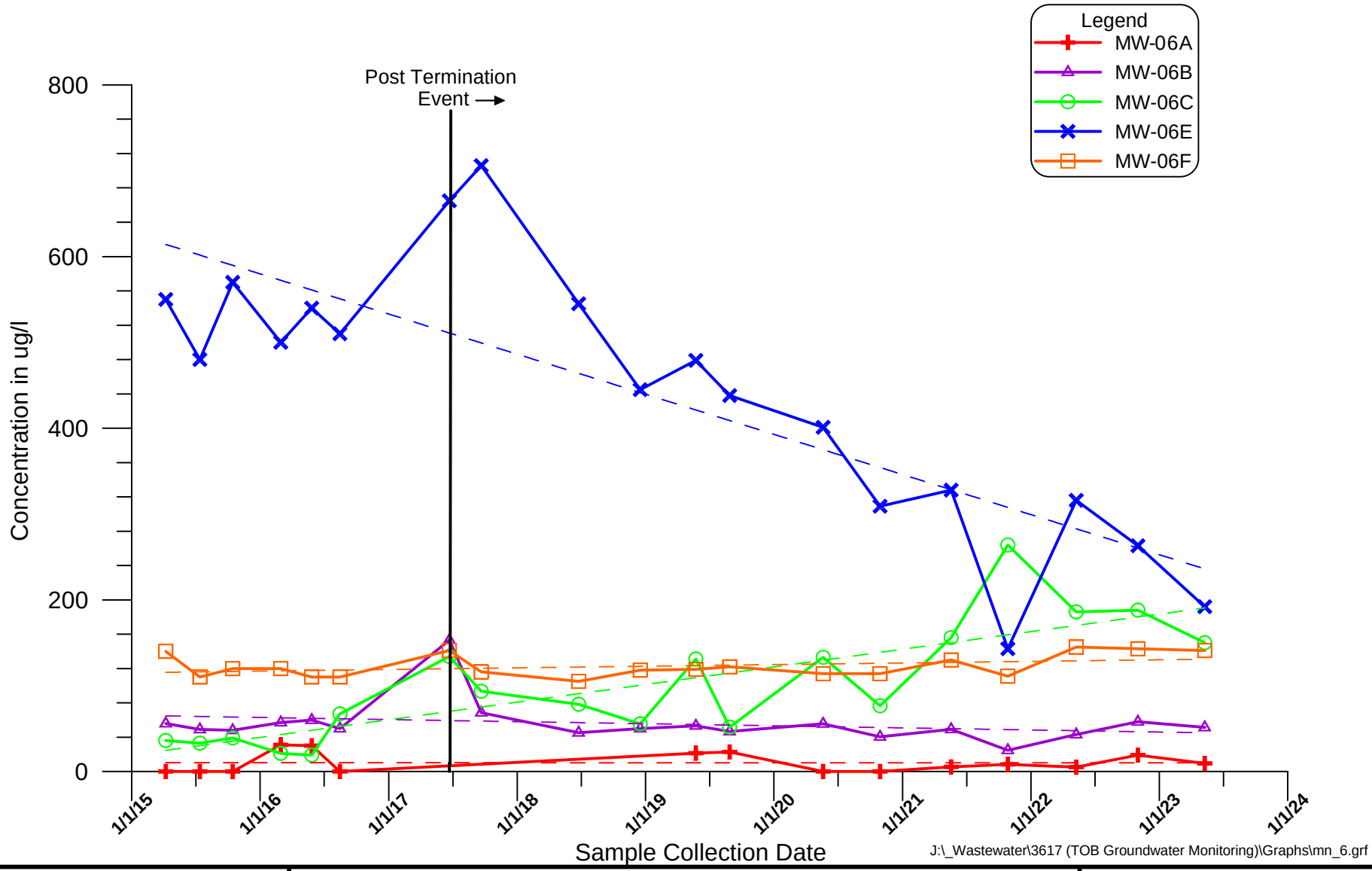
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Monitoring Wells 5, 8, & 9

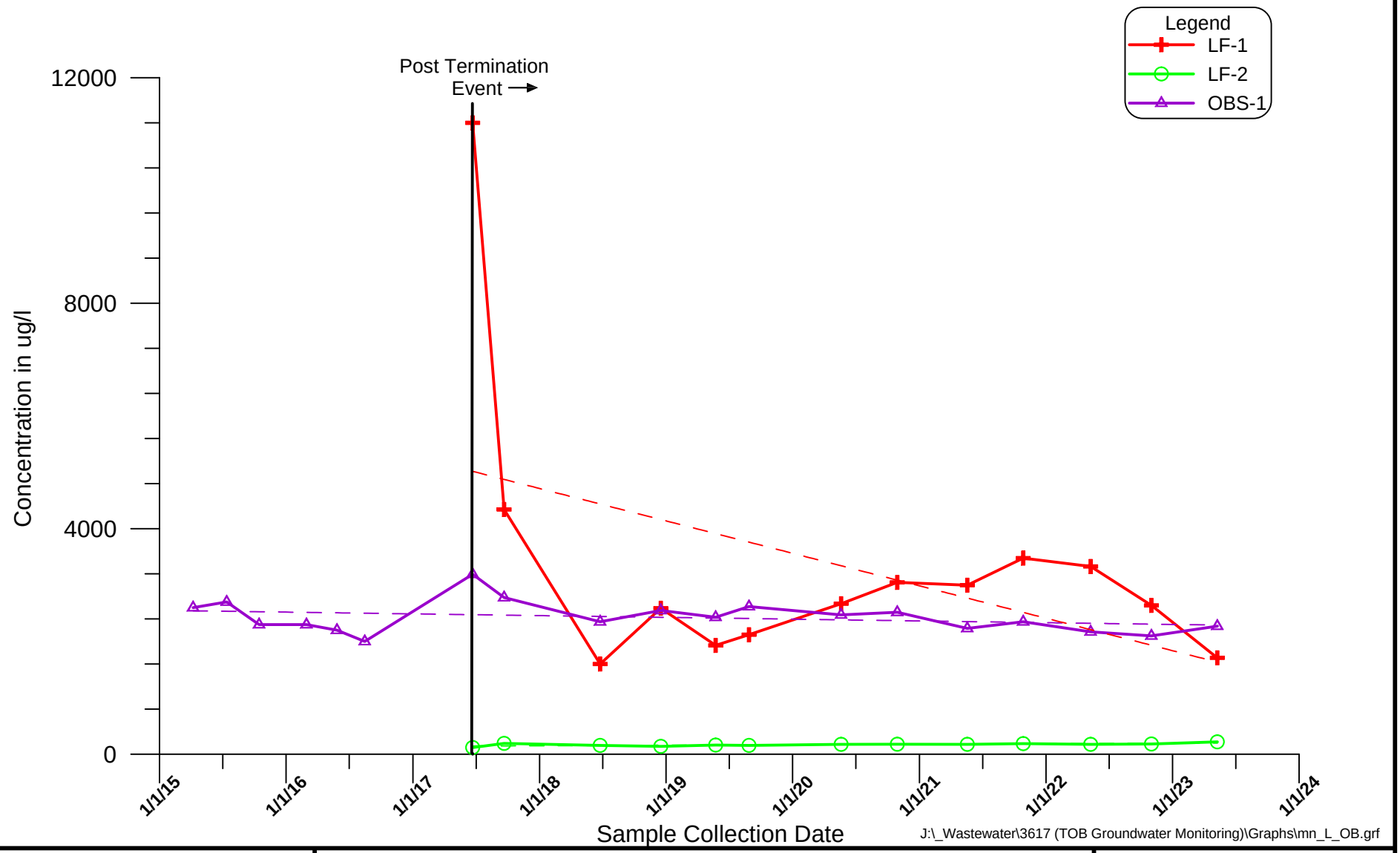
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Monitoring Well Cluster 6

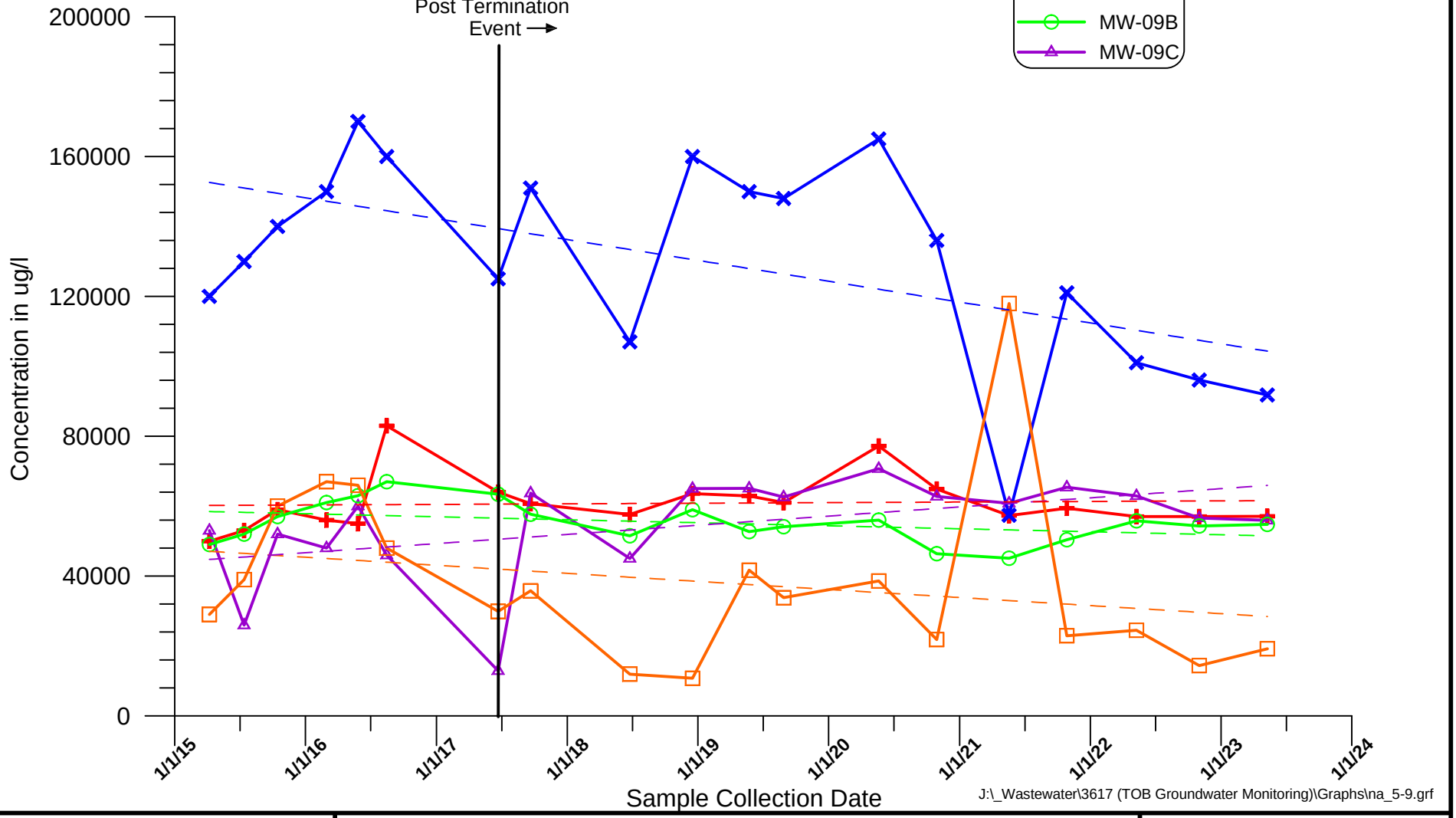
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Wells LF-1, LF-2 & OBS-1

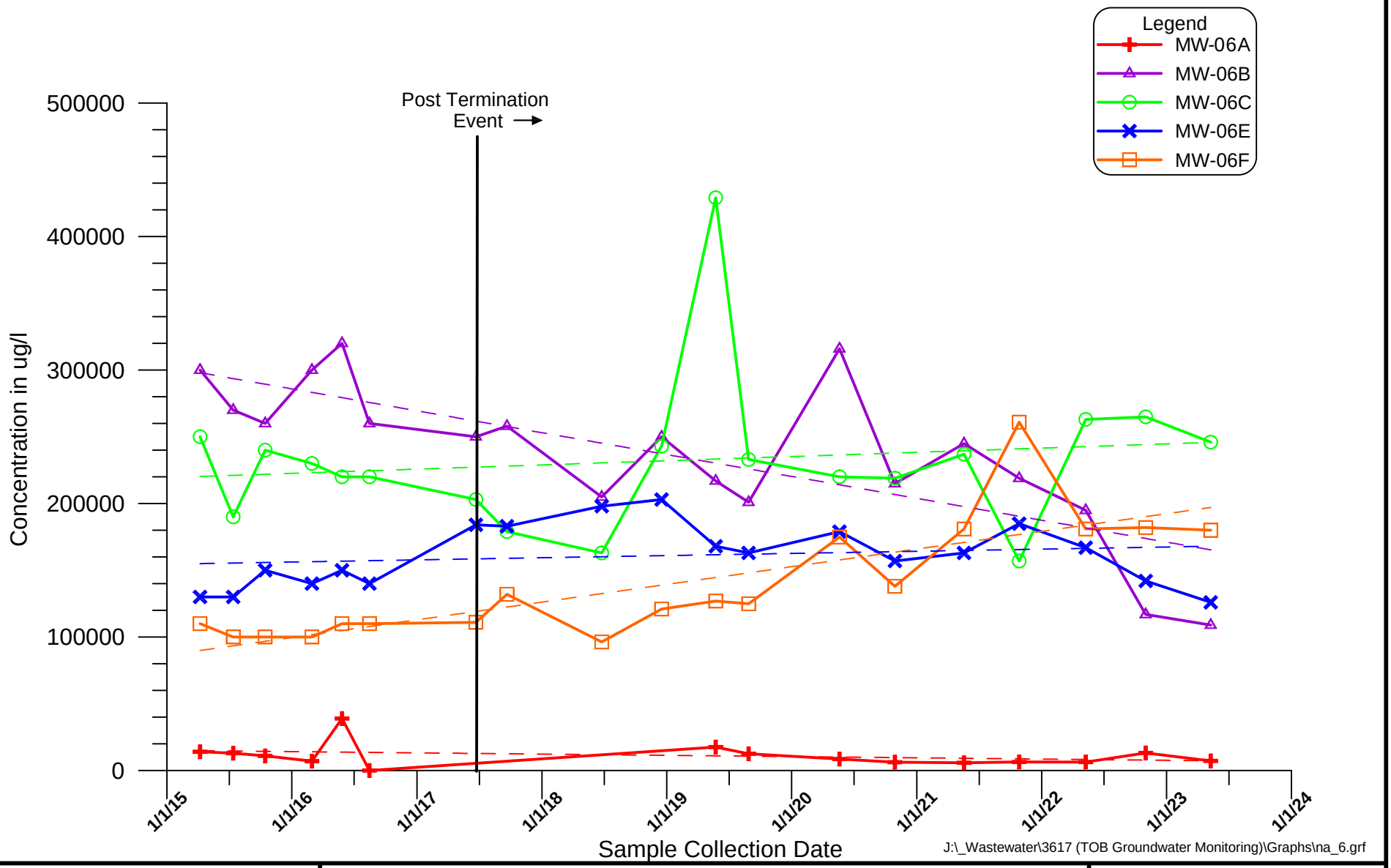
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Monitoring Wells 5, 8, & 9

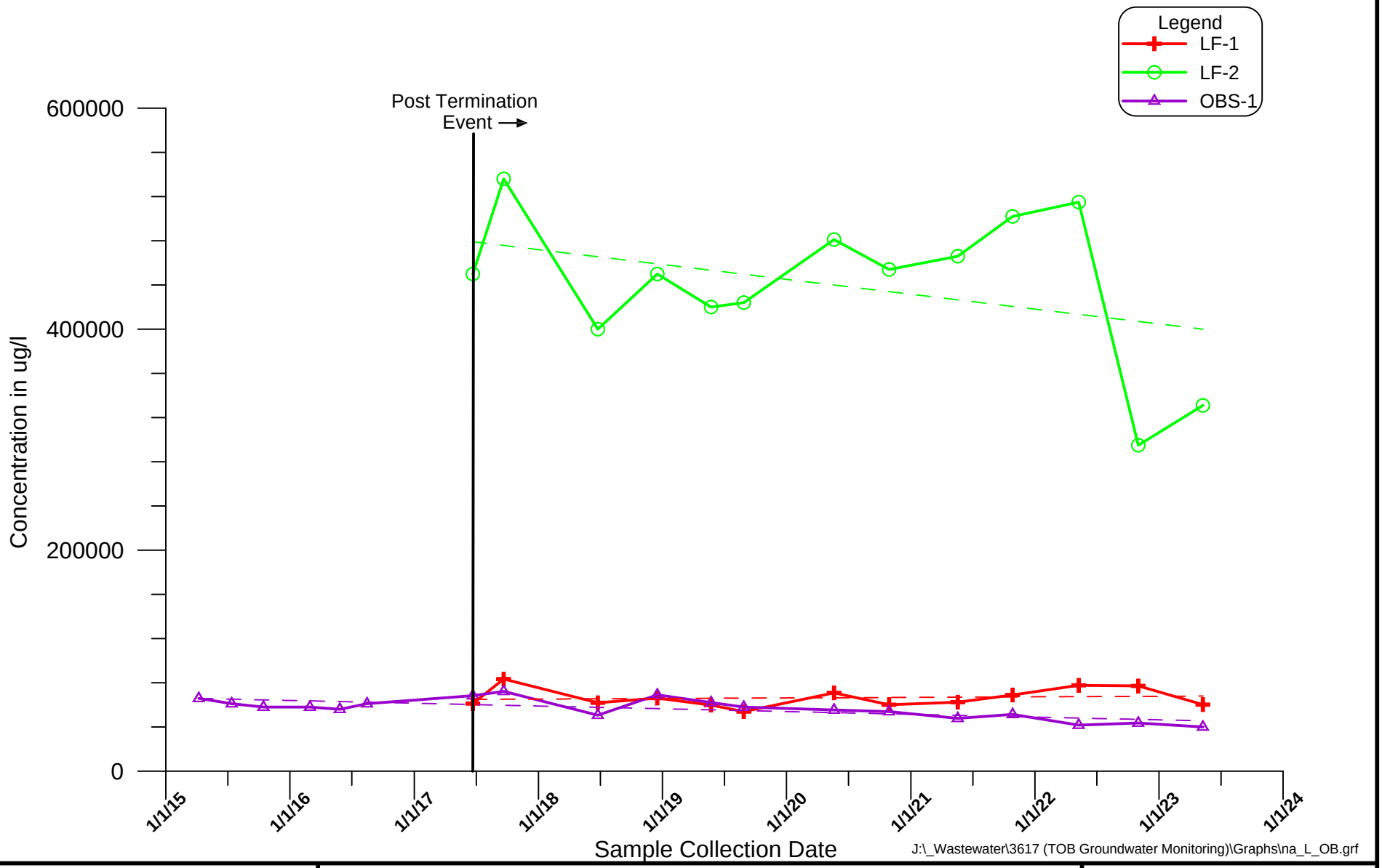
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Monitoring Well Cluster 6

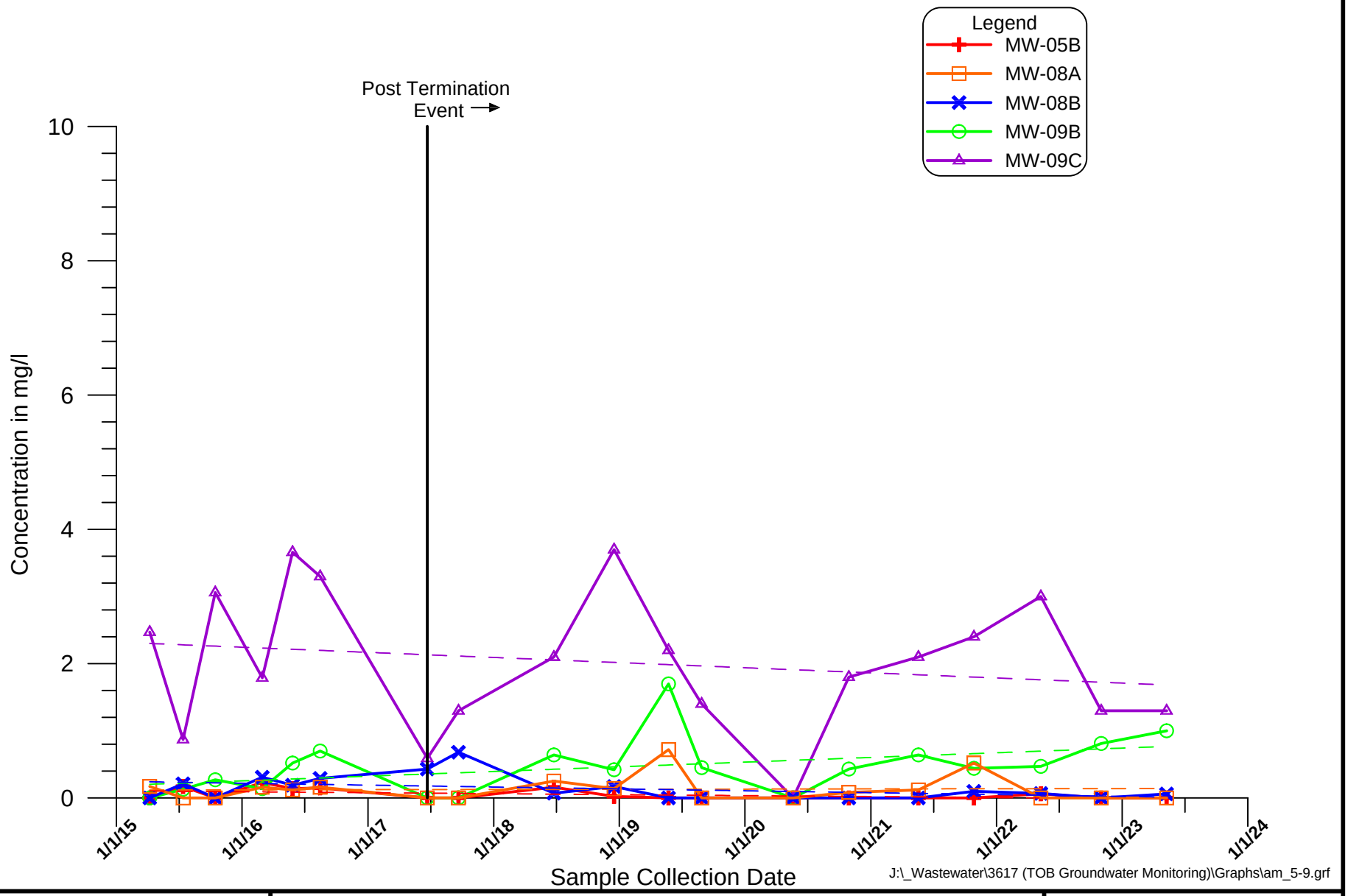
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Wells LF-1, LF-2 & OBS-1

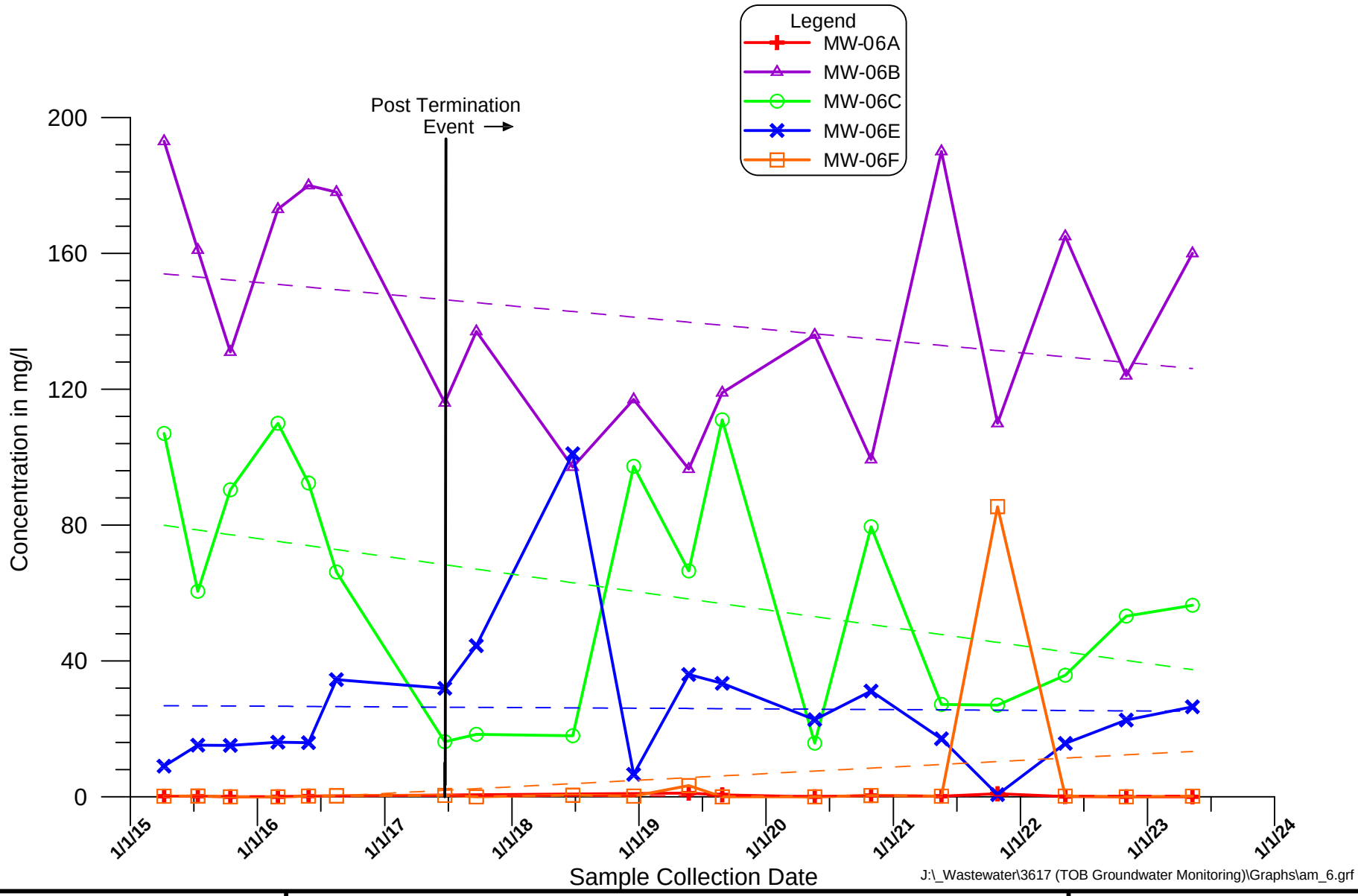
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Monitoring Wells 5, 8, & 9

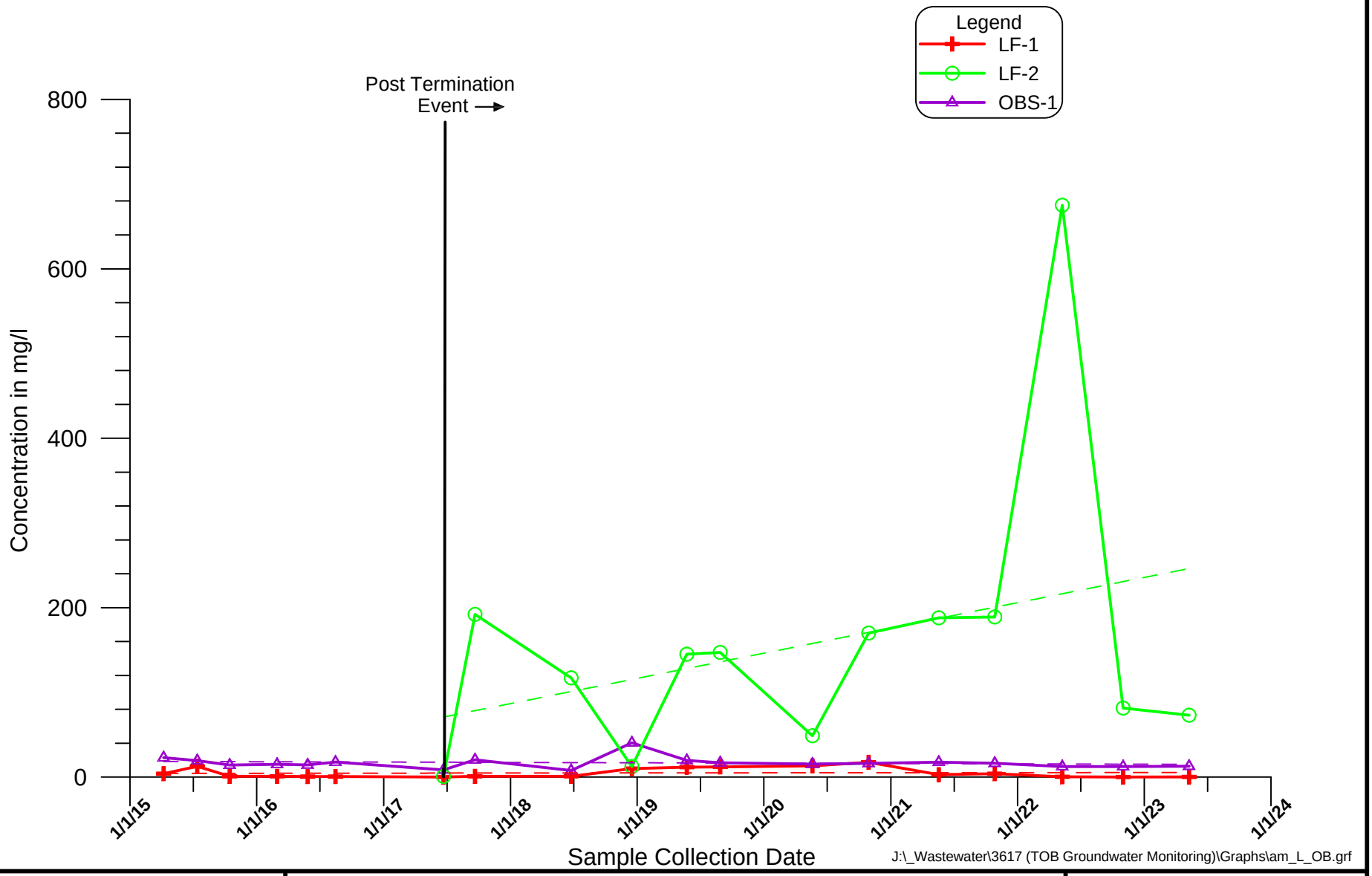
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Monitoring Well Cluster 6

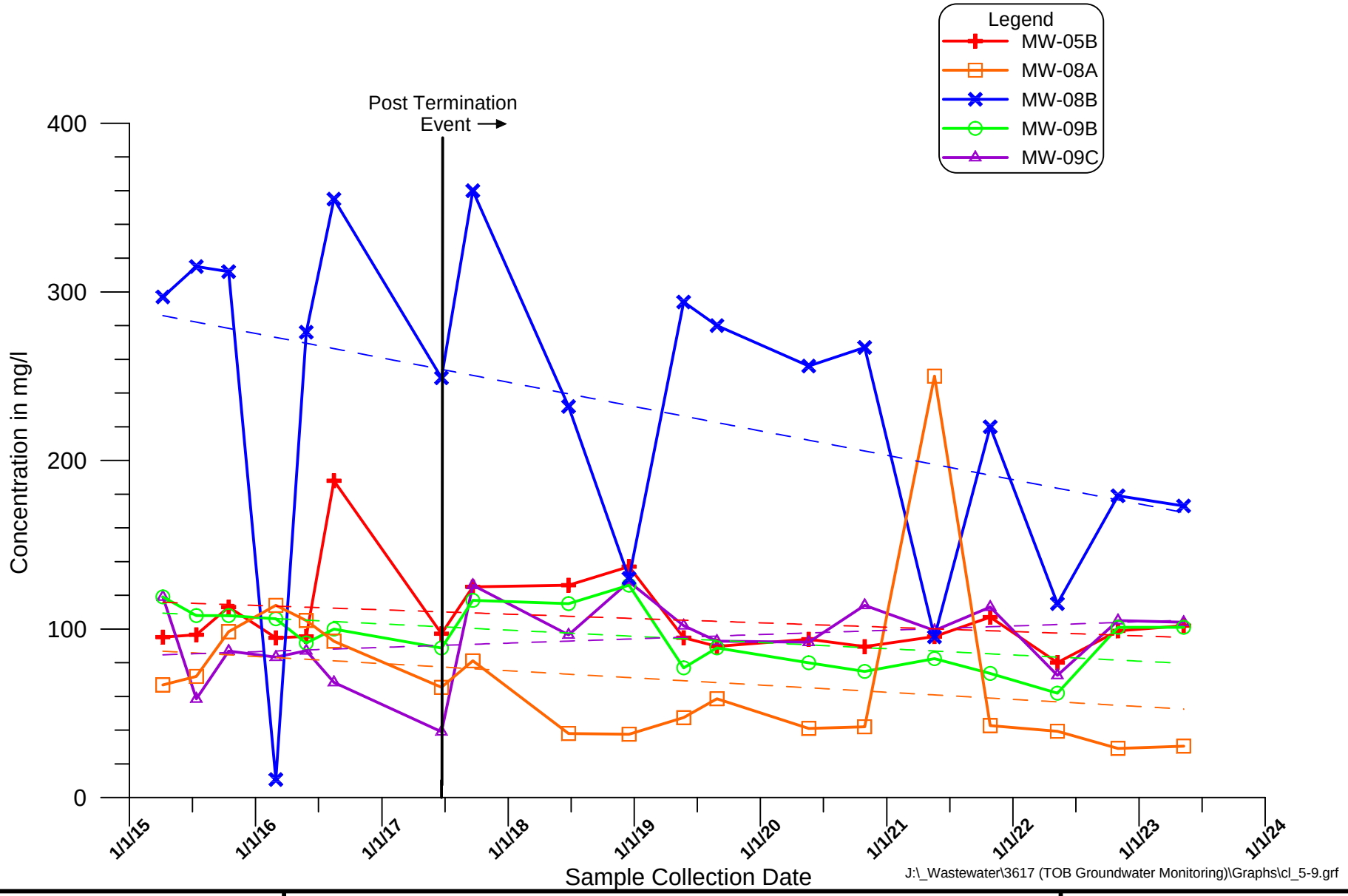
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Wells LF-1, LF-2 & OBS-1

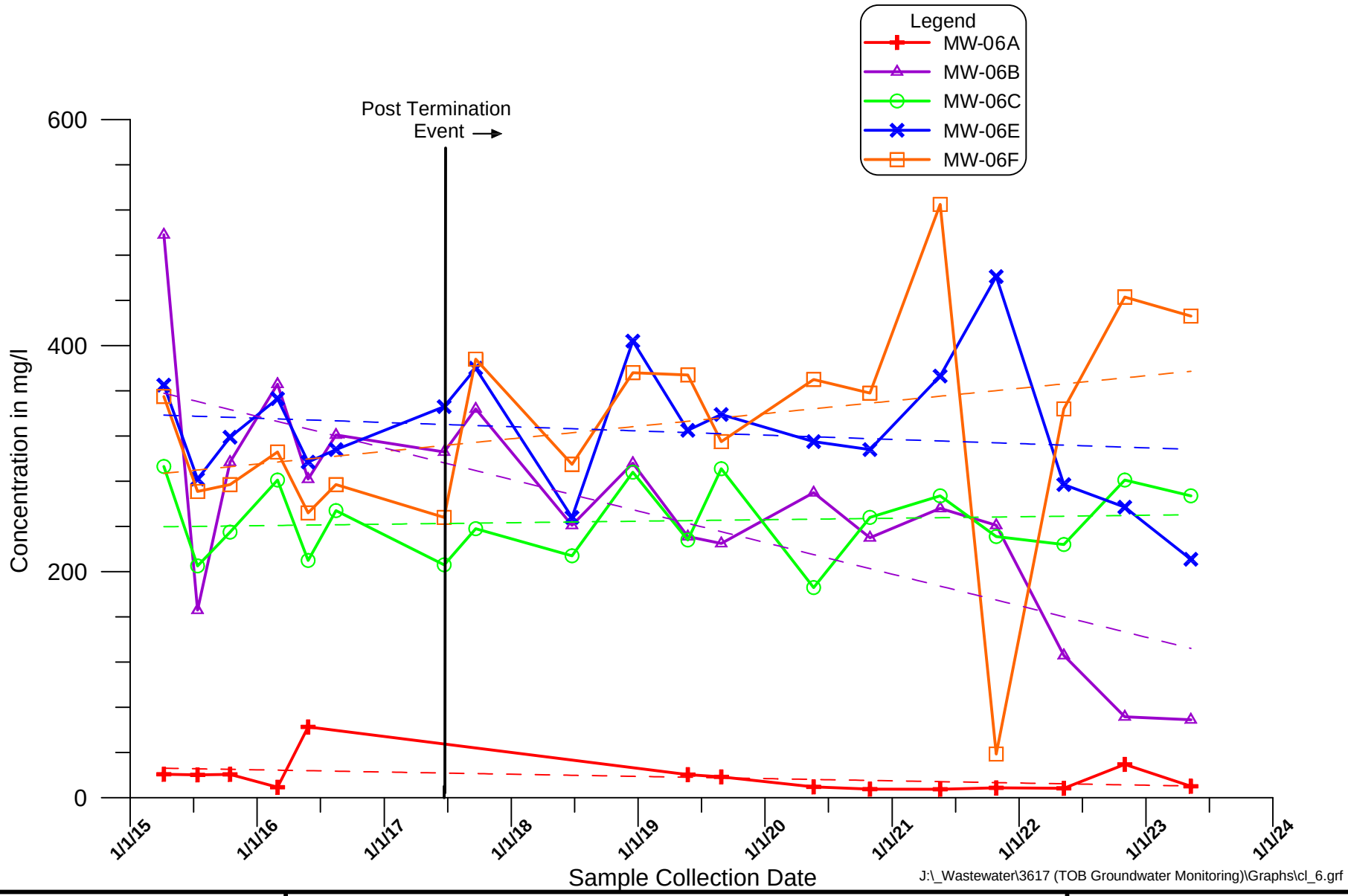
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Monitoring Wells 5, 8, & 9

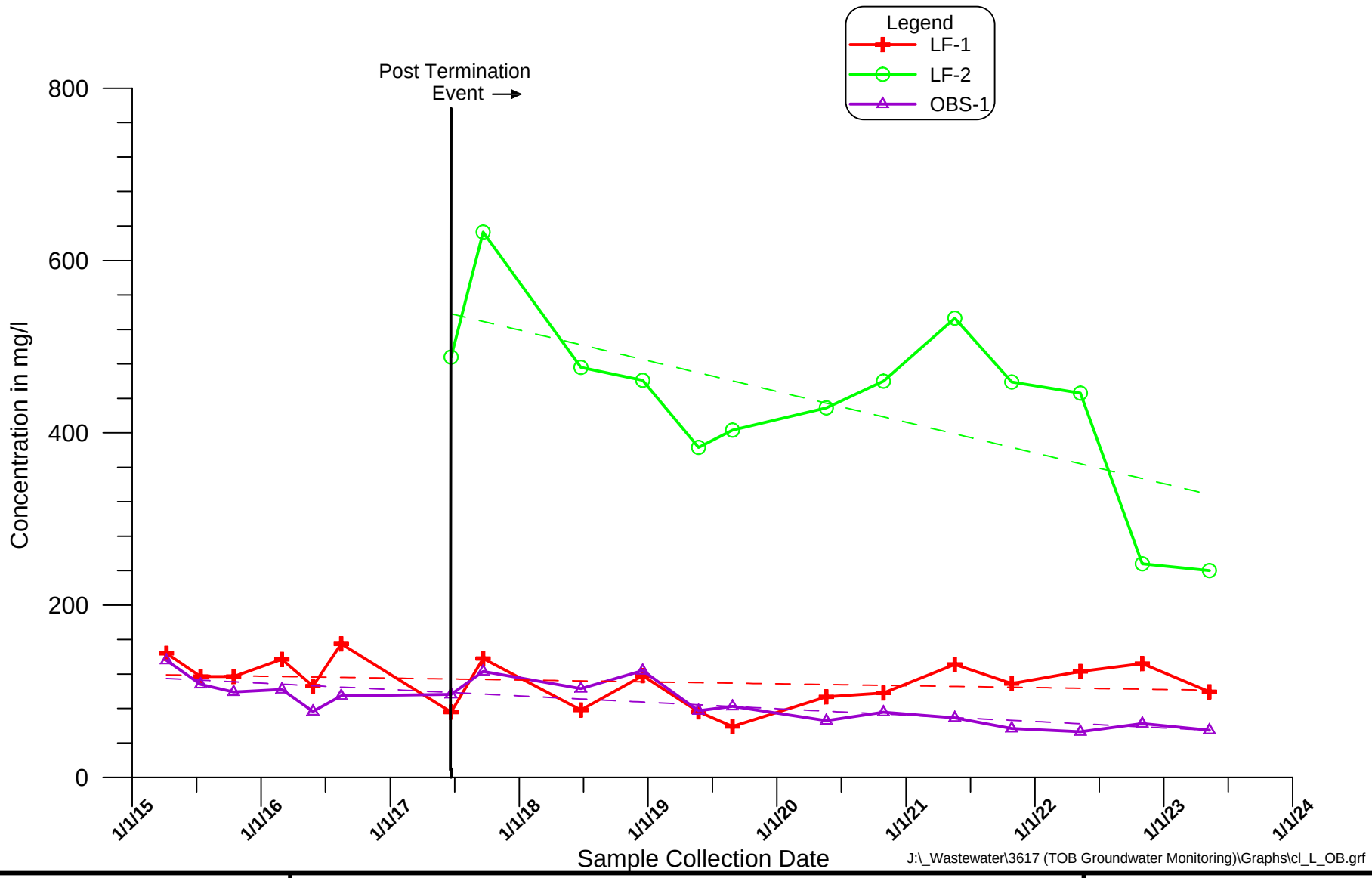
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Monitoring Well Cluster 6

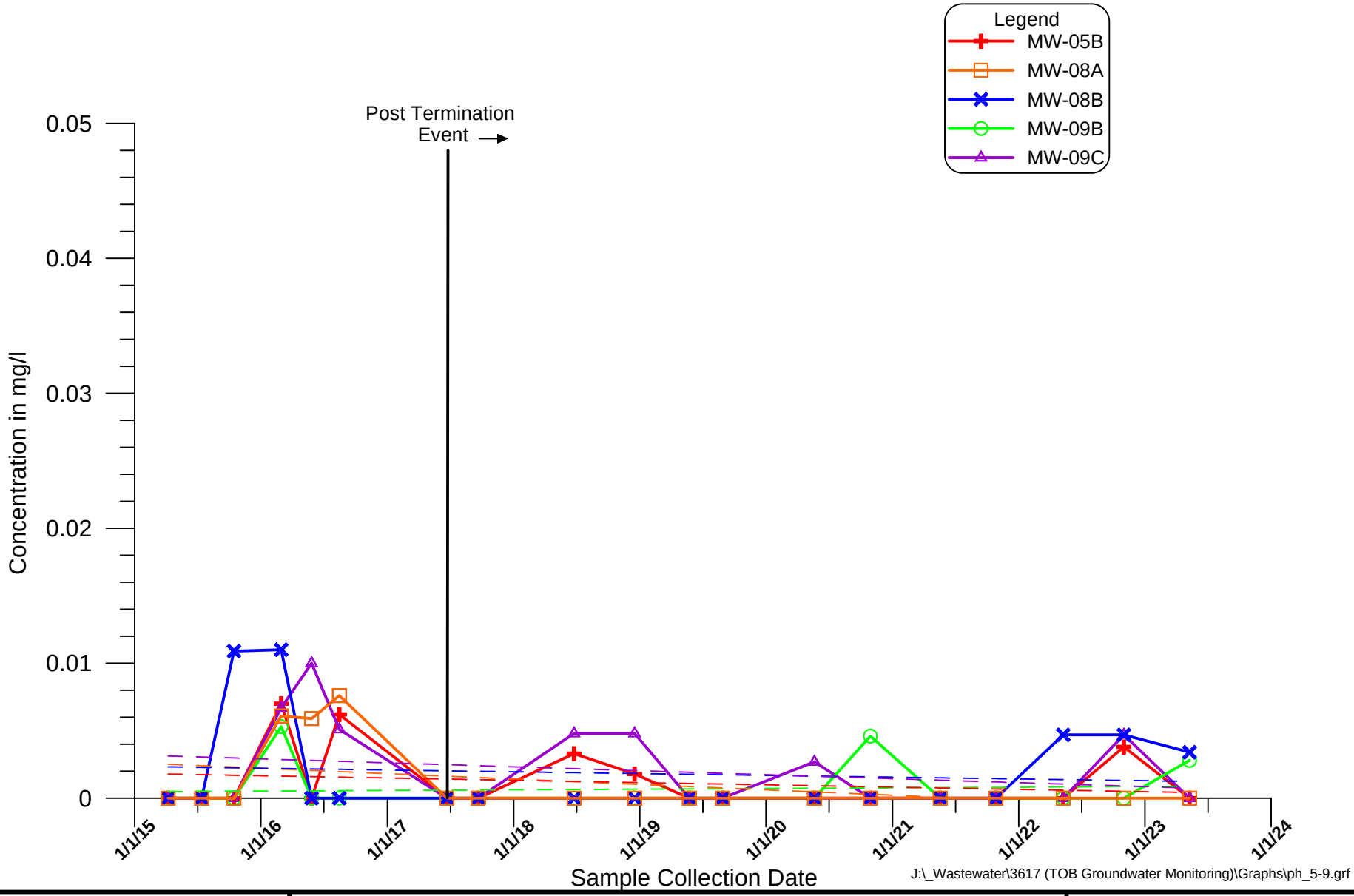
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Wells LF-1, LF-2 & OBS-1

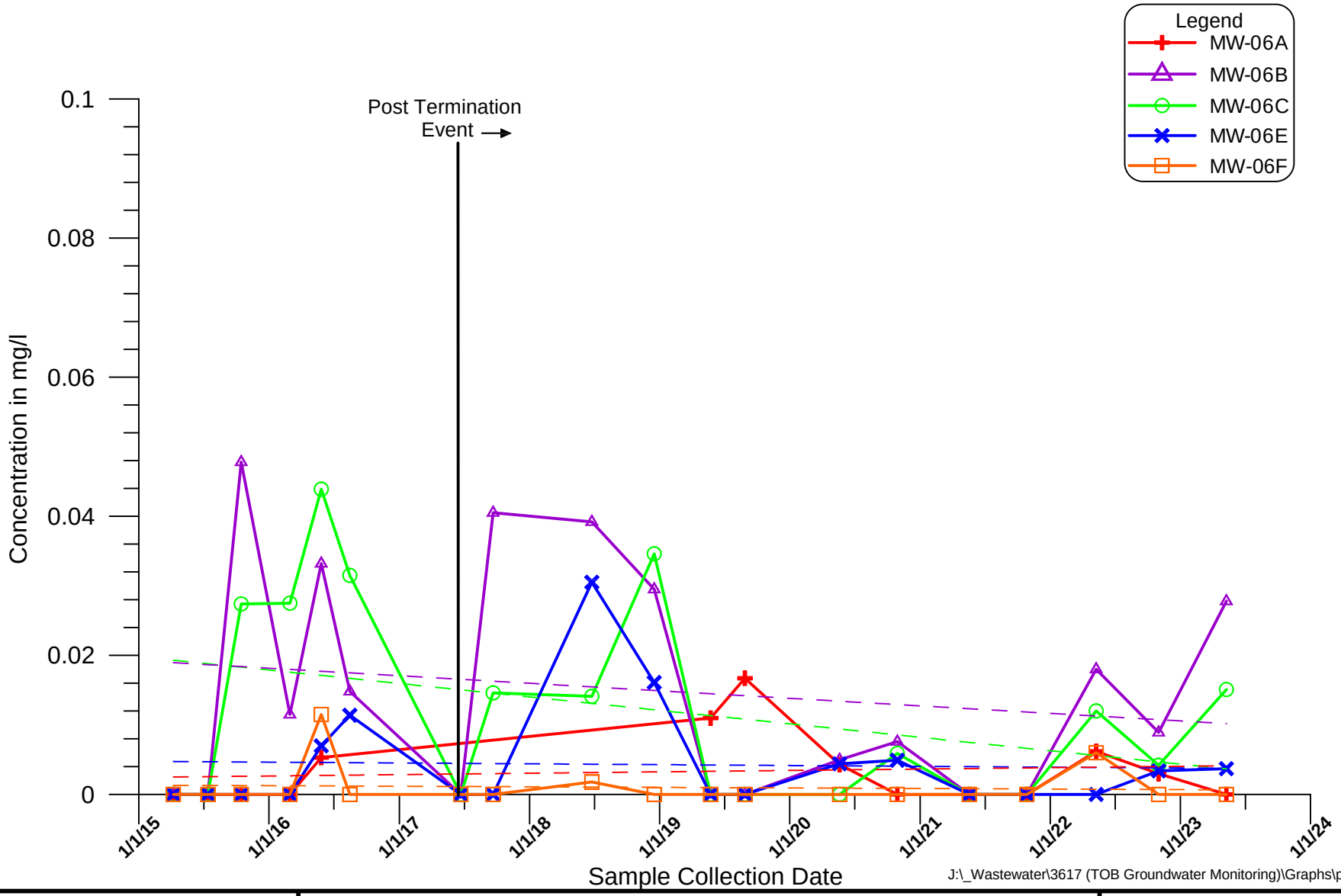
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolics
Data for Monitoring Wells 5, 8, & 9

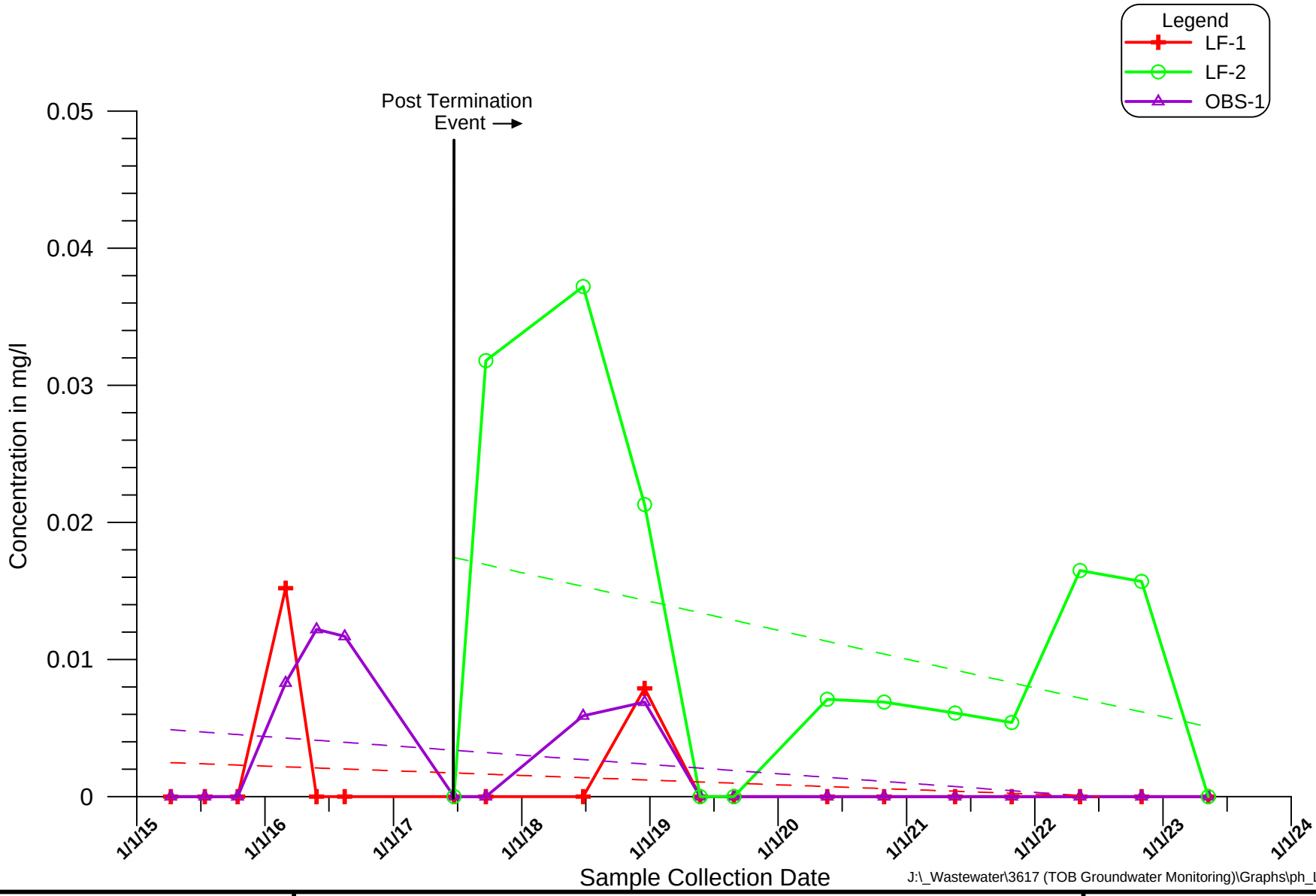
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolics
Data for Monitoring Well Cluster 6

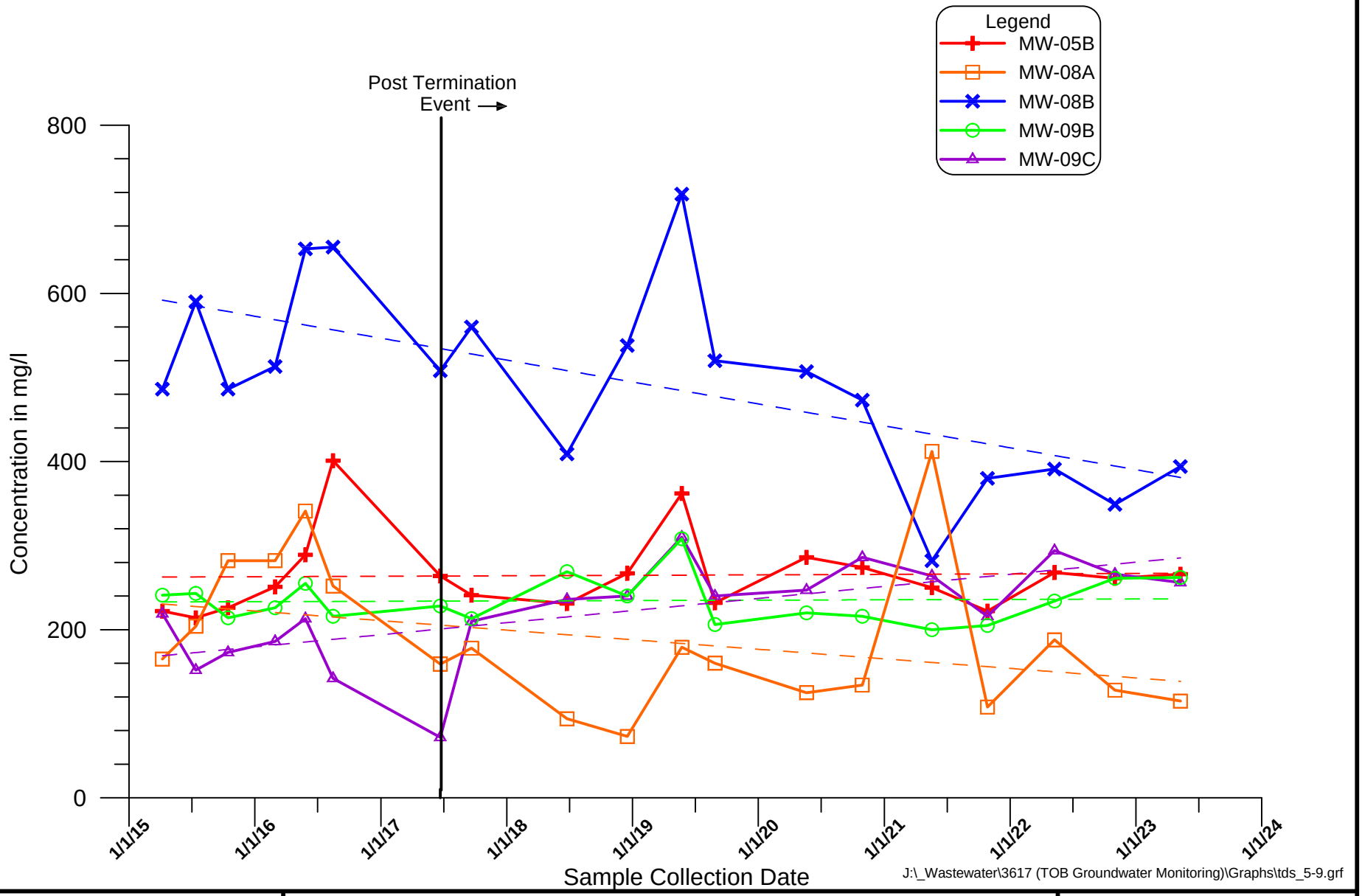
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolics
Data for Wells LF-1, LF-2 & OBS-1

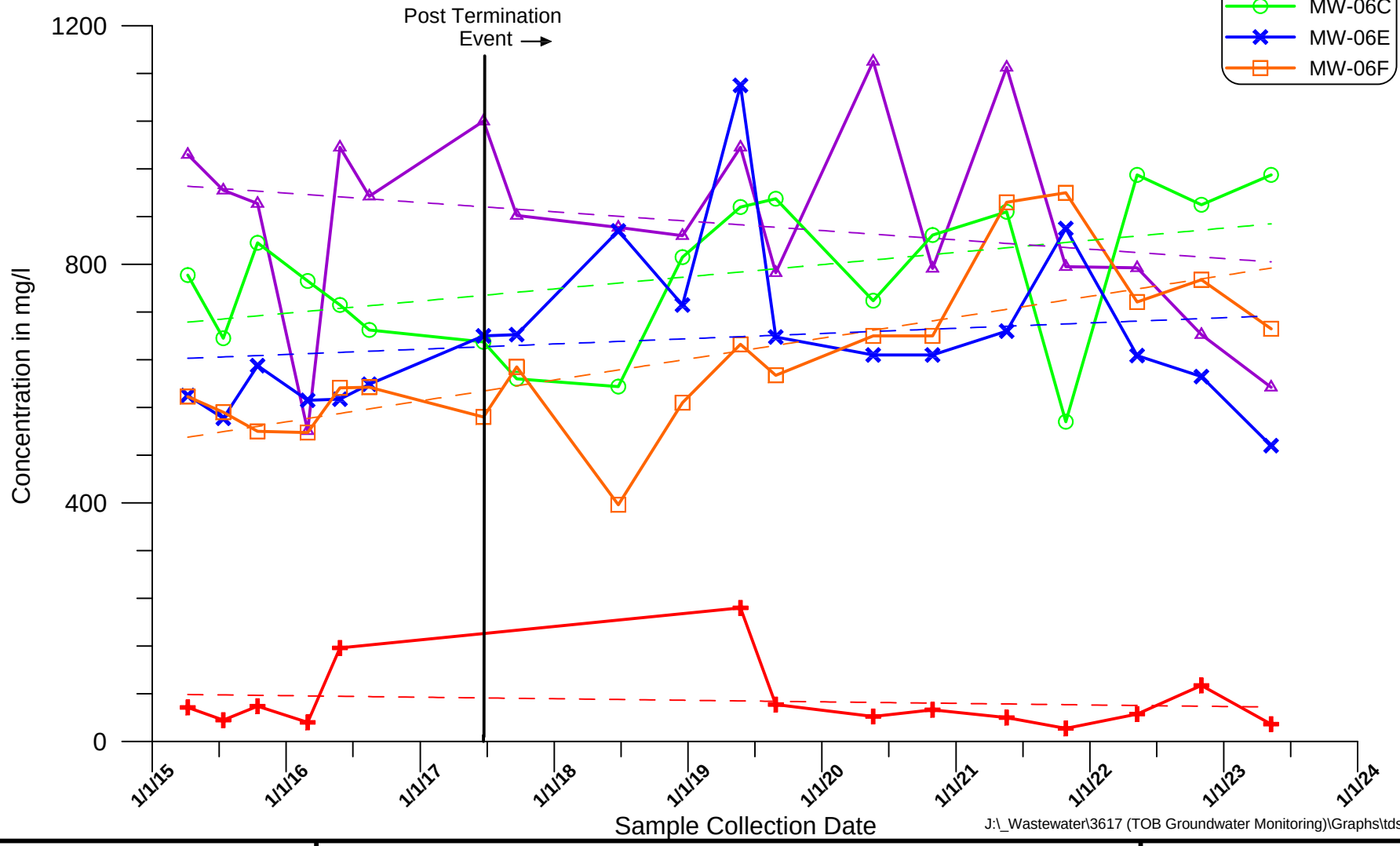
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Dissolved Solids
Data for Monitoring Wells 5, 8, & 9

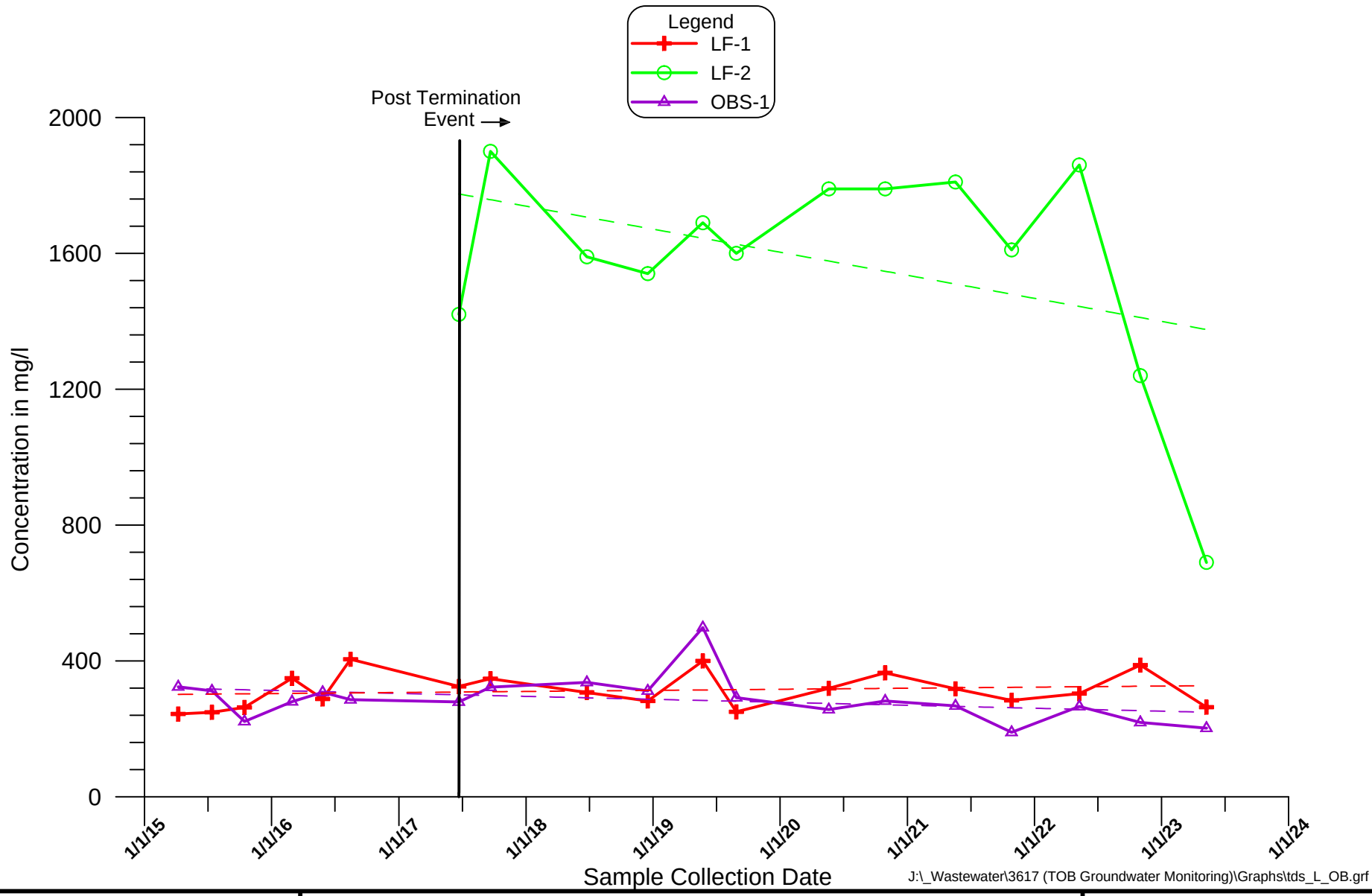
Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Dissolved Solids
Data for Monitoring Well Cluster 6

Figure
E



D&B ENGINEERS AND ARCHITECTS

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Dissolved Solids
Data for Wells LF-1, LF-2 & OBS-1

Figure
E

APPENDIX F

PREVIOUSLY COLLECTED POST-TERMINATION GROUNDWATER MONITORING DATA

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 06/22/2017	LF-2 06/20/2017	MW-5B 06/20/2017	MW-6B 06/21/2017	MW-6C 06/21/2017	MW-6E 06/21/2017	MW-6F 06/21/2017	MW-8A 06/22/2017	MW-8B 06/22/2017	MW-9B 06/20/2017	MW-9C 06/20/2017	OBS-1 06/20/2017
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value												
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	0.71 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1.9 J	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1.1
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.8	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U	1 U	1.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***5.6***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total Volatile Compounds	--	ND	ND	ND	6.01	ND	1.3	ND	11.1	ND	ND	ND	1.1

Footnotes/Qualifiers:

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
Exceeds NYSDEC Class GA Standard or Guidance Value
Note that well MW-06A was dry and could not be sampled

D&B Engineers and Architects, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	LF-1 06/22/2017 Total	LF-1 06/22/2017 Dissolved	LF-2 06/20/2017 Total	LF-2 06/20/2017 Dissolved	MW-5B 06/20/2017 Total	MW-5B 06/20/2017 Dissolved	MW-6B 06/21/2017 Total	MW-6B 06/21/2017 Dissolved	MW-6C 06/21/2017 Total	MW-6C 06/21/2017 Dissolved	MW-6E 06/21/2017 Total	MW-6E 06/21/2017 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	112 J	200 U	195 J	48.8 J	200 U	200 U	437	200 U	41.7 J	200 U	39.4 J	200 U
Barium	1000	368	8.9 J	56.9 J	42.9 J	55.3 J	31.6 J	59 J	37.6 J	43.7 J	21.9 J	196 J	151 J
Calcium	--	28900 J	24200	28800	21400	14600	12300	17300	13800	42400	34800	33800	27700
Chromium	50	10 U	10 U	7.6 J	2.9 J	4.7 J	10 U	4.9 UB	10 U	10 U	10 U	10 U	10 U
Copper	200	41.4 J	2.8 J	90.1	71.7	25 U	25 U	23.7 J	11.5 J	4.8 J	25 U	4.9 J	25 U
Iron	300	***57400***	100 U	***1080***	23 J	112	100 U	***21800***	53.1 J	***26600***	100 U	***29300***	***610***
Lead	25	5 U	5 U	***370***	***32***	4 UB	5 U	24.1	1.3 J	3.8 UB	5 U	2.9 UB	5 U
Magnesium	35000	17600	15000	11400	10000	6870	5900	13300	11100	10300	8670	15400	12900
Manganese	300	***11200***	11.3 UB	120 J	40.7	***5760 J***	***5220***	153 J	48	134 J	77.2	***665 J***	***513***
Mercury	0.7	0.087 UB	0.067 UB	0.1 UB	0.2 U	0.097 UB	0.10 UB	0.038 UB	0.067 UB	0.047 UB	0.066 UB	0.18 UB	0.066 UB
Nickel	100	8.2 J	2.1 J	12.7 J	9.7 J	4.3 J	3.1 J	17.6 J	13.2 J	7.6 UB	6.3 J	15.3 J	10 J
Potassium	--	9820	7540	148000	122000	12600	10200	88800	74200	26100	22400	33800	29000
Sodium	20000	***61100***	***54500***	***450000***	***404000***	***64000***	***54900***	***250000***	***214000***	***203000***	***176000***	***184000***	***157000***
Zinc	2000	509	7.9 UB	147	53.9	7 UB	5.7 UB	43.1	17.1 J	29.1	11 J	50.1	11.1 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID	MW-6F	MW-6F	MW-8A	MW-8A	MW-8B	MW-8B	MW-9B	MW-9B	MW-9C	MW-9C	OBS-1	OBS-1
	Sample Date	06/21/2017	06/21/2017	06/22/2017	06/22/2017	06/22/2017	06/22/2017	06/20/2017	06/20/2017	06/20/2017	06/20/2017	06/20/2017	06/20/2017
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	90.3 J	38.4 J	91 J	14 J	100 J	200 U	51 J	200 U	19.2 J	200 U	29.5 J	200 U
Barium	1000	201	172 J	69.5 J	62.2 J	109 J	92 J	94.4 J	88.2 J	36.2 J	30.9 J	91.1 J	73 J
Calcium	--	33700	27700	5940 J	5180	30200 J	27600	16500	13900	3760	3650	16900	16800
Chromium	50	3.3 UB	10 U	4.4 J	10 U	10.4	10 U	3.5 J	10 U	3.6 J	10 U	1.7 J	10 U
Copper	200	6.6 J	7.8 J	85.5 J	89.4	4.8 J	25 U	10.6 J	25 U	12.4 J	4.2 J	2.8 J	3.9 J
Iron	300	***756***	32.9 J	***328***	100 U	***352***	100 U	***752***	100 U	***875***	100 U	***1390***	100 U
Lead	25	7.1 UB	3 J	3.8 UB	4 J	7.7 UB	5 U	6.6 UB	5 U	8.1 UB	5 U	5.6 UB	5 U
Magnesium	35000	12400	10500	5850	5040	7770	6810	6100	5390	1900	2430	12000	12100
Manganese	300	141 J	120	162	155	***647***	***540***	***2510 J***	***3090***	77.8 J	60.8	***3190 J***	***2950***
Mercury	0.7	0.14 UB	0.2 U	0.07 UB	0.07 UB	0.094 UB	0.063 UB	0.1 UB	0.1 UB	0.098 UB	0.098 UB	0.14 UB	0.11 UB
Nickel	100	39.7 J	35.5 J	5.7 J	5.6 J	11.1 J	7.5 J	3.7 J	1.8 J	3 J	1.7 J	3.4 J	3.5 J
Potassium	--	7510	6450	14700	13400	9900	8770	8990	7100	2950 J	3080 J	18100	16700
Sodium	20000	***111000***	***91600***	***29900***	***24100***	***125000***	***113000***	***63400***	***52600***	12900	15800	***68400***	***63200***
Zinc	2000	1600	1400	302	386	32	25.1	17.8 J	5.6 UB	15.2 J	9.8 UB	33.4	9 UB

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID / Sample Date	LF-1 06/22/2017	LF-2 06/20/2017	MW-5B 06/20/2017	MW-6B 06/21/2017	MW-6C 06/21/2017	MW-6E 06/21/2017	MW-6F 06/21/2017	MW-8A 06/22/2017	MW-8B 06/22/2017	MW-9B 06/20/2017	MW-9C 06/20/2017	OBS-1 06/20/2017
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value												
Alkalinity, Total	---	112 J	466 J	30 J	905 J	331 J	177 J	3.6 J	7.2 J	45 J	34.4 J	12 J	144 J
Alkalinity,Bicarbonate	---	112	466 J	30 J	905 J	331 J	177 J	3.6 J	7.2	45	34.4 J	12 J	144 J
Alkalinity,Carbonate	---	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloride	250	75.8	***488***	97.2	***306***	206	***346***	248	65.4	249	88.7	39	96.3
Cyanide	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Hardness	---	190	120	70	120	176	152	180	40	104	72	19	100
Hexavalent Chromium	0.05	0.02 U	0.02 U	0.02 U	0.0064 J	0.023 J	0.014 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	0.026 UB	0.68 J	0.03 UB	***116***	***16.2***	***31.9***	0.42	0.021 UB	0.43	0.19 UB	0.59 J	***8.4 J***
Nitrogen, Kjeldahl, Total	---	0.65 J	3.2	0.1 U	114 J	12.4 J	30.2 J	0.1 UJ	0.1 UJ	0.65 J	0.35	0.9	9.1
Nitrate	10	5.5	5.6	5.6	0.091 J	0.034 J	1.7 J	3.3 J	4.5	0.63	4	0.75	0.19
Nitrite	1	0.05 U	0.045 J	0.068	0.05 U	0.05 U	0.05 U	0.022 UB	0.012 J	0.05 U	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.0011 UB	0.0021 UB	0.0016 UB	0.017 UB	0.0135 UB	0.0049 UB	0.0034 UB	0.0011 UB	0.0029 UB	0.0025 UB	0.003 UB	0.0094 UB
Sulfate	250	45.4	40.8	18.8	1 J	42.4	20.9	0.48 J	37.9	35.3	19.9	10.6	27.8
Total Dissolved Solids	---	325	1420	264	1040	670	680	544	159	508	228	72	279

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID / Sample Date	LF-1 09/21/17	LF-2 09/21/17	MW-5B 09/21/17	MW-6B 09/22/17	MW-6C 09/22/17	MW-6E 09/22/17	MW-6F 09/22/17	MW-8A 09/22/17	MW-8B 09/22/17	MW-9B 09/21/17	MW-9C 09/21/17	OBS-1 09/21/17
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value												
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1.3	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,2-Dichloropropane	1	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	***3.3***	1 U	***3.8***	1 U	1.0	1 U	1 U	1 U	1 U	1 U	1.2
Benzene	1	1 U	***3.4***	1 U	***1.9***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	2.7	1 U	***7.7***	1 U	3.2	1 U	1 U	1 U	1 U	1 U	1.8
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***6.4***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	***9.7***	1 U	***6.0***	1 U	1.4	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***5.5***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.8	1 U	1 U	1.3	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	2 U	3.8	2 U	1.1 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total Volatile Compounds	--	ND	24.2	ND	21.6	ND	5.6	ND	14.7	ND	ND	1.3	3

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated value or limit
--	No standard
ND	Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	LF-1 09/21/17 Total	LF-1 09/21/17 Dissolved	LF-2 09/21/17 Total	LF-2 09/21/17 Dissolved	MW-5B 09/21/17 Total	MW-5B 09/21/17 Dissolved	MW-6B 09/22/17 Total	MW-6B 09/22/17 Dissolved	MW-6C 09/22/17 Total	MW-6C 09/22/17 Dissolved	MW-6E 09/22/17 Total	MW-6E 09/22/17 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	200 U	15.6 UB	38.5 J	200 U	16.4 J	200 U	159 J	14.2 UB	200 U	200 U	200 U	200 U
Barium	1000	83 J	72.8 J	56 J	55.7 J	40.2 J	36.6 J	55 J	51.2 J	24.6 J	23 J	208	192 J
Calcium	--	19000	17200	35700	34400	14000	12400	18200	17000	36600	34200	35900	33300
Chromium	50	10 U	10 U	12.2	13.5	10 U	10 U	3.6 J	2.2 J	10 U	10 U	10 U	10 U
Copper	200	25 U	3.3 J	25 U	25 U	25 U	25 U	2.8 J	25 U	25 U	25 U	25 U	4.4 J
Iron	300	***22400***	***19500***	***8220***	***7840***	200 U	20 U	***12300***	***9140***	***3970***	***3580***	***21000***	***19100***
Lead	25	2.3 J	5 U	2.1 J	5 U	1.8 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	16500	14800	24500	22900	6740	5980	12600	11900	8790	8420	16800	15900
Manganese	300	***4340***	***4260***	193	184	***5030***	***5270***	68.5	37.3	93.4	83.3	***706***	***640***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	3.8 J	2.7 UB	20.8 J	19.6 J	2.2 J	2.5 UB	17.7 J	13.7 J	6.4 J	5.5 UB	15 J	12.2 J
Potassium	--	9790	10000	160000	162000	11200	11000	90200	91200	23400	24200	36300	36300
Sodium	20000	***83400***	***86400***	***536000***	***535000***	***60700***	***63200***	***258000***	***274000***	***179000***	***189000***	***183000***	***190000***
Zinc	2000	8.1 UB	3.1 UB	7.4 UB	2.3 UB	3.4 UB	1.7 UB	6.4 UB	1.6 UB	4.2 UB	20 UB	21.5 UB	16.7 UB

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	MW-6F 09/22/17 Total	MW-6F 09/22/17 Dissolved	MW-8A 09/22/17 Total	MW-8A 09/22/17 Dissolved	MW-8B 09/22/17 Total	MW-8B 09/22/17 Dissolved	MW-9B 09/21/17 Total	MW-9B 09/21/17 Dissolved	MW-9C 09/21/17 Total	MW-9C 09/21/17 Dissolved	OBS-1 09/21/17 Total	OBS-1 09/21/17 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	166 J	162 UB	55.5 J	46.5 UB	26.2 J	32.3 UB	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	223	205	82.3 J	78.1 J	156 J	143 J	99 J	95.6 J	52.2 J	48.5 J	64.6 J	60.5 J
Calcium	--	37100	34500	9430	10300	24000	22300	15400	14400	7830	7100	24000	21700
Chromium	50	10 U	10 U	2.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	2.5 J	25 U	24.5 J	19.1 J	3.1 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300	63.2 UB	49.7 UB	64 UB	19.5 UB	19.6 UB	32.1 UB	200 U	20 U	20.5 UB	20 U	53.5 UB	51.9 UB
Lead	25	5 U	2.3 J	3.6 J	3.5 J	5 U	5 U	1.5 J	5 U	1.8 J	5 U	2 J	5 U
Magnesium	35000	14600	13800	6960	6950	8300	7850	6370	5840	9760	8800	16300	14700
Manganese	300	116	107	143	128	***1110***	***1000***	***3380***	***3480***	187	169	***2780***	***2680***
Mercury	0.7	0.11 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.092 J	0.07 J
Nickel	100	22.2 J	20.7 J	6.7 J	5.9 UB	21.5 J	20 J	40 U	1 UB	1.4 J	2 UB	3.4 J	3.4 UB
Potassium	--	7750	7870	12700	13200	10300	10600	8550	8800	10600	10400	24800	24400
Sodium	20000	***132000***	***139000***	***35800***	***39000***	***151000***	***162000***	***57700***	***59500***	***63700***	***63300***	***72300***	***72400***
Zinc	2000	47.4 UB	43.3 UB	114 UB	107 UB	63.2 UB	58 UB	2.6 UB	20 U	3.1 UB	1.3 UB	2.9 UB	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID Sample Date	LF-1 09/21/17	LF-2 09/21/17	MW-5B 09/21/17	MW-6B 09/22/17	MW-6C 09/22/17	MW-6E 09/22/17	MW-6F 09/22/17	MW-8A 09/22/17	MW-8B 09/22/17	MW-9B 09/21/17	MW-9C 09/21/17	OBS-1 09/21/17
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value												
Alkalinity, Total	---	124	1590	34.2	957	272	328	1 U	13.2	8.4	34.6	44	196
Alkalinity,Bicarbonate	---	124 J	--	34.2 J	--	272 J	328 J	--	13.2 J	8.4 J	34.6 J	44 J	196 J
Alkalinity,Carbonate	---	1 U	--	1 U	--	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U
Chloride	250	138	***633***	125	***344***	238	***380***	***388***	81.1	***360***	117	126	123
Cyanide	0.2	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 U
Hardness	---	100	147	60	88	112	144	120	46	84	60	48	108
Hexavalent Chromium	0.05	0.1 U	0.1 U	0.02 U	0.1 U	0.1 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	0.83	***192***	0.22 UB	***137 J***	***18.4***	***44.5***	0.14 UB	0.018 UBJ	0.68 J	0.23 UB	1.3	***20.4***
Nitrogen, Kjeldahl, Total	---	1.7 J	192 J	1.2 J	146	16.1	41.2	0.1 U	0.17	2.4	0.1 U	1.4 J	18.9 J
Nitrate	10	0.037 UB	0.05 U	5.9	0.05 U	0.05 U	1.7 UB	4.1	3.3	1.8 UB	5.1	0.57 UB	0.24 UB
Nitrite	1	0.017 J	0.05 U	0.056	0.05 U	0.05 UJ	0.0096 J	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.0038 UB	***0.0318***	0.005 U	***0.0405***	***0.0146***	0.0065 UB	0.0016 UB	0.0011 UBJ	0.0034 UB	0.005 U	0.0016 UB	0.0087 UB
Sulfate	250	44.3	0.42 UB	23.9	0.61 UB	42.8	18.6	0.39 UB	33	27.3	21.6	21.7	45.2
Total Dissolved Solids	---	348	1900	241	882	608	682	628	178	560	213	210	323

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

Note that well MW-06A was dry and could not be sampled

Table 1. Summary of Second Quarter 2018 Field Parameter Results and Comparison to Standards

PARAMETER	UNITS	CLASS GA STANDARD	WELL NUMBER AND FIELD PARAMETER RESULTS					
			5B	6B	6C	6E	6F	8A
Temperature	°C	No Std.	15.6	17.4	17.8	17.8	16.7	14.6
pH	Units	6.5-8.5	**6.10**	7.14	6.84	6.99	**4.76**	**4.38**
Dissolved Oxygen	mg/L	No Std.	0.56	0.47	0.49	0.27	0.34	8.04
Conductivity	mS/cm	No Std.	0.544	2.390	1.280	2.490	0.900	0.185
Eh	pHmV	No Std.	34.5	-23.5	-7.5	-15.5	111	130
ORP	mV	No. Std.	128	-164	-37.5	-159	162	228
Turbidity	NTU	<5	1	**159**	**16**	**30**	2	0
Floaters or Sinkers	N/A	No Std.	None	None	None	None	None	None
Field Observations	N/A	No Std.	Clear, No Odor	Cloudy, Lt. Orange, Strong Odor	Slty. Cloudy, Moderate Odor	Slty. Cloudy, Foam, Strong Odor	Clear, No Odor	Clear, No Odor

PARAMETER	UNITS	CLASS GA STANDARD	WELL NUMBER AND FIELD PARAMETER RESULTS					
			8B	9B	9C	OBS-1	LF-1	LF-2
Temperature	°C	No Std.	14.3	14.5	14.8	15.9	17.5	18.1
pH	Units	6.5-8.5	**5.76**	**5.92**	**5.72**	**5.78**	6.70	7.27
Dissolved Oxygen	mg/L	No Std.	1.80	0.38	2.79	0.50	2.60	0.25
Conductivity	mS/cm	No Std.	0.880	0.491	0.370	0.519	0.610	3.530
Eh	pHmV	No Std.	52.2	44.2	55.3	52.4	0.90	-31.4
ORP	mV	No Std.	213	131	127	153	-71.6	-176
Turbidity	NTU	<5	1	1	3	1	4	0
Floaters or Sinkers	N/A	No Std.	None	None	None	None	None	None
Field Observations	N/A	No Std.	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, Odor	Foam, Strong Odor

Notes: Class GA Standards are the groundwater standards listed in 6NYCRR Part 703.5.
Bold values exceed Class GA standard.
°C = degrees Celsius.
mg/L = milligrams per Liter.
mS/cm = milliSiemens per centimeter.
pHmV = pH in milliVolts.
ORP = Oxidation-Reduction Potential
mV = milliVolts.
NTU = Nephelometric turbidity units.
N/A = Not applicable.

Table 2. Summary of Second Quarter 2018 VOC Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND VOC RESULTS					
		MW-5B	MW-6B	MW-6C	MW-6E	MW-6F	MW-8A
Aromatic Hydrocarbons:							
Benzene	1	<1.0	**2.0**	<1.0	**3.1**	<1.0	<1.0
Chlorobenzene	5	<1.0	**6.0**	<1.0	**9.4**	<1.0	<1.0
1,2-Dichlorobenzene	3	<1.0	1.2	<1.0	1.1	<1.0	<1.0
1,4-Dichlorobenzene	3	<1.0	**3.2**	<1.0	**3.9**	<1.0	<1.0
Isopropylbenzene	5	<1.0	3.1	<1.0	2.9	<1.0	<1.0
Chlorinated Solvents:							
cis-1,2-Dichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	2.1
Tetrachloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	**8.6**
Trichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	1.1

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND VOC RESULTS					
		MW-8B	MW-9B	MW-9C	OBS-1	LF-1	LF-2
Aromatic Hydrocarbons:							
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**
Chlorobenzene	5	<1.0	<1.0	<1.0	1.8	<1.0	2.0
1,2-Dichlorobenzene	3	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
1,4-Dichlorobenzene	3	<1.0	<1.0	<1.0	1.2	<1.0	2.4
Isopropylbenzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	3.8
Chlorinated Solvents:							
cis-1,2-Dichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5	1.2	<1.0	2.8	<1.0	<1.0	<1.0

Notes: Parameters listed are the VOCs that were detected in at least one groundwater sample.
Class GA Standards are the groundwater standards listed in 6NYCRR Part 703.5.
Results are in units of micrograms per Liter (ug/L).
Bold results exceed Class GA standard.

Table 3. Summary of Second Quarter 2018 Leachate Indicator Parameter Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND LEACHATE INDICATOR PARAMETER RESULT					
		5B	6B	6C	6E	6F	8A
Alkalinity	No Std.	24.0	696	316	742	4.0 J	2.0 J
Ammonia	2	0.16	**97.1**	**18.0**	**101**	0.49	0.25
Chloride	250	126	241	214	248	**295**	38.0
Cyanide	0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate	10	6.6	<0.050	<0.050	0.094	2.8	1.8
Nitrite	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite	10	6.6	<0.050	<0.050	0.1	2.8	1.8
Sulfate	250	27.0	4.3 J	49.2	5.9	0.33 J	19.0
Total Dissolved Solids	500 (SMCL)	231	**862**	**595**	**856**	397	94.0
Total Hardness	No Std.	60.0	136	112	128	120	34.0
Total Kjeldahl Nitrogen	No Std.	<0.10	137	23.4	115	0.69	0.10
Total Phenols	0.001	**0.0033 J**	**0.0392**	**0.0141**	**0.0305**	**0.0018 J**	<0.005

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND LEACHATE INDICATOR PARAMETER RESULT					
		8B	9B	9C	OBS-1	LF-1	LF-2
Alkalinity	No Std.	48.0	26.0	22.0	184	120	30.0
Ammonia	2	0.069 J	0.64	2.1	**7.8**	0.87	**117**
Chloride	250	232	115	96.5	103	78.2	**476**
Cyanide	0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate	10	1.3	3.5	1.4	0.34	1.4	<0.050
Nitrite	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite	10	1.3	3.5	1.4	0.3	1.4	<0.050
Sulfate	250	38.0	24.2	22.8	33.5	42.4	0.48 J
Total Dissolved Solids	500 (SMCL)	409	269	236	337	307	**1,590**
Total Hardness	No Std.	84.0	56.0	38.0	110	100	132
Total Kjeldahl Nitrogen	No Std.	0.69	0.72	4.0	14.8	4.5	150
Total Phenols	0.001	<0.005	<0.005	**0.0048 J**	**0.0059**	<0.005	**0.0372**

Notes: Standards are the Class GA groundwater standards listed in 6NYCRR Part 703.5, except for TDS.
Standard for TDS is the more stringent federal secondary maximum contaminant level (SMCL).
Results are in units of milligrams per Liter (mg/L).
J = Estimated result above method detection limit but below reporting limit.
Bold results exceed Class GA standard.

Table 4. Summary of Second Quarter 2018 Inorganic Parameter Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND TOTAL INORGANIC PARAMETER RESULT					
		5B	6B	6C	6E	6F	8A
Aluminum	No. Std.	38.5 J	216	86.0 J	48.6 J	249	30.9 J
Barium	1,000	30.6 J	36.8 J	23.0 J	138 J	162 J	50.2 J
Calcium	No Std.	12,700	12,100	32,000	29,800	27,300	4,850
Chromium, Total	50	<10.0	4.9 J	2.8 J	<10.0	1.7 J	1.7 J
Chromium, Hexavalent	50	<20	<20	<20	<40	3.0 J	3.0 J
Copper	200	<25.0	<25.0	<25.0	<25.0	<25.0	4.2 J
Iron	300	55.9	**10,600**	**5,730**	**54,600**	**693**	19.0 J
Iron and Manganese	500	**3,676**	**10,645**	**5,808**	**55,145**	**798**	178 J
Lead	25	<5.0	2.9 J	3.2 J	<5.0	<5.0	1.3 J
Magnesium	No Std	5,900	8,920	7,930	17,100	10,600	5,420
Manganese	300	**3,620**	45.1	78.4	545	105	159
Mercury	0.7	0.14 J	<0.20	<0.20	0.16 J	0.18 J	<0.20
Nickel	100	8.6 J	16.4 J	12.6 J	11.6 J	27.0 J	11.8 J
Potassium	No Std.	11,000	83,700	27,400	71,000	7,660	5,010
Sodium	20,000	**57,600**	**205,000**	**163,000**	**198,000**	**96,300**	11,900
Zinc	2,000[GV]	1.3 J	11.6 J	63.0	8.1 J	140	36.2

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND TOTAL INORGANIC PARAMETER RESULT					
		8B	9B	9C	OBS-1	LF-1	LF-2
Aluminum	No. Std.	21.4 J	27.9 J	13.7 J	41.8 J	29.6 J	155 J
Barium	1,000	75.8 J	77.9 J	50.1 J	67.0 J	42.9 J	39.6 J
Calcium	No Std.	24,600	12,700	6,590	14,200	19,800	26,300
Chromium, Total	50	5.4 J	<10.0	<10.0	<10.0	<10.0	9.4 J
Chromium, Hexavalent	50	5.8 J	<20	3.7 J	<20	<20	<20
Copper	200	<25.0	<25.0	3.3 J	<25.0	<25.0	<25.0
Iron	300	56.2	39.6	93.1	104	**8,360**	**6,730**
Iron and Manganese	500	387	**2,560**	237	**2,454**	**9,960**	**6,887**
Lead	25	<5.0	3.6 J	<5.0	<5.0	<5.0	<5.0
Magnesium	No Std.	6,170	5,890	5,940	9,680	14,100	18,000
Manganese	300	**331**	**2,520**	144	**2,350**	**1,600**	157
Mercury	0.7	<0.20	<0.20	0.28	<0.20	0.15 J	0.13 J
Nickel	100	10.2 J	4.4 J	5.7 J	5.6 J	9.2 J	17.1 J
Potassium	No Std.	8,820	8,460	8,950	12,400	10,800	123,000
Sodium	20,000	**107,000**	**51,500**	**45,000**	**50,700**	**61,900**	**400,000**
Zinc	2,000[GV]	16.6 J	2.5 J	3.4 J	1.5 J	5.6 J	2.8 J

Notes: Class GA Standards are the groundwater standards listed in 6NYCRR Part 703.5.
GV = Guidance Value, there is no Class GA standard for this parameter.
Results are in units of micrograms per Liter (ug/L).
J = Estimated result above method detection limit but below reporting limit.
Bold results exceed Class GA standard.

Table 1. Summary of Fourth Quarter 2018 Field Parameter Results and Comparison to Standards

PARAMETER	UNITS	CLASS GA STANDARD	WELL NUMBER AND FIELD PARAMETER RESULTS					
			5B	6B	6C	6E	6F	8A
Temperature	°C	No Std.	15.5	17.6	17.6	17.7	16.5	13.5
pH	Units	6.5-8.5	**6.33**	7.32	7.35	6.92	**4.82**	**4.97**
Dissolved Oxygen	mg/L	No Std.	0.59	0.37	0.31	0.38	0.67	8.25
Conductivity	mS/cm	No Std.	0.507	2.238	1.831	1.977	1.006	0.136
Eh	pHmV	No Std.	524	-34.8	-36.5	-11.6	109	99.8
ORP	mV	No. Std.	153	-109	-86.1	-97	193	161
Turbidity	NTU	<5	2.7	**32.2**	1.6	**108**	4.2	4.6
Floaters or Sinkers	N/A	No Std.	None	None	None	None	None	None
Field Observations	N/A	No Std.	Clear, No Odor	Cloudy, Strong Sulfur Odor	Slty. Cloudy, Moderate Sulfur Odor	Slty. Cloudy, Foam, Strong Sulfur Odor	Clear, No Odor	Clear, No Odor

PARAMETER	UNITS	CLASS GA STANDARD	WELL NUMBER AND FIELD PARAMETER RESULTS					
			8B	9B	9C	OBS-1	LF-1	LF-2
Temperature	°C	No Std.	13.8	14.8	15.3	16.1	16.3	16.8
pH	Units	6.5-8.5	**4.13**	**6.19**	N/A	6.62	7.00	7.43
Dissolved Oxygen	mg/L	No Std.	0.36	0.52	0.40	0.46	0.56	0.58
Conductivity	mS/cm	No Std.	1.160	0.464	0.492	0.747	0.634	3.170
Eh	pHmV	No Std.	147	29.9	524	5.7	-16.10	-41.5
ORP	mV	No Std.	254	154	972	112	-81.8	-138
Turbidity	NTU	<5	4.6	0.29	1.2	0.47	1.8	2.3
Floaters or Sinkers	N/A	No Std.	None	None	None	None	None	None
Field Observations	N/A	No Std.	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, No Odor	Clear, Odor	Light Yellow, Strong Odor

Notes: Class GA Standards are the groundwater standards listed in 6NYCRR Part 703.5.
Bold values exceed Class GA standard.

°C = degrees Celsius.
mg/L = milligrams per Liter.
mS/cm = milliSiemens per centimeter.
pHmV = pH in milliVolts.
ORP = Oxidation-Reduction Potential
mV = milliVolts.
NTU = Nephelometric turbidity units.
N/A = Not applicable.

Table 2. Summary of Fourth Quarter 2018 VOC Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND VOC RESULTS					
		MW-5B	MW-6B	MW-6C	MW-6E	MW-6F	MW-8A
Aromatic Hydrocarbons:							
Benzene	1	<1.0	1.0	0.94 J	0.95 J	<1.0	<1.0
Chlorobenzene	5	<1.0	3.6	2.4	3.9	<1.0	<1.0
1,4-Dichlorobenzene	3	<1.0	1.8	1.5	1.3	<1.0	<1.0
Isopropylbenzene	5	<1.0	2.4	1.8	0.87 J	<1.0	<1.0
Chlorinated Solvents:							
cis-1,2-Dichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Tetrachloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	2.8
Trichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND VOC RESULTS					
		MW-8B	MW-9B	MW-9C	OBS-1	LF-1	LF-2
Aromatic Hydrocarbons:							
Benzene	1	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**
Chlorobenzene	5	<1.0	<1.0	<1.0	0.96 J	<1.0	0.98 J
1,4-Dichlorobenzene	3	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Isopropylbenzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	2.3
Chlorinated Solvents:							
cis-1,2-Dichloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	5	<1.0	2.1	2.4	<1.0	<1.0	<1.0

Notes: Parameters listed are the VOCs that were detected in at least one groundwater sample.
Class GA Standards are the potable groundwater standards listed in 6NYCRR Part 703.5.
Results are in units of micrograms per Liter (ug/L).
Bold results exceed Class GA standard.

Table 3. Summary of Fourth Quarter 2018 Leachate Indicator Parameter Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND LEACHATE INDICATOR PARAMETER RESULT					
		5B	6B	6C	6E	6F	8A
Alkalinity	No Std.	31.3	763	741	426	0.63 J	1.3
Ammonia	2	0.024 J	**117**	**97.3**	**6.6**	0.20	0.14
Chloride	250	137	**296**	**288**	**404**	**376**	37.6
Cyanide	0.2	<0.010	0.003 J	<0.010	<0.010	<0.010	<0.010
Nitrate	10	4.4	<0.050	<0.050	1.1	3.4	1.2
Nitrite	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite	10	4.4	<0.050	<0.050	1.1	3.4	1.2
Sulfate	250	27.3	0.69 J	4.7 J	23.8	<5	11.2
Total Dissolved Solids	500 (SMCL)	267	**848**	**812**	**732**	**568**	73.0
Total Hardness	No Std.	58.0	72.0	100	148	140	24.0
Total Kjeldahl Nitrogen	No Std.	<0.10	129	107	68.0	<0.10	<0.10
Total Phenols	0.001	**0.0018 J**	**0.0295**	**0.0346**	**0.0161**	<0.005	<0.005

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND LEACHATE INDICATOR PARAMETER RESULT					
		8B	9B	9C	OBS-1	LF-1	LF-2
Alkalinity	No Std.	10.3	29.0	39.0	191	122	1,160
Ammonia	2	0.17	0.42	**3.7**	**40.4**	**10**	**12.3**
Chloride	250	130	126	128	124	118	**461**
Cyanide	0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate	10	1.1	3.3	1.8	0.39	<0.050	<0.050
Nitrite	1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite	10	1.1	3.3	1.8	0.39	<0.050	<0.050
Sulfate	250	32.2	23.2	22.7	35.6	43.9	8.5
Total Dissolved Solids	500 (SMCL)	**538**	240	240	312	282	**1,540**
Total Hardness	No Std.	80.0	56.0	57.0	99.0	88.0	130
Total Kjeldahl Nitrogen	No Std.	0.33	<0.10	3.1	20.7	10.5	136
Total Phenols	0.001	<0.005	<0.005	**0.0048 J**	**0.0069**	**0.0079**	**0.0213**

Notes: Standards are the Class GA groundwater standards listed in 6NYCRR Part 703.5, except for TDS.
Standard for TDS is the more stringent federal secondary maximum contaminant level (SMCL).
Results are in units of milligrams per Liter (mg/L).
J = Estimated result above method detection limit but below reporting limit.
Bold results exceed Class GA standard or SMCL.

Table 4. Summary of Fourth Quarter 2018 Inorganic Parameter Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND TOTAL INORGANIC PARAMETER RESULT					
		5B	6B	6C	6E	6F	8A
Aluminum	No. Std.	15.4 J	166 J	24.5 J	37.0 J	229	35.7 J
Barium	1,000	32.6 J	42.4 J	23.0 J	194 J	202	41.4 J
Calcium	No Std.	13,300	14,300	24,300	35,800	35,500	4,040
Chromium, Total	50	<10.0	1.8 J	<10.0	<10.0	<10.0	<10.0
Chromium, Hexavalent	50	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Copper	200	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Iron	300	14.5 J	**10,300**	**3,140**	**27,600**	**500**	<100
Iron and Manganese	500	**3,875 J**	**10,350**	**3,195**	**28,045**	**618**	65.1
Lead	25	1.4 J	3.7 J	<5.0	1.3 J	1.5 J	<5.0
Magnesium	No Std.	6,060	10,500	9,910	17,500	13,700	4,600
Manganese	300	**3,860**	50.0	55.4	**445**	118	65.1
Mercury	0.7	0.14 J	<0.20	<0.20	0.21	0.19 J	<0.20
Nickel	100	5.8 J	13.0 J	11.2 J	12.0 J	26.5 J	8.2 J
Potassium	No Std.	10,300	92,800	76,200	49,400	7,120	3,260 J
Sodium	20,000	**63,600**	**250,000**	**243,000**	**203,000**	**121,000**	10,800
Zinc	2,000[GV]	4.5 J	9.5 J	5.4 J	18.1 J	63.9	38.8

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND TOTAL INORGANIC PARAMETER RESULT					
		8B	9B	9C	OBS-1	LF-1	LF-2
Aluminum	No. Std.	52.3 J	14.0 J	15.9 J	14.1 J	13.8 J	27.6 J
Barium	1,000	144 J	91.0 J	53.7 J	48.3 J	75.8 J	41.2 J
Calcium	No Std.	26,300	13,700	7,840	17,100	17,200	26,700
Chromium, Total	50	<10.0	<10.0	<10.0	<10.0	<10.0	6.7 J
Chromium, Hexavalent	50	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Copper	200	<25.0	<25.0	<25.0	<25.0	4.5 J	<25.0
Iron	300	23.1 J	<100	21.0 J	74.6 J	**13,000**	**6,490**
Iron and Manganese	500	**1,173 J**	**2,430**	195	**2,625 J**	**15,590**	**6,628**
Lead	25	<5.0	<5.0	<5.0	2.0 J	<5.0	3.1 J
Magnesium	No Std.	8,710	5,910	7,120	13,800	13,500	17,500
Manganese	300	**1,150**	**2,430**	174	**2,550**	**2,590**	138
Mercury	0.7	<0.20	<0.20	<0.20	0.18 J	<0.20	<0.20
Nickel	100	24.4 J	2.5 J	4.0 J	3.9 J	7.3 J	13.6 J
Potassium	No Std.	10,700	8,110	12,400	24,700	13,300	125,000
Sodium	20,000	**160,000**	**59,000**	**65,000**	**69,100**	**66,100**	**450,000**
Zinc	2,000[GV]	59.0	5.7 J	6.4 J	5.4 J	5.5 J	5.3 J

Notes: Class GA Standards are the potable groundwater standards listed in 6NYCRR Part 703.5.
GV = Guidance Value from NYSDEC TOGS 1.1.1, there is no Class GA standard for this parameter.
Results are in units of micrograms per Liter (ug/L).
J = Estimated result above method detection limit but below reporting limit.
Bold results exceed Class GA standard.

Table 5. Summary of Fourth Quarter 2018 Dissolved Inorganic Parameter Results and Comparison to Standards

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND DISSOLVED INORGANIC PARAMETER RESULT					
		5B	6B	6C	6E	6F	8A
Aluminum	No. Std.	<200	102 J	16.7 J	22.5 J	180 J	32.6 J
Barium	1,000	30.6 J	34.8 J	19.5 J	165 J	198 J	39.9 J
Calcium	No Std.	13,200	13,000	23,200	34,400	34,900	3,930
Chromium, Total	50	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Chromium, Hexavalent	50	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Copper	200	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Iron	300	<20.0	**1,570**	271	**4,440**	**395**	<20.0
Iron and Manganese	500	**3,740**	**1,593**	321	**4,844**	**510**	62.6
Lead	25	1.6 J	<5.0	<5.0	<5.0	<5.0	2.5 J
Magnesium	No Std.	5,960	9,560	9,400	16,800	13,400	4,480
Manganese	300	**3,740**	23.2	49.5	**404**	115	62.6
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	0.16 J	<0.20
Nickel	100	6.0 J	9.6 J	10.9 J	10.8 J	26.1 J	7.7 J
Potassium	No Std.	9,960	87,000	74,000	48,000	7,080	3,210 J
Sodium	20,000	**61,100**	**232,000**	**234,000**	**199,000**	**116,000**	9,880
Zinc	2,000[GV]	2.8 J	3.5 J	3.3 J	4.7 J	60.1	39.4

PARAMETER	CLASS GA STANDARD	WELL NUMBER AND DISSOLVED INORGANIC PARAMETER RESULT					
		8B	9B	9C	OBS-1	LF-1	LF-2
Aluminum	No. Std.	49.5 J	<200	<200	15.0 J	<200	29.8 J
Barium	1,000	138 J	87.8 J	51.0 J	47.2 J	68.9 J	34.8 J
Calcium	No Std.	25,200	13,300	7,500	16,700	16,200	25,400
Chromium, Total	50	<10.0	<10.0	<10.0	<10.0	<10.0	6.3 J
Chromium, Hexavalent	50	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Copper	200	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
Iron	300	13.9 J	<20.0	<20.0	49.5	**6,040**	**3,010**
Iron and Manganese	500	**1,094 J**	**2,350**	167	**2,580**	**8,510**	**3,139**
Lead	25	<5.0	1.8 J	<5.0	<5.0	1.8 J	<5.0
Magnesium	No Std.	8,310	5,730	6,770	13,400	12,800	16,400
Manganese	300	**1,080**	**2,350**	167	**2,530**	**2,470**	129
Mercury	0.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	22.9 J	<40.0	2.9 J	4.8 J	5.5 J	14.2 J
Potassium	No Std.	10,300	7,880	11,900	23,800	12,800	121,000
Sodium	20,000	**155,000**	**56,900**	**62,200**	**66,500**	**63,800**	**437,000**
Zinc	2,000[GV]	53.4	3.2 J	3.7 J	2.9 J	5.3 J	3.5 J

Notes: Class GA Standards are the potable groundwater standards listed in 6NYCRR Part 703.5.
GV = Guidance Value from NYSDEC TOGS 1.1.1, there is no Class GA standard for this parameter.
Results are in units of micrograms per Liter (ug/L).
J = Estimated result above method detection limit but below reporting limit.
Bold results exceed Class GA standard.

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 05/24/19	LF-2 05/23/19	MW-05B 05/22/19	MW-06A 05/23/19	MW-06B 05/23/19	MW-06C 05/23/19	MW-06E 05/23/19	MW-06F 05/23/19	MW-08A 05/22/19	MW-08B 05/22/19	MW-09B 05/22/19	MW-09C 05/22/19	OBS-1 05/22/19
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1.6	1 U	1 U	2.4	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	**2.3**	1 U	1 U	**2.1**	0.92 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1.2	1 U	1 U	**5.4**	2.3	2.2	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**10**	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	5	1 U	1 U	2.7	1.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.2	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1.9	1 U	1.1	3.2	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	–	ND	10.1	ND	1.2	12.6	5.9	2.2	ND	14.1	ND	1.1	3.2	ND

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated value or limit
--	No standard
ND	Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	LF-1 05/24/19 Total	LF-1 05/24/19 Dissolved	LF-2 05/23/19 Total	LF-2 05/23/19 Dissolved	MW-5B 05/22/19 Total	MW-5B 05/22/19 Dissolved	MW-6A 05/23/19 Total	MW-6A 05/23/19 Dissolved	MW-6B 05/23/19 Total	MW-6B 05/23/19 Dissolved	MW-6C 05/23/19 Total	MW-6C 05/23/19 Dissolved	MW-6E 05/23/19 Total
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U
Barium	1000	71.2 J	69 J	47 J	45.8 J	38 J	36.9 J	50.1 J	46.7 J	53.3 J	50.9 J	46.7 J	21.6 J	212
Calcium	--	13100	13000	29800	29100	13000	12700	3130	3000	18000	17200	52700	24500	33300
Chromium	50	10 U	10 U	13.8	5.8 J	3 J	10 U	3.7 J	10 U	7.7 J	10 U	3.8 J	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***9520***	***8970 J***	***7280***	***7180 J***	25.4 UB	20 UJ	29.4 UB	13.2 J	***10800***	***9570 J***	***6700***	***3070 J***	***16200***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	10100	9990	20400	19500	5810	5660	3110	2930	14500	13600	21000	9730	15500
Manganese	300 #	***1930***	***1870***	***162***	***151***	***3690***	***3530***	21.4	17.4	***53.3***	***47.2***	***131***	***61.3***	***479***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.03 J	0.2 U	0.07 J	0.2 U	0.2 U	0.2 U	0.04 J	0.2 U	0.03 J	0.2 U
Nickel	100	8.1 J	7.6 J	18.9 J	15.2 J	9.7 J	6.9 J	9.4 J	7.5 J	11.9 J	7.2 J	23 J	9.6 J	15.2 J
Potassium	--	16800	16000	132000	128000	11300	10800	3580 J	3200 J	92200	87000	139000	63000	39200
Sodium	20000	***59700***	***58700***	***420000***	***411000***	***62900***	***61200***	17600	16100	***217000***	***207000***	***429000***	***207000***	***168000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	12 J	8.7 J	20 U	20 U	20 U	20 U	16.4 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-6E	MW-6F	MW-6F	MW-8A	MW-8A	MW-8B	MW-8B	MW-9B	MW-9B	MW-9C	MW-9C	OBS-1	OBS-1
Sample Date		05/23/19	05/23/19	05/23/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19	05/22/19
Type:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l														
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 UJ	155 J	139 J	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ	200 U	200 UJ
Barium	1000	210	212	203	55.8 J	55.7 J	141 J	141 J	80.4 J	77.2 J	53.7 J	51.8 J	50.6 J	49.3 J
Calcium	--	33300	36900	35400	12500	12600	23100	23400	11700	11700	7910	7660	16900	16600
Chromium	50	10 U	4 J	10 U	6.1 J	10 U	4 J	10 U	3.9 J	10 U	5.1 J	10 U	3 J	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	5.3 J	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***16000 J***	137	99.6 J	48.6 UB	6 J	32.6 UB	***8 J***	38.2 UB	***12.9 J***	35.7 UB	20 UJ	65.5 UB	***39.8 J***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	15400	14500	13900	5110	5210	7890	7980	5040	5040	8750	8480	13200	13000
Manganese	300 #	***467***	119	107	75.1	66.4	***1120***	***1110***	***2630***	***2440***	156	140	***2430***	***2330***
Mercury	0.7	0.2 U	0.21	0.1 J	0.2 U	0.07 J	0.2 U	0.13 J	0.2 U	0.05 J	0.2 U	0.06 J	0.2 U	0.05 J
Nickel	100	13.4 J	28.9 J	25.9 J	9.3 J	6 J	27.9 J	25.5 J	5.5 J	40 U	6.6 J	4.9 J	6.5 J	40 U
Potassium	--	38500	8570	8400	6420	6290	10800	10600	8580	8500	12000	11500	24500	23600
Sodium	20000	***166000***	***127000***	***123000***	***41700***	***42000***	***150000***	***151000***	***52700***	***52300***	***65100***	***62900***	***62100***	***60500***
Zinc	2000	15.1 J	29.3	27.1	17.7 J	16.9 J	66	65.9	12.6 J	10.5 J	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Sample ID / Sample Date / Units in mg/l	NYSDEC Class GA Standard or Guidance Value	LF-1 05/24/19	LF-2 05/23/19	MW-05B 05/22/19	MW-06A 05/23/19	MW-06B 05/23/19	MW-06C 05/23/19	MW-06E 05/23/19	MW-06F 05/23/19	MW-08A 05/22/19	MW-08B 05/22/19	MW-09B 05/22/19	MW-09C 05/22/19
LEACHATE INDICATORS													
Alkalinity, Total	—	117	1230	30.3	2.5	808	620	217	1.0 U	21.6	4.1	30.3	38.9
Alkalinity,Bicarbonate	—	117	1230	30.3	2.5	808	620	217	1.0 U	21.6	4,1	30.3	38.9
Alkalinity,Carbonate	—	1.0 U	1230	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	250	76.2	***383***	94.8	20.5	231	228	***325***	***374***	47.4	***294***	76.9	102
Cyanide	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.004 J	0.0036 J	0.0036 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Hardness	--	25.0	100	53.3	14.0	80.0	70.0	80.0	120	40.0	85.0	46.7	43.3
Hexavalent Chromium	0.05	0.020 UJ	0.10 U	0.020 U	0.020 U	0.10 U	0.10 U	0.10 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Nitrogen, Ammonia	2	***11.7***	***145***	0.10 U	1.1	***96.5***	***66.5***	***36.0***	***3.3***	0.72	0.32 UB	1.7	***2.2***
Nitrogen, Kjeldahl, Total	—	11.2 J	131	0.10 U	0.77	137	128	37.2	0.58	0.18	0.15	0.86	2.0
Nitrate	10	0.47	0.050 UJ	4.7	1.5 J	0.050 UJ	0.050 UJ	2.3 J	3.6	2.3	1.1	4.6	2.3
Nitrite	1	0.050 U	0.050 U	0.13 J	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Phenolics, Total	0.001	0.010 U	0.010 U	0.010 U	***0.011***	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Sulfate	250	36.6	5.0 U	24.3	13.3	5.0 U	4.7 J	24.7	5.0 U	27.9	31.6	20.7	21.4
Total Dissolved Solids	—	400 J	1690 J	362 J	224 J	996 J	896 J	1100 J	666 J	179 J	718 J	308 J	310 J

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard or not analyzed
Exceeds NYSDEC Class GA Standard or Guidance Value	

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID / Sample Date	OBS-1 05/22/19
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value	
Alkalinity, Total	—	186
Alkalinity,Bicarbonate	—	186
Alkalinity,Carbonate	—	1.0 U
Chloride	250	77.3
Cyanide	0.2	0.01 U
Hardness	—	85.0
Hexavalent Chromium	0.05	0.020 U
Nitrogen, Ammonia	2	19.7
Nitrogen, Kjeldahl, Total	—	18.0
Nitrate	10	0.42
Nitrite	1	0.050 U
Phenolics, Total	0.001	0.010 U
Sulfate	250	32.0
Total Dissolved Solids	—	498 J

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 08/28/19	LF-2 08/28/19	MW-05B 08/26/19	MW-06A 08/27/19	MW-06B 08/27/19	MW-06C 08/27/19	MW-06E 08/27/19	MW-06F 08/27/19
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value								
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	2.3	1 U	1 U	2.7	2.1	1.1	1 U
Benzene	1	1 U	***2.8 J***	1 U	1 U	***1.7***	***1.5***	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1.4	1 U	1 U	***5.7***	4.2	2.1	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U	1 U	1 U	2.1	2	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1.8	1.2	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	ND	6.5	1.8	1.2	12.2	9.8	3.2	ND

Footnotes/Qualifiers:
ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
ND Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l Sample ID Sample Date		MW-08A 08/26/19	MW-08B 08/26/19	MW-09B 08/26/19	MW-09C 08/26/19	OBS-1 08/26/19
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value					
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	***15.5***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	3.5	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	2.5	1 U	2.9	2.1	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	21.5	ND	2.9	2.1	ND

Footnotes/Qualifiers:
ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
ND Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID / Sample Date / Type:	LF-1 08/28/19		LF-2 08/28/19		MW-05B 08/26/19		MW-06A 08/27/19		MW-06B 08/27/19		MW-06C 08/27/19	
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	74.1 J	79.7 J	47.3 J	49.2 J	37.1 J	39.6 J	31.5 J	33.4 J	51.2 J	53.4 J	22.2 J	23.2 J
Calcium	--	11300	12100	31600	32300	13000	13800	2040	2130	18000	18500	20300	20800
Chromium	50	10 U	10 U	9.6 J	9 J	10 U	10 U	1.5 J	10 U	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300*	***11000***	***11500***	***7400***	***7540***	100 U	20 U	151 UB	146	***10500***	***10600***	***3490***	***3520***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	9330	9930	21300	21500	5670	6050	2080	2160	14500	14700	12600	12800
Manganese	300*	***2120***	***2240***	***157***	***160***	***3410***	***3610***	22.8	21.7	***46.6***	***45.8***	***51.7***	***52.6***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	6.6 J	7.5 J	17 J	17.1 J	6.6 J	8 J	6.8 J	7.8 J	6.8 J	7.5 J	11.4 J	12.1 J
Potassium	--	16300	17500	133000	145000	11200	12100	2460 J	2680 J	89200	95800	81500	87500
Sodium	20000	***53900***	***59100***	***424000***	***451000***	***61000***	***65900***	12500	13400	***201000***	***214000***	***233000***	***248000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 UB	20 UB	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard
Exceeds NYSDEC Class GA Standard or Guidance Value	
*	Iron and magnesium sum is 500

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID	MW-06E		MW-06F		MW-08A		MW-08B		MW-09B		MW-09C	
	Sample Date	08/27/19		08/27/19		08/26/19		08/26/19		08/26/19		08/26/19	
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	200 U	200 U	138 J	145 J	200 U	200 U	200 U	100 J	200 U	200 U	200 U	200 U
Barium	1000	207	228	207	227	52 J	53.7 J	123 J	130 J	98.3 J	107 J	57 J	62.3 J
Calcium	--	32100	34900	36200	39200	11900	12000	24600	26000	14000	15100	8630	9290
Chromium	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	6.7 J	25 U	7.1 J	12.2 J	25 U	25 U	5.6 J	25 U	25 U	25 U	25 U	25 U
Iron	300*	***17800***	***19000***	100 UB	100	100 U	20 U	100 UB	***77.1***	100 U	20 UB	100 UB	20 U
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	15000	16200	14100	15300	4730	4840	7790	8200	5800	6290	9050	9780
Manganese	300*	***438***	***475***	122	120	82.8	66.6	***1050***	***1100***	***3340***	***3560***	181	195
Mercury	0.7	0.2 U	0.2 U	0.32	0.2 U	0.2 U	0.11 J	0.11 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	14.1 J	15.5 J	26.6 J	29.9 J	6.4 J	7.1 J	20.8 J	21.8 J	40 U	40 U	4.5 J	5.8 J
Potassium	--	36200	40500	8790	9510	5780	6030	11500	12300	9830	10900	11800	13200
Sodium	20000	***163000***	***183000***	***125000***	***139000***	***33800***	***35200***	***148000***	***158000***	***54100***	***59600***	***62600***	***69200***
Zinc	2000	20 UB	20 UB	26.8 UB	29.2 UB	20 UB	20 UB	50.1	51.3 UB	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard
Exceeds NYSDEC Class GA Standard or Guidance Value	
*	Iron and magnesium sum is 500

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l Sample ID Sample Date Type:		OBS-1 08/26/19 Total	OBS-1 08/26/19 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value		
Aluminum	--	200 U	168 J
Barium	1000	51.8 J	89.1 J
Calcium	--	17500	18600
Chromium	50	10 U	10 U
Copper	200	25 U	25 U
Iron	300*	100 UB	62.8 UB
Lead	25	5 U	5 U
Magnesium	35000	13500	14200
Manganese	300*	***2620***	***2770***
Mercury	0.7	0.2 U	0.2 U
Nickel	100	40 U	5.2 J
Potassium	--	23200	24900
Sodium	20000	***58000***	***62900***
Zinc	2000	20 U	20 UB

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard
Exceeds NYSDEC Class GA Standard or Guidance Value	
*	Iron and magnesium sum is 500

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID Sample Date	LF-1 08/28/19	LF-2 08/28/19	MW-05B 08/26/19	MW-06A 08/27/19	MW-06B 08/27/19	MW-06C 08/27/19	MW-06E 08/27/19	MW-06F 08/27/19	MW-08A 08/26/19	MW-08B 08/26/19
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value										
Alkalinity, Total	--	109	1170	26.3 J	4.1 J	726 J	691 J	172 J	1 U	12.8 J	10.6 J
Alkalinity,Bicarbonate	--	109	1170	26.3 J	4.1 J	726 J	691 J	172 J	1 U	12.8 J	10.6 J
Alkalinity,Carbonate	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloride	250	59.1	***403***	89.7	18.5	225	***291***	***339***	***315***	58.6	***280***
Cyanide	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Hardness	--	70.0	140	45.0	10.0	100	93.3	200	133	40.0	73.3
Hexavalent Chromium	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.1 U	0.1 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	***11.9***	***147***	0.1 UB	0.55	***119***	***111***	***33.4***	0.16 UB	0.1 U	0.1 UB
Nitrogen, Kjeldahl, Total	--	12.6 J	137 J	0.1 UJ	1.2 J	111 J	98.6 J	34.6 J	1.1 J	0.076 UJB	0.057 UJB
Nitrate	10	0.05 U	0.05 U	5.0	0.85	0.05 UJ	0.05 UJ	2.3 J	3.7	1.8	1.4
Nitrite	1	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 U	0.05 U
Phenolics, Total	0.001	0.005 UB	0.005 UB	0.005 U	**0.0167**	0.005 UB	0.005 U	0.005 UB	0.005 U	0.005 U	0.005 U
Sulfate	250	45.7	5 U	28.8	14.2	5 U	5.8	41.1	5 U	36.1	38.0
Total Dissolved Solids	--	250	1600	232	62.0 J	786 J	910 J	678 J	614 J	160	520

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID Sample Date	MW-09B 08/26/19	MW-09C 08/26/19	OBS-1 08/26/19
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value			
Alkalinity, Total	–	27.4 J	42.8 J	153 J
Alkalinity,Bicarbonate	–	27.4 J	42.8 J	153 J
Alkalinity,Carbonate	–	1 U	1 U	1 U
Chloride	250	88.8	92.8	82.4
Cyanide	0.2	0.01 U	0.01 U	0.01 U
Hardness	–	50.0	45.0	86.7
Hexavalent Chromium	0.05	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	0.45	1.4	***16.9***
Nitrogen, Kjeldahl, Total	–	0.45 UJB	1.4 J	15.6 J
Nitrate	10	3.8	0.42	0.52
Nitrite	1	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.005 U	0.005 U	0.005 U
Sulfate	250	23.3	26.1	40.2
Total Dissolved Solids	--	206	240	292

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
–	No standard or not analyzed
Exceeds NYSDEC Class GA Standard or Guidance Value	

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID / Sample Date	LF-1 5/20/20	LF-2 5/20/20	MW_05B 5/18/20	MW_06A 5/19/20	MW_06B 5/19/20	MW_06C 5/19/20	MW_06E 5/19/20	MW_06F 5/19/20	MW_08A 5/18/20	MW_08B 5/18/20	MW_09B 5/18/20	MW_09C 5/18/20	OBS_1 5/18/20
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1.8	1 U	1 U	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	***3.1***	1 U	1 U	***3.6***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1.8	1 U	1 U	***8.9***	1 U	1.8	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***17.2***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	4.9	1 U	1 U	2.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.5	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	2.9	1 U	1.6	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	1.3 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	ND	12.9	1.6	ND	17.6	ND	1.8	ND	24.6	ND	1.6	ND	ND

Footnotes/Qualifiers:

ug/l	Micrograms per liter
U	Compound was analyzed for but not detected
J	Estimated value or limit
--	No standard
ND	Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID	LF-1	LF-1	LF-2	LF-2	MW_05B	MW_05B	MW_06A	MW_06A	MW_06B	MW_06B	MW_06C	MW_06C	MW_06E
	Sample Date	5/20/20	5/20/20	5/20/20	5/20/20	5/18/20	5/18/20	5/19/20	5/19/20	5/19/20	5/19/20	5/19/20	5/19/20	5/19/20
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	102 J	96.7 J	52.8 J	51.9 J	49.8 J	43.2 J	22.3 J	20.5 J	61.5 J	58.2 J	29.7 J	26.8 J	193 J
Calcium	--	15300	15200	34900	35000	15800	15100	1400	1350	20800	20400	47200	46300	30300
Chromium	50	10 U	10 U	13	12.8	10 U	10 U	10 U	6.1 J	11.7	6.8 J	10 U	10 U	10 U
Copper	200	25 U	25 U	11.7 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***14600***	***14300***	***9020***	***8820***	100 U	20 U	40.1 UB	103 UB	***12800***	***12200***	***5220***	***4810***	***12600***
Lead	25	5 U	5 U	3.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	12500	12600	25200	25800	6520	6580	1470	1450	14600	14600	11300	11700	14800
Manganese	300 #	***2670***	***2630***	***174***	***178***	***3890***	***3880***	8.9 UB	10.5 UB	***55.6***	***55***	***133***	***141***	***401***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21	0.15 J	0.2 U	0.2 U
Nickel	100	4 J	4 J	14.7 J	14.4 J	2.9 J	2.3 J	40 U	8.5 J	16.8 J	12.7 J	7.9 J	7.3 J	9 J
Potassium	--	17800	16300	133000	132000	10900	8890	5000 U	1990 J	118000	108000	28600	26100	28400
Sodium	20000	***70900***	***71800***	***481000***	***488000***	***77200***	***71500***	8650	7750	***316000***	***313000***	***220000***	***207000***	***179000***
Zinc	2000	20 U	3.6 UB	20 U	2.1 UB	20 U	20 U	20 U	23.3	20 U	2.2 UB	20 U	3 UB	17.2 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B Engineers and Architects, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW_06E	MW_06F	MW_06F	MW_08A	MW_08A	MW_08B	MW_08B	MW_09B	MW_09B	MW_09C	MW_09C	OBS_1	OBS_1
Sample Date		5/19/20	5/19/20	5/19/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20	5/18/20
Type:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l														
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	191 J	166 J	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	184 J	248	235	64 J	52.6 J	118 J	103 J	96.8 J	90.8 J	65.2 J	60.9 J	48.2 J	46.4 J
Calcium	--	29100	42800	43400	11200	9640	21600	20500	13300	13500	10200	10200	16100	16000
Chromium	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	3.9 J	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***12000***	79.5 UB	86.8 UB	100 U	20 U	100 U	20 U	100 U	20 U	20.1 UB	10.2 UB	46.2 UB	38 UB
Lead	25	5 U	2.8 J	5.5	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	14200	16400	17500	4900	4790	6680	6700	5570	5980	8090	8410	10600	10900
Manganese	300 #	***381***	114	121	82.9	84.2	***910***	***914***	***3160***	***3320***	192	202	***2470***	***2560***
Mercury	0.7	0.2 U	0.2 U	0.26	0.2 U	0.2 U	0.37	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	7.7 J	24.4 J	24.8 J	2.9 J	2.6 J	17.4 J	15.6 J	40 U	40 U	3.9 J	1.9 J	2.8 J	1.9 J
Potassium	--	25700	7790	7130	6200	4280 J	10000	8300	8940	8050	11400	10600	20600	19800
Sodium	20000	***180000***	***175000***	***171000***	***38600***	***30600***	***165000***	***150000***	***56000***	***55300***	***70700***	***68500***	***55300***	***54600***
Zinc	2000	14.3 UB	26.4	25.8	13.6 J	12.1 UB	54.2	51.3	20 U	4.3 UB	20 U	4.4 UB	20 U	2.9 UB

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B Engineers and Architects, P.C.

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID / Sample Date	LF-1 05/20/20	LF-2 05/20/20	MW_05B 05/18/20	MW_06A 05/19/20	MW_06B 05/19/20	MW_06C 05/19/20	MW_06E 05/19/20	MW_06F 05/19/20	MW_08A 05/18/20	MW_08B 05/18/20	MW_09B 05/18/20	MW_09C 05/18/20	OBS_1 05/18/20
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	116	1320	32.2	4.3	1030	390	144	1 U	14	5.8	33.8	44.9	160
Alkalinity,Bicarbonate	---	116	1320	32.2	4.3	1030	390	144	1 U	14	5.8	33.8	44.9	160
Alkalinity,Carbonate	---	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloride	250	93.5	***429***	93.9	9.6	***270***	186	***315***	***370***	41	***256***	79.9	92.1	65.9
Cyanide	0.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0038 J	0.01 U	0.01 U	0.01 U	0.01 U
Hardness	---	110	210	70	10	130	170	160	100	50	70	70	50	70
Hexavalent Chromium	0.05	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Nitrogen, Ammonia	2	***13.1***	***48.7***	0.45 UB	0.44 UB	***136***	***15.8***	***22.7***	0.39 UB	0.35 UB	0.51 UB	1.3 UB	2.8 UB	***15.3***
Nitrogen, Kjeldahl, Total	---	13.1	168	0.2 UB	0.73 UB	172	24.1	25.2	0.1 U	0.1 U	0.17 UB	0.16 UB	2.1 UB	17.4
Nitrate	10	0.05 U	0.05 U	5.8 J	0.8	0.05 U	0.05 U	3.3	4.6	2.5 J	2.1 J	5.1 J	0.84 J	0.52 J
Nitrite	1	0.05 U	0.05 U	0.065	0.05 U	0.05 U	0.05 U	0.064	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.005 U	***0.007 J***	0.005 U	***0.004 J***	***0.005 J***	0.005 U	***0.004 J***	0.005 U	0.005 U	0.005 U	0.005 U	***0.003 J***	0.005 U
Sulfate	250	50	5 U	25.6	7.4	5 U	38.2	44	5 U	32.2	38.4	19.6	22.8	30.8
Total Dissolved Solids	---	319	1790	286	42	1140	739	648	680	125	507	220	247	257

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
UB	Non-detect based on blank results
--	No standard or not analyzed
Exceeds NYSDEC Class GA Standard or Guidance Value	

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 10/29/20	LF-2 10/29/20	MW-05B 10/27/20	MW-06A 10/28/20	MW-06B 10/28/20	MW-06C 10/28/20	MW-06E 10/28/20	MW-06F 10/28/20	MW-08A 10/27/20	MW-08B 10/27/20	MW-09B 10/27/20	MW-09C 10/27/20	OBS-1 10/27/20
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	2.1	1 U	1 U	2.8	1.5	1.2	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	***3.6***	1 U	1 U	***1.2***	***1.4***	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1.7	1 U	1 U	4.5	2.9	1.5	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***21.2***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	***5.5***	1 U	1 U	1.7	1.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***8.4***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	1 U	1 U	1.7	1.1	1 U	1 U	1 U	1 U	3.8	1 U	1.5	1	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	2.8 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	ND	15.7	1.7	1.1	10.2	7.2	2.7	ND	33.4	ND	1.5	1	ND

Footnotes/Qualifiers:
ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
ND Not detected
Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	LF-1 10/29/20 Total	LF-1 10/29/20 Dissolved	LF-2 10/29/20 Total	LF-2 10/29/20 Dissolved	MW-05B 10/27/20 Total	MW-05B 10/27/20 Dissolved	MW-06A 10/28/20 Total	MW-06A 10/28/20 Dissolved	MW-06B 10/28/20 Total	MW-06B 10/28/20 Dissolved	MW-06C 10/28/20 Total	MW-06C 10/28/20 Dissolved	MW-06E 10/28/20 Total	MW-06E 10/28/20 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value														
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	47.8 J	200 U	200 U	200 U	200 U	200 U
Barium	1000	114 J	96.3 J	58 J	46.3 J	41.2 J	42.6 J	19.3 J	18.9 J	39.2 J	42.5 J	24.3 J	27.2 J	153 J	158 J
Calcium	--	17000	16500	39200	37700	12900	13500	1280	1250	13500	14400	30600	33800	23200	24000
Chromium	50	2.3 J	10 U	14.6	11.7	2.1 J	10 U	10 U	10 U	3.9 J	3.9 J	3.1 J	4.1 J	2.4 J	2.1 J
Copper	200	8 J	25 U	25 U	5.7 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***19700***	***2290***	***9810***	***4920***	23.3 UB	20 U	198 UB	197 UB	***8870***	***9350***	***3780***	***4160***	***12100***	***12400***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	14600	14100	28800	27000	5310	5530	1270	1230	11100	11900	11600	12800	12300	12700
Manganese	300 #	***3050***	***2950***	***177***	***171***	***3250***	***3310***	10.2 UB	10.1	***40.5***	***41.8***	***76.4***	***84.7***	***309***	***316***
Mercury	0.7	0.17 UB	0.2 U	0.23 UB	0.12 UB	0.2 UB	0.12 UB	0.2 UB	0.11 UB	0.2 U	0.2 U	0.18 UB	0.2 U	0.2 U	0.11 UB
Nickel	100	10 J	8.8 J	20.9 J	19.8 J	11.4 J	9.8 J	5.8 J	5.4 J	12.7 J	14.3 J	12.3 J	15.1 J	15.1 J	15.5 J
Potassium	--	18800	18300	145000	137000	10600	10400	1450 J	1440 J	84700	87400	66800	70100	33200	33500
Sodium	20000	***60100***	***58400***	***454000***	***434000***	***64900***	***70200***	6220	6000	***215000***	***237000***	***219000***	***248000***	***157000***	***166000***
Zinc	2000	5 J	20 U	20 U	20 U	20 U	20 U	11 J	5.4 UB	20 U	20 U	20 U	20 U	12.4 J	10.1 UB

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-06F	MW-06F	MW-08A	MW-08A	MW-08B	MW-08B	MW-09B	MW-09B	MW-09C	MW-09C	OBS-1	OBS-1
Sample Date		10/28/20	10/28/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20	10/27/20
Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l													
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	177 J	169 J	41.4 J	200 U	38 J	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	228	250	59.9 J	67.5 J	94 J	97.5 J	81.1 J	87.2 J	63.6 J	68.5 J	43.5 J	47 J
Calcium	--	40200	43800	10700	12600	20600	21200	11400	12300	10600	11300	14900	16100
Chromium	50	1.5 J	1.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	91.7 UB	80.2 UB	100 U	20 U	100 U	20 U	8.3 UB	20 U	23.4 UB	9.1 UB	34 UB	30
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	15500	16800	5320	5790	6180	6390	4850	5250	8250	8900	10100	10900
Manganese	300 #	114	124	91.8	91.8	***851***	***872***	***3010***	***3200***	215	229	***2520***	***2710***
Mercury	0.7	0.37 UB	0.11 UB	0.13 UB	0.2 U	0.18 UB	0.1 UB	0.13 UB	0.2 U	0.16 UB	0.1 UB	0.2 U	0.2 U
Nickel	100	29.2 J	33.3 J	7.3 J	8.5 J	19.8 J	21.2 J	40 U	40 U	6.3 J	6.3 J	5.8 J	6.3 J
Potassium	--	9510	9750	5220	5610	11100	10900	8770	8990	12600	12700	22200	23100
Sodium	20000	***138000***	***155000***	***21800***	***26400***	***136000***	***147000***	***46400***	***52200***	***62800***	***70100***	***53900***	***60500***
Zinc	2000	26.4	27 UB	9.6 J	11.1 UB	41.1	42.9 UB	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Sample ID Sample Date Units in mg/l		LF-1 10/29/20	LF-2 10/29/20	MW-05B 10/27/20	MW-06A 10/28/20	MW-06B 10/28/20	MW-06C 10/28/20	MW-06E 10/28/20	MW-06F 10/28/20	MW-08A 10/27/20	MW-08B 10/27/20	MW-09B 10/27/20	MW-09C 10/27/20	OBS-1 10/27/20
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	123	1380	39.0	3.2	676	603	145	1.0 U	12.7	9.9	31.6	48.3	162
Alkalinity,Bicarbonate	---	123	--	39.0	3.2	676	603	145	1.0 U	12.7	9.9	31.6	48.3	162
Alkalinity,Carbonate	---	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	250	98.0	***460***	89.5	7.6	230	248	***308***	***358***	41.9	***267***	74.8	114	75.7
Cyanide	0.2	0.004 J	0.0021 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0026 J	0.01 U
Hardness	---	103	216	54.1	8.43	79.4	124	109	164	48.6	76.9	48.4	60.4	78.8
Hexavalent Chromium	0.05	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 UJ	0.020 UJ	0.020 UJ	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ
Nitrogen, Ammonia	2	***17.3***	***170***	0.10 U	0.39	***99.3***	***79.5***	***31.1***	0.34	0.083 J	0.10 U	0.43	1.8	***16.2***
Nitrogen, Kjeldahl, Total	---	17.1	149	0.10 U	1.8	121	86.4	35.1	0.10 U	0.10 U	0.17	0.10 U	2.1	18.5
Nitrate	10	0.050 U	0.050 U	5.1	0.26	0.050 U	0.050 U	2.6	5.5	2.9	3.3	6.9	0.49	0.65
Nitrite	1	0.050 U	0.050 U	0.037 J	0.050 U	0.050 U	0.050 U	0.042 J	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Phenolics, Total	0.001	0.005 U	***0.007***	0.005 U	0.005 U	***0.008***	0.0059	***0.005 J***	0.005 U	0.005 U	0.005 U	***0.005 J***	0.005 U	0.005 U
Sulfate	250	34.6	5.0 U	25.6	7.7	5.0 U	14.5	46.5	5.0 U	26.1	30.8	20.1	20.2	22.0
Total Dissolved Solids	---	365	1790	274	53.0	793	849	648	680	134	473	216	286	282

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
J	Estimated detection limit or value
--	No standard or not analyzed
Exceeds NYSDEC Class GA Standard or Guidance Value	

D&B ENGINEERS AND ARCHITECTS, P.C.

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 5/19/21	LF-2 5/19/21	MW-05B 5/17/21	MW-06A 5/18/21	MW-06B 5/18/21	MW-06C 5/18/21	MW-06E 5/18/21	MW-06F 5/18/21	MW-08A 5/17/21	MW-08B 5/17/21	MW-09B 5/17/21	MW-09C 5/17/21	OBS-1 5/17/21
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	***3.1***	1 U	1 U	***4.9***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	***4.5***	1 U	1 U	***5.7***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	3.7	1 U	1 U	***13.4***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***21.9***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	***12.9***	1 U	1 U	3.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***7.5***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	3.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.3	1 U	1.5	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3.8	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	5	28	ND	ND	28.9	ND	ND	ND	32.7	ND	1.5	ND	ND

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
ND Not detected
Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID Sample Date Type: Units in ug/l		LF-1 5/19/21 Total	LF-1 5/19/21 Dissolved	LF-2 5/19/21 Total	LF-2 5/19/21 Dissolved	MW-05B 5/17/21 Total	MW-05B 5/17/21 Dissolved	MW-06A 5/18/21 Total	MW-06A 5/18/21 Dissolved	MW-06B 5/18/21 Total	MW-06B 5/18/21 Dissolved	MW-06C 5/18/21 Total	MW-06C 5/18/21 Dissolved	MW-06E 5/18/21 Total
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	72.5 J	72.1 J	61.8 J	61.9 J	40.9 J	41 J	15.5 J	15 J	66.8 J	68.5 J	29.2 J	28.9 J	179 J
Calcium	--	15900	16400	41500	42500	13100 J	13700 J	1040	979 J	22600	23500	50000	51200	25200
Chromium	50	10 U	10 U	11.2	10.4	10 U	10 U	10 U	10 U	2.3 J	2 J	40.5	4.7 J	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***19900***	***20200***	***10500***	***10400***	100 U	20 U	26.1 J	20 UB	***13600***	***14000***	***5640***	***4970***	***5250***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	11800	12300	30200	30100	5420	5750	954	976 J	21700	22400	11800	12100	11700
Manganese	300 #	***3000***	***2980***	***175***	***176***	***3100 J***	***3140 J***	5.4 J	5.2 J	***49.2***	***49.4***	***156***	***153***	***328***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	6.9 J	6.6 J	21.9 J	22.1 J	7.9 J	7.2 J	4.8 J	40 U	13 J	13.1 J	150	17.8 J	15.7 J
Potassium	--	10100	9670	166000	156000	10000 J	9700 J	1550 J	1450 J	131000	128000	37800	36100	26200
Sodium	20000	***62400***	***59100 J***	***466000***	***441000 J***	***57300 J***	***55800 J***	5840	5300	***245000***	***238000 J***	***237000***	***223000 J***	***163000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	6.9 UB	20 U	20 U	20 U	20 U	19 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-06E	MW-06F	MW-06F	MW-08A	MW-08A	MW-08B	MW-08B	MW-09B	MW-09B	MW-09C	MW-09C	OBS-1	OBS-1
Sample Date		5/18/21	5/18/21	5/18/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21	5/17/21
Type:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l														
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	213	229	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	181 J	258	260	79.1 J	80.1 J	40.9 J	42.1 J	81.6 J	85.7 J	61.8 J	63.6 J	37.3 J	38.3 J
Calcium	--	26100	46100	47500	15200	16000	13200	14100	10300	11200	10400	11000	12800	13600
Chromium	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11.4	2.5 J	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***5190***	34 J	29.5 UB	100 U	20 U	100 U	20 U	***147***	***77.6***	100 U	9.2 UB	***31.9 J***	29.4 UB
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	12200	17800	18600	4660	4960	5450	5910	4640	5130	7870	8500	8840	9490
Manganese	300 #	***330***	130	130	***708***	***727***	***3110***	***3230***	***2060***	***2190***	252	262	***2230***	***2300***
Mercury	0.7	0.2 U	0.16 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	15.2 J	30.6 J	30.8 J	17.5 J	17.1 J	7.8 J	7.6 J	29.3 J	20.9 J	4.6 J	40 U	4.6 J	4.4 J
Potassium	--	25500	10000	9670	8940	8610	10100	9980	8190	8190	11600	11400	21300	21200
Sodium	20000	***156000 J***	***181000***	***172000 J***	***118000***	***115000***	***57400***	***57300***	***45100***	***45000***	***60800***	***60200***	***47700***	***46500***
Zinc	2000	19.4 UB	24.2	26.5 UB	38.1	42.1	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Sample ID / Sample Date / Units in mg/l	NYSDEC Class GA Standard or Guidance Value	LF-1 5/19/21	LF-2 5/19/21	MW-05B 5/17/21	MW-06A 5/18/21	MW-06B 5/18/21	MW-06C 5/18/21	MW-06E 5/18/21	MW-06F 5/18/21	MW-08A 5/17/21	MW-08B 5/17/21	MW-09B 5/17/21	MW-09C 5/17/21	OBS-1 5/17/21
LEACHATE INDICATORS														
Alkalinity, Total	---	68.5	1600	34.3 J	2.6	1270	511	88	1.0 U	6.2	33.6	26.8	52.9	158
Alkalinity,Bicarbonate	---	68.5	--	34.3 J	2.6	1270	511	88	1.0 U	6.2	33.6	26.8	52.9	158
Alkalinity,Carbonate	---	1.0 UJ	--	1.0 UJ	1.0 U	5 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Chloride	250	131	***533***	95.5 J	7.5	***256***	***267***	***373***	***525***	250	95.3	82.4	99.1	69
Cyanide	0.2	0.005 UJ	0.0033 J	0.005 U	0.005 UJ	0.0021 J	0.005 UJ	0.005 UJ	0.005 UJ	0.002 J	0.005 U	0.005 U	0.005 U	0.005 U
Hardness	---	88.3	228	55 J	65.3	146	173	111	188	57.1	55.4	44.8	58.4	68.4
Hexavalent Chromium	0.05	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Nitrogen, Ammonia	2	***2.8***	***188***	0.10 U	0.16	***190***	***27.2***	***17.1***	0.17	0.12	0.10 U	0.64	***2.1***	***17.5***
Nitrogen, Kjeldahl, Total	---	2.5 UB	203 J	0.31 UB	1.6 UB	204 J	34.2 J	22.9 J	0.10 U	0.10 UB	0.10 U	0.10 U	2.7 UB	22.4 J
Nitrate	10	0.050 UJ	0.050 UJ	5.5 J	0.46	0.050 U	0.050 U	2.1	4.0	2.6	4.5	4.7	0.25	0.25 U
Nitrite	1	0.037 J	0.050 U	0.038 J	0.050 U	0.050 U	0.050 U	0.031 J	0.03 J	0.050 U	0.032 J	0.050 U	0.050 U	0.050 U
Phenolics, Total	0.001	0.005 UJ	***0.006 J***	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ
Sulfate	250	35.4	5.0 U	20.7	6.6	5.0 U	21	46.5	2.7 UB	31.2	20.7	21.8	23	24.9
Total Dissolved Solids	---	318	1810	250 J	40	1130	888	688	904	412 J	282 J	200 J	264 J	268 J

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Non-detect based on blank results
J	Estimated detection limit or value
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 10/29/21	LF-2 10/29/21	MW-05B 10/25/21	MW-06A 10/28/21	MW-06B 10/28/21	MW-06C 10/27/21	MW-06E 10/27/21	MW-06F 10/27/21	MW-08A 10/25/21	MW-08B 10/25/21	MW-09B 10/25/21	MW-09C 10/25/21	OBS-1 10/25/21
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	0.66 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	***3.1***	1 U	1 U	2.4	1.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	***3.7***	1 U	1 U	***1.5***	***1.8***	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	3.2	1 U	1 U	4.7	4.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	2.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***12.9***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	***7.8***	1 U	1 U	2.1	1.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***5.8***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	***14.9***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	1 U	1.5	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3.2	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	18.46	22	ND	ND	10.7	9.4	ND	1	21	ND	1.5	ND	ND

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
-- No standard
ND Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		LF-1	LF-1	LF-2	LF-2	MW-05B	MW-05B	MW-06A	MW-06A	MW-06B	MW-06B	MW-06C	MW-06C	MW-06E
Sample Date		10/29/21	10/29/21	10/29/21	10/29/21	10/25/21	10/25/21	10/28/21	10/28/21	10/28/21	10/28/21	10/27/21	10/27/21	10/27/21
Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Units in ug/l														
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	226
Barium	1000	83.6 J	75.7 J	67.6 J	65.2 J	42.3 J	39.7 J	17.5 J	15.9 J	35.8 J	35.2 J	132 J	124 J	263 J
Calcium	--	17400	17100	46900	45700	13800 J	13300	1170	1110	12400	12400	21100	19800	47500
Chromium	50	1.7 J	10 U	12.9	11.7	1.3 J	10 U	1.2 J	10 U	3.9 J	1.6 J	1.8 J	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	9.1 J
Iron	300 #	***23100***	***19600 J***	***11200***	***10700 J***	100 U	20 U	174 U	105 U	***7090***	***6870 J***	***8870***	***8030 J***	75.2 U
Lead	25	3.3 J	5 U	2.5 J	5 U	5 U	5 U	5 U	5 U	2.6 J	5 U	5 U	5 U	3.1 J
Magnesium	35000	13200	12800	31900	31000	5580	5360	11500	1070	11500	11400	11200	10500	18400
Manganese	300 #	***3480***	***3190***	***188***	***182***	***3200***	***2990***	8.2 J	7.4 J	***24.7***	***25.9***	***264***	***246***	143
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.11 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.14 U	0.14 U	0.36 U
Nickel	100	9.0 J	8.1 J	23.5 J	22.9 J	8.6 J	8.4 J	5.6 J	5.8 J	12 J	12.7 J	14.3 J	12 J	32.5 J
Potassium	--	11400	11100	183000	182000	10200	10100	1570 J	1610 J	92100	92500	31600	31300	10600
Sodium	20000	***69000***	***65300***	***502000***	***489000***	***59400***	***56900***	6420	6020	***219000***	***215000***	***157000***	***149000 J***	***185000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5.1 J	11.7 J	9.0 J	29.8

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-06E	MW-06F	MW-06F	MW-08A	MW-08A	MW-08B	MW-08B	MW-09B	MW-09B	MW-09C	MW-09C	OBS-1	OBS-1
Sample Date		10/27/21	10/27/21	10/27/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21	10/25/21
Type:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l														
METALS	NYSDEC Class GA Standard or Guidance Value													
Aluminum	--	217	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	252 J	33.6 J	30.9 J	62.9 J	58.5 J	77.5 J	72.3 J	108 J	95 J	71 J	64.7 J	39.2 J	37.2 J
Calcium	--	45500	46900	43500	9920	9650	16300	15200	13500	12300	12700	11600	13500	12500
Chromium	50	10 U	2.6 J	10 U	10 U	10 U	1.4 J	10 U	1.6 J	10 U	10 U	10 U	1.6 J	10 U
Copper	200	8.0 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	47.4 U	***5110***	***4570 J***	100 U	20 U	25.4 U	20 U	100 U	20 U	100 U	8.9 U	30.2 U	24.4 U
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.2 J	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	17500	13400	12500	5280	4860	4870	4540	5770	5260	8390	7660	8570	7730
Manganese	300 #	133	***111***	***102***	133	119	***656***	***612***	***3170***	***2720***	307	280	***2350***	***2140***
Mercury	0.7	0.15 U	0.14 U	0.14 U	0.12 UJ	***2.5 J***	0.14 U	0.20 U	0.16 U	0.18 U	0.10 U	0.19 U	0.12 U	0.20 U
Nickel	100	31.4 J	13.8 J	13.1 J	9.0 J	8.4 J	18.4 J	17 J	7.3 J	40 U	5.8 J	5.3 J	6.6 J	5.0 J
Potassium	--	10600	74600	71500	5820	5600	9050	8780	9660	9130	12400	11700	21500	19800
Sodium	20000	***178000***	***261000***	***244000***	***22900***	***21700***	***121000***	***113000***	***50400***	***46200***	***65400***	***60100***	***51400***	***47500***
Zinc	2000	27.4	20 U	20 U	20 U	8.4 J	35.7	31.4 U	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
--	No standard
Exceeds NYSDEC Class GA Standard or Guidance Value	

D&B ENGINEERS AND ARCHITECTS

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Sample ID Sample Date Units in mg/l		LF-1 10/29/21	LF-2 10/29/21	MW-05B 10/25/21	MW-06A 10/28/21	MW-06B 10/28/21	MW-06C 10/27/21	MW-06E 10/27/21	MW-06F 10/27/21	MW-08A 10/25/21	MW-08B 10/25/21	MW-09B 10/25/21	MW-09C 10/25/21	OBS-1 10/25/21
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	85.6	1490	33.6 J	4.2	689	126	1.0 U	772	10.5	8	29.7	55.7	146
Alkalinity,Bicarbonate	---	85.6	--	33.6 J	4.2	689	126	1.0 U	772	10.5	8	29.7	55.7	146
Alkalinity,Carbonate	---	1.0 U	--	1.0 U	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	250	109 J	***459 J***	107 J	8.7 J	241 J	231 J	***461 J***	38.6 J	42.7 J	220 J	73.6 J	113 J	56.7 J
Cyanide	0.2	0.0085 J	0.0128	0.0077	0.01 U	0.01 U	0.005 U	0.0072 J	0.009 J	0.008 J	0.0075 J	0.008	0.0086 J	0.01 U
Hardness	---	97.8	248	57.4 J	7.66	78.3	98.8	194	172	46.5	60.8	57.5	66.3	69
Hexavalent Chromium	0.05	0.020 UJ	0.020 UJ	0.020 U	0.02 UJ	0.020 UJ	0.020 U	0.020 U	0.020 U	0.02 U	0.020 U	0.020 U	0.020 U	0.020 U
Nitrogen, Ammonia	2	***3.8***	***189***	0.10 U	0.92	***110***	***27***	0.65	***85.4***	0.52	0.10	0.44	***2.4***	***16.4***
Nitrogen, Kjeldahl, Total	---	4.2 J	204 J	0.12 UBJ	1 UBJ	121 J	29 J	0.1 UJ	89.1 J	0.1 UJ	0.1 UJ	0.10 UJ	3 J	16.9 J
Nitrate	10	0.050 U	0.050 U	3.7	0.24 UB	0.046 J	1.2	3.4	0.050 U	1.7	2.4	4.1	0.12 UB	0.22 UB
Nitrite	1	0.029 J	0.050 U	0.034 J	0.05 U	0.050 U	0.050 U	0.05 U	0.050 U	0.050 U	0.050 U	0.050 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.005 U	***0.0054***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Sulfate	250	32.7	5.0 U	23.5 J	6.7	0.15 J	45.7 J	0.29 J	8 J	26.8 J	27.8 J	19.4 J	22.9 J	19.9 J
Total Dissolved Solids	500	284	***1610***	222	22	***796***	***536***	***860***	***920***	108	380	205	216	190

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Non-detect based on blank results
J	Estimated detection limit or value
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 5/12/22	LF-2 5/12/22	MW-05B 5/5/22	MW-06A 5/11/22	MW-06B 5/11/22	MW-06C 5/10/22	MW-06E 5/12/22	MW-06F 5/11/22	MW-08A 5/10/22	MW-08B 5/10/22	MW-09B 5/5/22	MW-09C 5/5/22	OBS-1 5/5/22
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	***3.2***	1 U	1 U	***3.8***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	***2.8***	1 U	1 U	***3.6***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	3.5	1 U	1 U	***12.9***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1.3 UB	1 U	1 U	1.1 UB	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	2.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***11.5***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	***8.6***	1 U	1 U	2.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***6.4***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	***22.3***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	2.7 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	26.6	20.8	ND	ND	23.6	ND	ND	ND	19.7	ND	ND	ND	ND

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated value or limit
UB Non-detect based on blank result
-- No standard
ND Not detected

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID Sample Date Type:	LF-1 5/12/22 Total	LF-1 5/12/22 Dissolved	LF-2 5/12/22 Total	LF-2 5/12/22 Dissolved	MW-05B 5/5/22 Total	MW-05B 5/5/22 Dissolved	MW-06A 5/11/22 Total	MW-06A 5/11/22 Dissolved	MW-06B 5/11/22 Total	MW-06B 5/11/22 Dissolved	MW-06C 5/10/22 Total	MW-06C 5/10/22 Dissolved	MW-06E 5/12/22 Total	MW-06E 5/12/22 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value														
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	235	200 U	200 U	200 U
Barium	1000	84.7 J	93.7 UB	67.9 J	74.9 UB	34.4 J	36 UB	16.8 J	19.9 UB	63.5 J	76 UB	29.8 J	35.7 UB	169 J	191 J
Calcium	--	15400	16900 UB	46700	51600 UB	10600	11200 UB	1240	1410 UB	23400	27100 UB	52200	93000 UB	24600	27600 UB
Chromium	50	10 U	7.8 J	11.3	12.6	1.1 J	10 U	10 U	10 U	1.7 J	10 U	8.6 J	10 U	10 U	10 U
Copper	200	3.8 J	25 U	6.2 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	9 UB	25 U	25 U
Iron	300 #	***22400***	***23900***	***11300***	***12100***	100 U	20 U	100 U	16.4 UB	***14200***	***16100***	***5420***	***3940***	***7860***	***8390***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	10700	11800 UB	29100	31700 UB	4460	4580 UB	1290	1440 UB	23900	26900 UB	11800	24800 UB	12400	13900 UB
Manganese	300 #	***3330***	***3590***	***175***	190 UB	***2510***	***2600***	5.1 J	6.1 UB	***43.2***	49.6 UB	***186***	139 UB	***316***	348 UB
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	7.9 J	9.2 UB	25.8 J	29.2 UB	10.1 J	8.4 UB	4.9 J	10.5 UB	11.6 J	12.4 UB	14.2 J	15.8 UB	15.2 J	17.6 UB
Potassium	--	14400	16000 UB	194000	223000	8880	9140 UB	1520 J	1770 UB	118000	143000	46400 J	36700	29100	33600 UB
Sodium	20000	***77700***	89200 UBJ	***515000***	587000 UBJ	***57000***	60300 UB	6310	8160 UBJ	***195000***	247000 UBJ	***263000***	200000 UBJ	***167000***	197000 UBJ
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	15.3 J	20 U	20 U	20 U	30.2	15.4 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Sample ID		MW-06F	MW-06F	MW-08A	MW-08A	MW-08B	MW-08B	MW-09B	MW-09B	MW-09C	MW-09C	OBS-1	OBS-1
Sample Date		5/11/22	5/11/22	5/10/22	5/10/22	5/10/22	5/10/22	5/5/22	5/5/22	5/5/22	5/5/22	5/5/22	5/5/22
Type:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Units in ug/l													
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	193 J	251	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	277	316	63.7 J	58.9 UB	66.7 J	65.7 UB	104 J	105 UB	69.4 J	70.2 UB	33.1 J	34.4 UB
Calcium	--	50700	56100 UB	11100	9520 UB	13400	13300 UB	13000	13300 UB	12300	12300 UB	11600	12100 UB
Chromium	50	10 U	10 U	10 U	10 U	1.2 J	10 U	1.4 J	10 U	10 U	10 U	10 U	10 U
Copper	200	5.8 J	25 U	5.4 J	25 U	25 U	25 U	25 U	25 U	3.9 J	25 U	25 U	25 U
Iron	300 #	160	51.2 UB	100 U	20 U	100 U	20 U	100 U	20 U	100 U	8.4 UB	36 UB	24.6 UB
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	19800	21600 UB	4820	4480 UB	4100	3970 UB	5890	5850 UB	7680	7570 UB	7180	7290 UB
Manganese	300 #	145	162 UB	126	115 UB	***579***	563 UB	***2960***	***2970***	***325***	324 UB	***2170***	***2230***
Mercury	0.7	***1.2***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	32.4 J	37.7 UB	9.5 J	8.6 UB	17.7 J	15.9 UB	5.4 J	4.9 UB	6.4 J	5.9 UB	5.9 J	5.5 UB
Potassium	--	11200	13400 UB	6840	6070 UB	8200	7970 UB	9830	9710 UB	12200	11900 UB	18000	18200 UB
Sodium	20000	***181000***	231000 UBJ	***24500***	22100 UB	***101000***	101000 UB	***55800***	57000 UB	***62900***	63900 UB	***41700***	43700 UB
Zinc	2000	26.3	28.4	12.8 J	9.8 J	31.2	30.5	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Non-detect based on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Sample ID Sample Date Units in mg/l		LF-1 5/12/22	LF-2 5/12/22	MW-05B 5/5/22	MW-06A 5/11/22	MW-06B 5/11/22	MW-06C 5/10/22	MW-06E 5/12/22	MW-06F 5/11/22	MW-08A 5/10/22	MW-08B 5/10/22	MW-09B 5/5/22	MW-09C 5/5/22	OBS-1 5/5/22
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	54.6	1580	37.9	4	981	532	81.6	1 U	16.2	6.5	30.1	57.5	126
Alkalinity,Bicarbonate	---	54.6	--	37.9	4	981	532	81.6	1 U	16.2	6.5	30.1	57.5	126
Alkalinity,Carbonate	---	1 UJ	--	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U
Chloride	250	123	***446***	80.1	8.4	126	224	***277***	***344***	39.3	115	61.9	72.5	52.9
Cyanide	0.2	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 UJ	0.01 UJ	0.01 UJ
Hardness	---	82500	236000	44800	8410	157000	179000	112000	208000	47600	50300	56700	62300	58500
Hexavalent Chromium	0.05	0.02 UJ	0.02 UJ	0.02 U	0.02 U	0.02 UJ	0.02 U	0.02 UJ	0.02 U	0.02 U	0.02 U	0.02 UJ	0.02 UJ	0.02 UJ
Nitrogen, Ammonia	2	0.37	***675***	0.061 J	0.092 J	***165***	***35.8***	***15.7***	0.2	0.1 U	0.067 J	0.47	***3***	***12.3***
Nitrogen, Kjeldahl, Total	---	1.1 UB	169	0.18 UB	2 UB	150	35.4	17.2	0.1 U	0.1 U	0.1 U	0.1 U	3.4	12.8
Nitrate	10	0.05 UJ	0.05 UJ	2.1	0.32 J	0.05 UJ	0.05 UJ	1.5 J	4.2 J	1.9 J	2.4 J	4 J	0.092 UB	0.12 UB
Nitrite	1	0.048 J	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.055	0.05 U	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 U
Phenolics, Total	0.001	0.005 U	***0.017***	0.005 U	***0.01***	***0.018***	***0.012***	0.005 U	***0.006***	0.005 U	***0.005 J***	0.005 U	0.005 U	0.005 U
Sulfate	250	33.3	0.19 UB	21.3	7.1	0.63 UB	10.8	43	0.27 UB	33	23.6	19.1	22.2	20.9
Total Dissolved Solids	500	304	***1860***	268	46	***794***	***950***	***647***	***737***	188	391	234	294	266

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Non-detect based on blank results
J	Estimated detection limit or value
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 1
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Volatile Organic Compounds

Units in ug/l	Sample ID Sample Date	LF-1 11/1/22	LF-2 10/28/22	MW-05B 10/27/22	MW-06A 10/31/22	MW-06B 11/1/22	MW-06C 10/31/22	MW-06E 11/1/22	MW-06F 10/31/22	MW-08A 10/27/22	MW-08B 10/27/22	MW-09B 10/26/22	MW-09C 10/26/22	OBS-1 10/25/22
VOLATILE COMPOUNDS	NYSDEC Class GA Standard or Guidance Value													
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	***3.8***	1.2	1.1	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	***2.1***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	***17.4***	1.9	2.7	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	2.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	5	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***6.6***	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	5	1 U	1 U	1 U	1 U	1.2	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	5	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethylene(PCE)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***7.0***	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	***8.4***	1 U	1 U	***7.7***	1 U	1 U	1 U	1 U	1.3	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Total Volatile Compounds	--	9.5	ND	ND	7.7	29.5	4.6	3.8	ND	16	ND	ND	ND	ND

ug/l Micrograms per liter
U Compound was analyzed for but not detected
J Estimated limit
-- No standard
ND Not detected
Exceeds NYSDEC Class GA Standard or Guidance Value

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Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID	LF-1	LF-1	LF-2	LF-2	MW-05B	MW-05B	MW-06A	MW-06A	MW-06B	MW-06B	MW-06C	MW-06C	MW-06E	MW-06E
	Sample Date	11/1/22	11/1/22	10/28/22	10/28/22	10/27/22	10/27/22	10/31/22	10/31/22	11/1/22	11/1/22	10/31/22	10/31/22	11/1/22	11/1/22
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value														
Aluminum	--	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	72.7 J	69.1 J	53.7 J	55.8 J	40.7 J	40.8 J	49.1 J	43.7 J	80.4 J	73.6 J	36.5 J	24.1 J	134 J	126 J
Calcium	--	12300	11800	48100	50100	12200	12600	3530	3510	29600	26800	63000	56400	21800	20300
Chromium	50	10 U	10 U	4.3 J	4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Copper	200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	***16000***	***15200***	***10500***	***11300***	100 U	8.4 UB	224	170	***19400***	***17400***	***6890***	***3250***	***15800***	***15000***
Lead	25	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Magnesium	35000	8340	7800	29400	29500	4960	5100	3640	3560	32600	28500	14800	13400	14800	13700
Manganese	300 #	***2640***	***2330***	***183***	***190***	***2660***	***2640***	19	17.5	***57.9***	***48***	***188***	***105***	***263***	***228***
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	10.6 J	7.5 J	12.3 J	11.2 J	8.7 J	7.7 J	10 J	6.6 J	6.8 J	6.1 J	16 J	13.4 J	16.1 J	11.9 J
Potassium	--	12300	11400	88200	92500	9010	9380	2750 J	2790 J	107000	88600	56200 J	53300	33300	29400
Sodium	20000	***77200***	***72800***	***295000***	***311000***	***57000***	***59400***	13200	12600	***117000***	***107000***	***265000***	***240000***	***142000***	***133000***
Zinc	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	5.2 J

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Not detected base on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 2
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Total and Dissolved Metals

Units in ug/l	Sample ID / Sample Date / Type:	MW-06F 10/31/22 Total	MW-06F 10/31/22 Dissolved	MW-08A 10/27/22 Total	MW-08A 10/27/22 Dissolved	MW-08B 10/27/22 Total	MW-08B 10/27/22 Dissolved	MW-09B 10/26/22 Total	MW-09B 10/26/22 Dissolved	MW-09C 10/26/22 Total	MW-09C 10/26/22 Dissolved	OBS-1 10/25/22 Total	OBS-1 10/25/22 Dissolved
METALS	NYSDEC Class GA Standard or Guidance Value												
Aluminum	--	237	154 J	73.2 J	56.4 J	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Barium	1000	255	241 J	53 J	55 J	59.8 J	59 J	83.7 J	85.3 J	59.4 J	61.6 J	33.1 J	33.4 J
Calcium	--	44400	43400	4330	4680	14000	14400	11700	11800	10700	11000	11200	11200
Chromium	50	10 U	10 U	10 U	10 U	10 U	10 U	1.3 J	10 U	1.3 J	10 U	10 U	10 U
Copper	200	6.8 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Iron	300 #	77.9 J	19.6 UB	27.6 J	27.6 UB	100 U	20 U	***21.8 J***	27.6 UB	38.1 J	29.3 UB	***23.9 J***	20.4 UB
Lead	25	3.6 J	5 U	5 U	5 U	5 U	5 U	3.6 UB	5 U	2.4 UB	5 U	5 U	5 U
Magnesium	35000	17400	16800	4290	4510	3960	4020	5890	5820	6800	6820	6750	6820
Manganese	300 #	143	129	98	96.8	***496***	***489***	***2330***	***2410***	241	248	***2100***	***2120***
Mercury	0.7	0.38	0.11 J	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.091 J
Nickel	100	38.2 J	30.8 J	10.1 J	9.5 J	14.5 J	13.3 J	5.8 J	5 J	6.2 J	6.8 J	4.5 J	40 U
Potassium	--	10400 J	10400	3820 J	4190 J	7720	7890	9200	9490	9890	10300	17100 J	17100
Sodium	20000	***182000***	***168000***	14400	16000	***96100***	***97000***	***54300***	***58500***	***56600***	***61000***	***43600***	***41900***
Zinc	2000	27.2	24.2	11.8 J	14.3 J	24.1	24.5	20 U	20 U	20 U	20 U	20 U	20 U

Footnotes/Qualifiers:

ug/l	Micrograms per liter
#	Standard for total iron and manganese is 500 ug/l
U	Compound was analyzed for but not detected
J	Estimated value
UB	Not detected base on blank results
--	No standard

Exceeds NYSDEC Class GA Standard or Guidance Value

Table 3
Old Bethpage Landfill Complex
Post-Termination Groundwater Monitoring Program
Monitoring Well Sample Results
Leachate Indicator Parameters

Units in mg/l	Sample ID Sample Date	LF-1 11/1/22	LF-2 10/28/22	MW-05B 10/27/22	MW-06A 10/31/22	MW-06B 11/1/22	MW-06C 10/31/22	MW-06E 11/1/22	MW-06F 10/31/22	MW-08A 10/27/22	MW-08B 10/27/22	MW-09B 10/26/22	MW-09C 10/26/22	OBS-1 10/25/22
LEACHATE INDICATORS	NYSDEC Class GA Standard or Guidance Value													
Alkalinity, Total	---	54.8	1130	40.6	3.6	1000	664	193	1.0 U	3.0	12.0	43.4	52.9	130
Alkalinity,Bicarbonate	---	54.8	1130	40.6	3.6	1000	664	193	1.0 U	3.0	12.0	43.4	52.9	130
Alkalinity,Carbonate	---	1.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloride	250	132	248 J	98.9 J	29.4	71.6	***281***	***257***	***443***	29.1 J	179 J	101	105	62.5
Cyanide	0.2	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Hardness	---	65.1	241	50.9	23.8	208	218	115	183	28.5	51.3	53.5	54.7	55.8
Hexavalent Chromium	0.05	0.020 UJ	0.020 U	0.020 UJ	0.020 UJ	0.020 UJ	0.020 UJ	0.020 UJ	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Nitrogen, Ammonia	2	0.17 UB	***81.3***	0.10 U	0.17 UB	***124***	***53.2***	***22.6***	0.17 UB	0.10 U	0.071 UB	0.81	1.3	***12.3***
Nitrogen, Kjeldahl, Total	---	0.39	85.6	0.12	0.10 U	124	55.0 J	25.0	0.11	0.10 U	0.10 U	0.39	1.7	13.0
Nitrate	10	0.050 U	0.050 U	3.5	1.1	0.050 U	0.050 U	2.1	4.0	1.5	2.5	2.9	0.57	0.35
Nitrite	1	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
Phenolics, Total	0.001	0.0055 U	***0.0157***	***0.0038 J***	***0.003 J***	***0.0089***	***0.0042 J***	***0.0034 J***	0.0055 U	0.0055 U	***0.0047 J***	0.0055 U	***0.0047 J***	0.0055 U
Sulfate	250	33.2	53.6	20.0 J	5.8 J	5.0 U	5.3 J	42.5	5.0 UB	22.7 J	27.7 J	21.7 J	20.9 J	18.4 J
Total Dissolved Solids	500	388 J	***1240 J***	261 J	94.0	***682 J***	***900***	***612 J***	***774***	128 J	349 J	261 J	266 J	219 J

Footnotes/Qualifiers:

mg/l	Milligrams per liter
U	Compound was analyzed for but not detected
UB	Non-detect based on blank results
J	Estimated detection limit or value
--	No standard or not analyzed

Exceeds NYSDEC Class GA Standard or Guidance Value

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