D&B ENGINEERS AND ARCHITECTS, P.C.

DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING

Old Bethpage Landfill

Post-Termination Groundwater Monitoring Program

First Semiannual Report of 2019

October 2019

D&B ENGINEERS AND ARCHITECTS, P.C.

FIRST SEMIANNUAL REPORT OF 2019

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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OCTOBER 2019

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1.0 INTRODUCTION

This First Semiannual Report of 2019 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 operational termination of the recovery wells RW-1 and RW-2.

Note that this report describes the first semiannual groundwater sampling event of 2019 and is the fifth sampling round and report completed under the Post-Termination Groundwater Monitoring Program. In an October 7, 2016 letter, the NYSDEC approved the operational termination 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 will be performed semi-annually for three years, for a total of six rounds. Each report will include all previously collected Post-Termination data, and the final report will evaluate if the termination criteria described in Appendix A, Section III of the Consent Decree has been met.

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-5B, MW-06A, MW-6B, MW-6C, MW-6E, MW-6F, MW-8A, MW-8B, MW-9B, MW-9C and OBS-1 were sampled on May 22, 23 and 24, 2019 as part of the first semiannual groundwater sampling event of 2019. The locations of these monitoring wells are depicted on **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 directly from the pump discharge. 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 three 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 2019 from the monitoring wells were analyzed for VOCs, total and dissolved metals and leachate indicators. Laboratory analyses were performed by Pace Analytical Laboratories of 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 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 three trip blanks were collected as part of the first semiannual groundwater sampling event of 2019 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 Services, LLC, located in Melville, New York, and was reported in data packages 7090528; phenolics were subcontracted to EnviroTest Laboratories, Inc., in Newburgh, New York.

The data packages submitted by the analytical laboratory were validated in accordance with NYSDEC quality assurance/quality control (QA/QC) requirements. All samples were analyzed within the method specified holding times. The Data Validation Checklists are provided in **Appendix C**. The laboratory data packages are provided in **Appendix D**. The following qualification of the data was required based on the findings of the data validation:

- The percent recovery (%R) was below the QC limit for bromoform in the matrix spike (MS) and laboratory control sample (LCS) and was qualified as an estimated detection limit in all samples (UJ).
- Total iron was detected in the Field Blank and was qualified as non-detect (UB) in samples MW-5B, BLIND DUPLICATE, MW-6A, MW-8A, MW-8B, MW-9B, MW-9C and OBS-1.
- The dissolved aluminum and iron %Rs were above the QC limits in the spike sample and had relative percent difference above the QC limit in the duplicate. Dissolved aluminum and iron were qualified as estimated (UJ/J) in all samples.
- Ammonia was detected in the Field Blank and was qualified as non-detect (UB) in sample MW-08B.
- The %Rs for hexavalent chromium and total kjeldahl nitrogen were below the QC limits in the MS associated with samples LF-1 and FIELD BLANK and nitrate associated with samples LF-2, MW-06A, MW-06B, MW-06C, MW-06E and FIELD BLANK. They were qualified as estimated (J/UJ) in the associated samples.

- The %Rs were above the QC limits in the MS for total dissolved solids and nitrite associated with all samples. Total dissolved solids in all samples and nitrite in samples MW-5B and BLIND DUPLICATE were detected and qualified as estimated (J).

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 2019 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 New York State Department of Environmental Conservation Ambient Water Quality Standards and Guidance Values for Class GA groundwater (herein referred to as the Class GA groundwater standards and guidance values).

3.2.1 Volatile Organic Compounds

Detectable concentrations of VOCs were identified in 8 of the 13 groundwater monitoring wells, including LF-2, MW-6A, MW-6B, MW-6C, MW-6E, MW-8A, MW-9B and MW-9C. The highest concentration of total VOCs of 14.1 ug/l was detected at MW-8A. The sample collected from MW-6B exhibited the next highest total VOCs of 12.6 ug/l, followed in decreasing order by LF-2, MW-6C, MW-9C, MW-6E, MW-6A and MW-9B. VOCs were detected at concentrations above Class GA groundwater standards and guidance values at wells LF-2, MW-6B and MW-8A as follows:

- Benzene was detected at LF-2 and MW-6B at concentrations of 2.3 ug/l and 2.1 ug/l, respectively, slightly above the Class GA standard of 1 ug/l.
- Chlorobenzene was detected at MW-6B at a concentration of 5.4 ug/l, slightly above the Class GA standard of 5 ug/l.
- Cis-1,2-dichloroethylene (1,2-DCE) was detected at MW-8A at concentration of 10 ug/l, above the Class GA standard of 5 ug/l.

3.2.2 Inorganic Parameters

Iron, manganese and sodium were detected above groundwater standards in both total and dissolved samples, as described below. Note that concentrations of total metals may be elevated due to the presence of suspended solids in the sample, and therefore the dissolved (filtered) analysis more closely represents actual groundwater conditions.

- Total iron was detected above the Class GA groundwater standard of 300 ug/l in 5 of the 13 groundwater monitoring wells with concentrations ranging from 6,700 ug/l at MW-6C to a maximum of 16,200 ug/l at MW-6E. Dissolved iron concentrations were generally lower but similar to their respective total concentrations, with a maximum concentration of 16,000 ug/l detected at MW-6E.
- Total manganese was detected above the Class GA groundwater standard of 300 ug/l in 6 of the 13 groundwater monitoring wells with concentrations ranging from 479 ug/l at MW-6E to a maximum of 3,690 ug/l at MW-5B. Dissolved manganese concentrations were generally lower but similar to their respective total concentrations, with a maximum concentration of 3,530 ug/l detected at MW-5B.
- Total sodium was detected above the Class GA groundwater standard of 20,000 ug/l in 12 of the 13 groundwater monitoring wells, with concentrations ranging from 41,700 ug/l at MW-8A to a maximum of 429,000 ug/l at MW-6C. Dissolved sodium concentrations were similar to their respective total concentrations, with a maximum concentration of 411,000 ug/l detected at LF-2.

3.2.3 Leachate Indicators

Chloride, ammonia and total phenols 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 4 of the 13 groundwater monitoring wells, with concentrations ranging from 294 mg/l at MW-8B to a maximum of 383 mg/l at LF-2.
- Ammonia was detected above the Class GA groundwater standard of 2 mg/l in 8 of the 13 groundwater monitoring wells, with concentrations ranging from 2.2 mg/l at MW-9C to a maximum of 145 mg/l at LF-2.
- Total phenols were detected above the Class GA groundwater standard of 0.001 mg/l at MW-6C with a reported concentration of 0.011 mg/l.

3.3 Historical Groundwater Trends

Since the objective of the Post-Termination monitoring period (2017 through 2019), is to assess the impacts of turning off recovery wells (RW-1 and RW-2), D&B performed an interim trend analysis using the results from the five 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. The following provides a brief discussion for the trend analysis.

3.3.1 Total Volatile Organic Compounds

During the Post-Termination period, seven monitoring wells (MW-05B, MW-06F, MW-08B, MW-09B, MW-09C, OBS-1 and LF-1), in general exhibited a fairly flat trend. Monitoring wells MW-06A, MW-06B and LF-2, in general exhibited a decreasing trend. For well MW-06E, TVOCs initially increased, however has shown a substantial decrease over the past two sampling events. Three wells (MW-06C, MW-08A and MW-09C) have exhibited a slight increase in TVOCs in comparison to historical data in 2015 and 2016.

3.3.2 Inorganic Parameters

Historical graphs and trends 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.

3.3.3 Leachate Indicators

The following leachate indicators which exceeded the Class GA groundwater standards included: ammonia, chloride and total phenols. In general, these leachate indicators exhibited either a decreasing or relatively flat trend in the majority of the wells.

4.0 CONCLUSIONS

The first semiannual groundwater sampling event of 2019 described in this report is the fifth sampling round and report completed under the Post-Termination Groundwater Monitoring Program. The Town will continue the Post-Termination Monitoring program, which will be performed semi-annually for three years, for a total of six rounds. Each report will include all previously collected Post-Termination data, and the final report will evaluate if the termination criteria described in Appendix A, Section III of the Consent Decree has been met. Previously collected Post-Termination data is provided in **Appendix F**.

The concentrations of VOCs, metals and leachate indicators detected during the first semiannual groundwater sampling event of 2019, including those detected above Class GA groundwater standards and guidance values, appear to be generally consistent with historical results.

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

ROAD

CLAREMENT POLYCHEMICAL SITE

M-29A-R

M-30A

M-30B-R

M-29B

LANDFILL BOUNDARY

ROUND SWAMP ROAD

PHASE II PIT

TW-1

OLD BETHPAGE LANDFILL

LF-2

MW-8A,B,C

MW-10A,B,C,D

TW-2

TW-3-R

LF-1

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

WINDING ROAD

TOWN PROPERTY BOUNDARY

RW-5

NASSAU COUNTY FIRE SERVICE ACADEMY

TOWN RECHARGE BASIN NO. 33

MW-5A,B

MW-9A,B,C

RW-4

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

RW-1

RW-2

RW-3

MW-7A,B-R

OBS-1

BETHPAGE GOLF COURSE

ROUND SWAMP ROAD

ROAD

MW-11A,B

QUAKER MEETING HOUSE ROAD

MELVILLE

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

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OLD BETHPAGE LANDFILL
TOWN OF OYSTER BAY, NEW YORK

GROUNDWATER MONITORING WELL LOCATION MAP

SCALE: 1"=800'

FIGURE 1

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 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

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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 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		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	NYSDEC Class GA Standard or Guidance Value												
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

APPENDIX A

GROUNDWATER SAMPLING LOGS

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

SITE Town of Oyster Bay Landfill DATE 5/24/19

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) ..... 43.82'
Approximate Pump Inlet (feet from top of casing) ..... 49'

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: 58.18 ft. of water x 1.47 = 86 gallons

volume of water removed:
380 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	7.69	17.42	0.445	0.0	13.55	105
100	7.48	16.94	0.493	0.0.	1.06	-87
150	7.53	16.90	0.492	0.0	3.00	-99
200	7.58	16.88	0.490	0.0	3.33	-101
250	7.66	16.88	0.488	0.0	3.89	-110
300	7.69	16.88	0.485	0.0	3.52	-112
350	7.72	16.88	0.484	0.0	3.96	-115
380	7.73	16.89	0.483	0.0	3.94	-117

Purging Rate: 3 GPM
Purging Time: 129 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 11:40 a.m.

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

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

Observations
Weather/Temperature: Sunny Clear, 65-75 F.
Sample description: Clear.
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/23/19

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

Depth of well (feet from top of casing) ..... 102.10'
Initial static water level (feet from top of casing) ..... 51.55'
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
6 in. casing: 50.55 ft. of water x 1.47 = 74.3 gallons

volume of water removed: 350 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	8.09	16.62	3.05	0.8	0.00	-194
100	8.02	16.63	3.45	0..0	0.00	-198
200	8.08	16.63	3.45	0.0	0.00	-189
250	8.08	16.64	3.42	0.0	0.00	-188
300	8.09	16.63	3.36	0.0	0.00	-190
350	8.10	16.63	3.39	0.0	0.00	-190

Purging Rate: 5 GPM
Purging Time: 65 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 10:15 a.m.

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

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

Observations
Weather/Temperature: Cloudy/ light rain 55-60 F.
Sample description: Clear - Yellow tint.
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes X no ____ describe Sulfur-like odor

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/19

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

Depth of well (feet from top of casing)	117.25'
Initial static water level (feet from top of casing)	71.79'
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:	45.46	ft. of water x 0.65 =	29.5	gallons

volume of water removed: 165 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	7.08	15.70	0.469	2,3	13.75	259
60	5.94	15.59	0.476	0.0	3.80	238
90	5.93	15.53	0.477	0.0	2.52	228
120	5.94	15.48	0.477	0.0	0.84	216
150	6.00	15.46	0.478	0.0	0.00	207
165	6.03	15.47	0.478	0.0	0.00	205

Purging Rate: 3 GPM
Purging Time: 55 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling

Time of Sample Collection: 2:00 p.m.

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

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

Observations

Weather/Temperature: Sunny Clear, 60 -70 F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____
Note: Collected Blind Duplicate at well MW-05B

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

SITE Town of Oyster Bay Landfill DATE 5/23/2019

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

Depth of well (feet from top of casing) ..... 100.40'
Initial static water level (feet from top of casing) ..... 94.5'
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: 5.9 ft. of water x 0.65 = 3.8 gallons

volume of water removed:
35 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	6.13	15.92	0.138	4.7	11.05	153
10	5.03	15.28	0.136	0.0	8.46	218
20	5.42	15.95	0.128	0.0	10.66	240
25	5.39	15.94	0.127	0.0	11.05	252
30	5.40	15.96	0.127	0.0	9.55	257
35	5.58	15.91	0.125	0.0	9.82	257

Purging Rate: 1 GPM
Purging Time: 45 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 6:00 p.m.

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

Analyses: Pace Analytical ab
X VOCs
X Total & Dissolved Metals
Leachate
X Parameters

Observations
Weather/Temperature: Cloudy/cool 55-65 F
Sample description: clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/23/2019

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

Depth of well (feet from top of casing) ..... 134.90'
Initial static water level (feet from top of casing) ..... 94.55'
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: 40.35 ft. of water x 0.65 = 26.2 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	7.10	17.40	3.14	38.8	4.39	-92
40	7.06	17.88	3.35	62	1.26	-113
80	7.10	17.86	3.42	9	0.76	-113
100	7.11	17.92	3.39	18.4	0.60	-117
120	7.12	17.90	3.38	27.4	0.60	-119
140	7.12	17.86	3.37	23.3	0.57	-120

Purging Rate: 2 GPM
Purging Time: 70 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 4:00 p.m.

Method:		Analyses: Pace Analytical	
X	Submersible Pump	X	VOCs
X	In-Line Filter (Diss. Metals)		
____	Pos. Disp. Pump	X	Total & Dissolved Metals
	Disposable bailer		Leachate
____		X	Parameters
____	Dedicated pump		

Observations
Weather/Temperature: Cloudy 55-65 F
Sample description: Clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/23/2019

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

Depth of well (feet from top of casing) ..... 160.90'
Initial static water level (feet from top of casing) ..... 94.00'
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: 66.9 ft. of water x 0.65 = 43.48 gallons

volume of water removed: 225 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	6.94	17.96	1.95	7.7	16.74	-77
50	7.17	18.26	2.38	8.5	1.21	-116
125	7.15	18.26	2.45	44.1	0.74	-120
150	7.14	18.26	2.62	0.0	1.36	-109
175	7.13	18.28	2.66	0.0	1.43	-114
200	7.15	18.30	2.63	13.9	0.81	-116
225	7.16	18.30	2.62	0.0	0.82	-116

Purging Rate: 2.5 GPM
Purging Time: 90 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 1:25 p.m.

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

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

Observations
Weather/Temperature: Cloudy, cool 55-65 F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes X no ____ describe Slight landfill like odor

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/23/2019

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

Depth of well (feet from top of casing) ..... 251' historical log
Initial static water level (feet from top of casing) ..... 92.20'
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: 155.28 ft. of water x 0.65 = 101.27 gallons

volume of water removed: 420 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	7.61	16.78	1.86	7.3	0.0	-142
60	7.47	17.01	1.79	57	0.0	-130
120	7.26	16.82	1.63	56	0.0	-102
180	7.30	16.82	1.61	2	0.0	-98
240	7.36	16.85	1.59	0	0.0	-101
300	7.36	16.82	1.54	0	0.0	-99
360	7.34	16.79	1.53	0	0.0	-91
420	7.32	16.80	1.51	0	0.0	-88

Purging Rate: 3.0 GPM
Purging Time: 140 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 4:55 p.m.

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

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

Observations
Weather/Temperature: Cloudy cool 55-65 F
Sample description: Clear.
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/23/2019

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

Depth of well (feet from top of casing) ..... 349' historical log
Initial static water level (feet from top of casing) ..... 94.60'
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: 254.4 ft. of water x 0.65 = 165 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	4.70	16.11	0.749	0	3.39	307
100	4.70	16.97	0.699	0	4.87	278
150	4.61	16.04	0.754	0	0.0	286
200	4.41	15.31	0.801	0	0.0	310
250	4.36	15.23	0.822	0	0.0	321
300	4.36	15.17	0.831	0	0.0	326
350	4.42	15.15	0.836	0	0.0	328
400	4.44	15.14	0.843	0	0.0	329
450	4.50	15.11	0.856	0	0.0	329
500	4.53	15.11	0.863	0	0.0	330

Purging Rate: 5.0 GPM
Purging Time: 100 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
X VOCs
X Total & Dissolved Metals
Leachate
X Parameters

Observations
Weather/Temperature: Cloudy cool 55-65 F
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/2019

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

Depth of well (feet from top of casing) ..... 80.70'
Initial static water level (feet from top of casing) ..... 68.36'
Approximate Pump Inlet (feet from top of casing) ..... 74'

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: 12.34' ft. of water x 0.65 = 8 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	5.04	14.09	0.091	10.5	12.46	328
10	3.97	13.17	0.105	5.2	10.02	242
15	4.00	13.11	0.148	3.1	9.05	348
25	4.20	13.02	0.210	0.7	5.60	324
30	4.63	12.97	0.245	0.9	5.44	322
35	4.88	12.97	0.288	0.1	4.68	314
40	5.00	12.94	0.301	0.0	4.66	304

Purging Rate: 1.25 GPM
Purging Time: 32 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 6:00 p.m.

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

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

Observations
Weather/Temperature: Sunny Clear, 60-70 F
Sample description: Clear
Free Product? yes ____ no X describe _____
Sheen? yes ____ no X describe _____
Odor? yes ____ no X describe _____

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/2019

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

Depth of well (feet from top of casing) ..... 160.20'
Initial static water level (feet from top of casing) ..... 67.80'
Approximate Pump Inlet (feet from top of casing) ..... 73'

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: 92.4 ft. of water x 0.65 = 60 gallons

volume of water removed: 240 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	6.58	14.00	0.772	3.9	18.20	240
30	6.23	13.29	0.792	14.6	1.15	188
60	5.65	13.20	0.911	15	0.0	197
90	5.31	13.11	0.975	12	0.0	222
120	5.25	13.08	0.992	13	0.0	231
150	5.27	13.11	1.00	2.9	0.0	241
180	5.23	13.08	1.01	2.4	0.0	251
210	5.15	13.04	1.02	2.4	0.0	266
240	5.18	13.04	1.02	0.2	0.0	268

Purging Rate: 2.5 GPM
Purging Time: 96 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 4:45 p.m.

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

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

Observations
Weather/Temperature: Sunny, clear, warm 60-70 F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/2019

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

Depth of well (feet from top of casing) 169.10
Initial static water level (feet from top of casing) 89.81
Approximate Pump Inlet (feet from top of casing) ..... 95'

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: 79.29 ft. of water x 0.65 = 51.5 gallons

volume of water removed: 225 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	5.28	16.38	0.571	0.0	7.14	322
30	5.12	15.26	0.526	0.0	1.70	321
60	5.19	15.29	0.513	0.0	1.08	313
90	5.26	15.23	0.514	0.0	1.31	304
120	5.31	15.21	0.515	0.0	1.13	288
150	5.34	15.21	0.517	0.0	1.09	285
180	5.37	15.17	0.519	0.0	1.05	283
210	5.42	15.20	0.520	0.0	1.01	281
225	5.43	15.19	0.521	0.0	1.00	281

Purging Rate: 3 GPM
Purging Time: 75 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 11:40 a.m.

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

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

Observations
Weather/Temperature: Sunny, clear 60-70 F
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/2019

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

Depth of well (feet from top of casing) ..... 225' historical log
Initial static water level (feet from top of casing) ..... 90.51'
Approximate Pump Inlet (feet from top of casing) ..... 96'

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: 134.49 ft. of water x 0.65 = 87.4 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	5.88	13.61	0.215	4.3	7.57	285
100	5.52	14.29	0.395	1.0	4.85	288
150	5.84	14.34	0.477	0.4	2.30	262
200	5.95	14.34	0.486	0.1	0.0	246
250	6.00	14.33	0.488	0.1	0.0	235
300	6.04	14.32	0.489	0.0	0.0	229
350	6.07	14.32	0.490	0.0	0.0	223
375	6.09	14.32	0.490	0.0	0.0	219

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: 11:45 a.m.

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

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

Observations
Weather/Temperature: Sunny, clear skies 60-70 F
Sample description: Clear
Free Product? yes ____ no X describe
Sheen? yes ____ no X describe
Odor? yes ____ no X describe

D&B ENGINEERS AND ARCHITECTS, P.C.

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

SITE Town of Oyster Bay Landfill DATE 5/22/2019

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

Depth of well (feet from top of casing) ..... 194.75'
Initial static water level (feet from top of casing) ..... 46.76'
Approximate Pump Inlet (feet from top of casing) ..... 52'

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: 147.99 ft. of water x 0.65 = 96.1 gallons

volume of water removed: 425 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	6.45	14.59	0.454	2.3	2.14	186
100	6.37	15.24	0.667	11.1	0.0	56
150	6.39	15.23	0.657	16.7	0.0	57
200	6.41	15.25	0.644	21.8	0.0	59
250	6.42	15.27	0.644	26.9	0.0	62
300	6.46	15.30	0.627	35.8	0.0	64
350	6.82	15.29	0.681	0	0.0	50
400	6.81	15.29	0.674	0	0.0	51
425	6.81	15.29	0.671	0	0.0	52

Purging Rate: 5 GPM
Purging Time: 85 min
Sampling Rate: 0.1l/min VOCs / 0.5l/min Other Analytes

Sampling
Time of Sample Collection: 9:15 a.m.

Method:

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

Analyses: Pace Analytical

X	VOCs
X	Total & Dissolved Metals
	Leachate
X	Parameters

Observations
Weather/Temperature: Sunny, warm 0-70 F
Sample description: Clear
Free Product? yes ____ no X describe ____
Sheen? yes ____ no X describe ____
Odor? yes ____ no X describe ____

D&B ENGINEERS AND ARCHITECTS, P.C.

APPENDIX B

CHAIN OF CUSTODY FORMS

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Docu

WO# : 7090528

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

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Town of Oyster Bay	Report To: Russo, Matt	Attention:	
Address: 150 Miller Place	Copy To:	Company Name:	Regulatory Agency
Syosset, NY 11791		Address:	
Email: mrusso@oysterbays.net	Purchase Order #	Pace Quote	
Phone: NONE Fax:	Project Name: Old Bethpage Landfill	Pace Project Manager: jennifer.graziani@pacelabs.com	State / Location: NY
Requested Due Date: Standard	Project #: 3421 (P/B)	Pace Profile #: 6466	

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 Cr6 (Field Filter)	Alk Cl,SO4,CO3,Cr6,HCO3	No2 TDS	Residual Chlorine (Y/N)	
	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																	Requested Analysis Filtered (Y/N)	N	N	N	C	N	N	N	N		Note for field filtered dissolved metals and dissolved Cr6 bottles for matrix: F
1	Trip Blank - 5/22/19	WT	G	5/22/19	-	5/22/19	-		2	-	-	-	-	2	-	-	-		✓	-	-	-	-	-	-	-	N	001
2	OBS-1 - 5/22/19	GW	G	5/22/19	0915	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	002+003
3	MW-09B - 5/22/19	GW	G	5/22/19	1144 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	004+005
4	MW-09C - 5/22/19	GW	G	5/22/19	1145 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	006+007
5	Blind Duplicate - 5/22/19	GW	G	5/22/19	0000	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	008+009
6	MW-05B - 5/22/19	GW	G	5/22/19	1400 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	010+011
7	MW-08B - 5/22/19	GW	G	5/22/19	1445 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	012+013
8	MW-08A - 5/22/19	GW	G	5/22/19	1600 pm	5/22/19	-		8	2	1	2	2	0	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	014+015
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill / Provide Category B deliverables	Keith Rebus / P&B	5/22/19	1530		5/22/19	1530	1	8	N	4
Field Filtered Cr+6 metals (dissolved)										
Cr+6 - Analyze at Cr+6										
Send data to Labdata@dbbengineering.com										

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Keith Rebus		
SIGNATURE of SAMPLER:	Keith Rebus	DATE Signed:	5/22/19

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

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

WO# : 7090528

PM: JSA Due Date: 06/07/19

CLIENT: TOY

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company	Town of Oyster Bay	Report To	Russo, Matt	Attention	T.O.B. / D+G
Address	150 Miller Place	Copy To	Anthony Clemons (516) Env. Conservation	Company Name	D+G Engineering & Architects, P.C.
	Syosset, NY 11791	Purchase Order #		Address	330 Crossways Park Drive
Email	mrusso@tobays.net	Project Name	Old Bethpage Landfill	Pace Quote	
Phone	NONE Fax	Project #	3611	Pace Project Manager	jennifer.aracri@pacelabs.com
Requested Due Date	Standard			Pace Profile #	6466

Regulatory Agency	
State / Location	NY

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

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	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 (Field Filter)	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	
																		Y/N	N	N	N	N	N	N	N	N		
																		Analyses Test										
1	Tr. Blank	WQ	—	5/22/19	—	5/23/19	—		3	1	—	—	2	—	—	—	1		✓	✓	—	✓	—	—	±	—		N	016
2	GE-2	GW	G	5/23/19	1015	5/23/19	—		8	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	017+018
3	MW-06F	GW	G	5/23/19	1150	5/23/19	—		8	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	~~019~~ 020
4	MW-06C	GW	G	5/23/19	1250	5/23/19	—		8	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	~~021~~ 022
5	MW-06B	GW	G	5/23/19	1400	5/23/19	—		3	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	~~023~~ 024
6	MW-06E	GW	G	5/23/19	1455	5/23/19	—		8	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	~~025~~ 026
7	MW-06A	GW	G	5/23/19	1600	5/23/19	—		8	2	1	2	2	1	—	—	—		✓	✓	✓	✓	✓	✓	✓	✓		N	~~027~~ 028
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Old Bethpage Landfill / provide coolers to deliverer	Keith Rowe (D+G)	5/24/19			5/23/19	15:45
Filtered in Field bottles Required						
with "F" given for clarity on						
metals and 6 charges C.R.#6						
also send data to lab data@pdbeng.com						

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

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Keith Rowe
SIGNATURE of SAMPLER:	Keith Rowe
DATE Signed:	5/23/19

PaceAnalytical

CHAIN-OF-CUSTODY / Analytical Request Doc

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

WO#: 7090528

PM: JSA Due Date: 06/07/19

CLIENT: TOY

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company	Town of Oyster Bay	Report To	Russo, Matt	Attention	Anthony Carlino
Address	150 Miller Place	Copy To	Anthony Carlino	Company Name	D&B Engineers + Architects P.C.
	Syosset, NY 11791	Email	[illegible]	Address	330 Crossways Park Drive
Email	[illegible]	Purchase Order #		Pace Quote	
Phone	NONE	Project Name	Old Bethpage Landfill	Pace Project Manager	jennifer.aracri@pacelabs.com
Requested Due Date	Standard Turnaround Time	Project #	3613 (P18)	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 (Field Filter)	Alk CL,SO4 CO3,CaCO3,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																	N	N	N	N	N	N	N	N			
1	Trip Blank - 5/24/19	WQ	G	5/24/19	--	5/24/19	--		2	--	--	--	3	--	--	--	--		✓	--	--	--	--	--	--	--	--	N	029
2	LF-1 - 5/24/19	WQ	G	5/24/19	1140	5/24/19	1140		8	2	1	2	2	1	--	--	--		✓	✓	✓	✓	✓	✓	✓	✓	✓	N	030 + 031
3	Field Blank - 5/24/19	WQ	G	5/24/19	1230	5/24/19	1230		8	2	1	2	2	1	--	--	--		✓	✓	✓	✓	✓	✓	✓	✓	✓	N	032 + 033
4																													
5																													
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 Rubino D&B	5/24/19	1530	[illegible]	5/24/19	1530	4.1	Y	N	
Provide Copy of B Deliverables								0		
Send Del. to Cc blake@dbeng.com										
Field Filtered Required on										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH RUBINO

SIGNATURE of SAMPLER: Keith Rubino DATE Signed: 5-24-19

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

6 bottles with F.D. dissolved metals
Cr+6

Job completed as of 5/24/19.

APPENDIX C

DATA VALIDATION CHECKLIST

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	Old Bethpage Landfill
Project Number:	3617
Sample Date(s):	May 22-24, 2019
Sample Team:	Keith Robins
Matrix/Number of Samples:	Water/ 13 Field Duplicates/ 1 Trip Blanks / 3 Field Blanks/ 1
Analyzing Laboratory:	Pace Analytical, Melville, NY for all analysis except phenolics which was subcontracted to EnviroTest Laboratories, Inc, Newburgh, NY
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 (SM2340C), Total Dissolved Solids (SM 2540C), Hexavalent Chromium (SM22 3500), Chloride and Sulfate (USEPA 300.0), Total Kjeldahl Nitrogen (TKN) (USEPA 351.2), Nitrate-Nitrite and Nitrite (USEPA 353.2), Cyanide (SM 4500) and Ammonia (SM22 4500). Phenolics (USEPA 420.4) by EnvrioTest.
Laboratory Report No:	7090528 Date: 6/14/2019

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, January 2017, or USEPA National Functional Guidelines of Inorganic Data Review, January 2017,, 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, P.C.

Custody Numbers:7090528
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis				
				VOC	SVOC	PCB	MET	MISC
TRIP BLANK	7090528001	5/22/2019		X				
OBS-1	7090528002-3	5/22/2019		X			X	X
MW-09B	7090528004-5	5/22/2019		X			X	X
MW-09C	7090528006-7	5/22/2019		X			X	X
BLIND DUPLICATE	7090528008-9	5/22/2019	MW-05B	X			X	X
MW-05B	7090528010-11	5/22/2019		X			X	X
MW-08B	7090528012-13	5/22/2019		X			X	X
MW-08A	7090528014-15	5/22/2019		X			X	X
TRIP BLANK	7090528016	5/23/2019		X				
LF-2	7090528017-18	5/23/2019		X			X	X
MW-06F	7090528019-20	5/23/2019		X			X	X
MW-06C	7090528021-22	5/23/2019		X			X	X
MW-06B	7090528023-24	5/23/2019		X			X	X
MW-06E	7090528025-26	5/23/2019		X			X	X
MW-06A	7090528027-28	5/23/2019		X			X	X
TRIP BLANK	7090528029	5/24/2019		X				
LF-1	7090528030-31	5/24/2019		X			X	X
FIELD BLANK	7090528032-33	5/24/2019		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) %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 below the QC limit for bromoform in the LCS and MS and was qualified as an estimated detection limit in all samples (UJ).

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:

2B. Total barium, calcium, iron and magnesium were detected in the Field Blank. Total iron was qualified as non-detect (UB) in samples MW-5B, BLIND DUPLICATE, MW-6A, MW-8A, MW-8B, MW-9B, MW-9C and OBS-1.

4&5. The dissolved aluminum and iron %Rs were above the QC limits in the spike sample and had RPD above the QC limit in the duplicate. Dissolved aluminum and iron were qualified as estimated (UJ/J) 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		X	

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

Comments:
Performance was acceptable, except the following:

2B. Ammonia was detected in the Field Blank and was qualified as non-detect (UB) in sample MW-08B.

5. The %Rs for hexavalent chromium and total kjeldahl nitrogen were below the QC limits in the MS associated with samples LF-1 and FIELD BLANK and nitrate associated with samples LF-2, MW-06F, MW-06C, MW-06B, MW-06E, MW-06A, LF-1 and FIELD BLANK. They were qualified as estimated (J/UJ) in the associated samples.

The %Rs were above the QC limits in the MS for total dissolved solids and nitrite associated with all samples. Total dissolved solids in all samples and nitrite in samples MW-5S and BLIND DUPLICATE were detected and qualified as estimated (J).

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers:7090528

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOCs			
All samples	Bromoform	UJ	%R was below the QC limit for in the LCS
Metals			
MW-5B, BLIND DUPLICATE, MW-6A, MW-8A, MW-8B, MW-9B, MW-9C and OBS-1	Total iron	UB	Detected in the Field Blank
All sample	Dissolved aluminum and iron	UJ/J	%Rs were above the QC limits in the spike sample and had RPD above the QC limit in the duplicate
General Chemistry			
MW-08B	Ammonia	UB	detected in the Field Blank
LF-1 and FIELD BLANK	Hexavalent chromium and total kjeldahl nitrogen	J/UJ	The %Rs were below QC limits in the MS
LF-2, MW-06F, MW-06C, MW-06B, MW-06E, MW-06A, LF-1 and FIELD BLANK	Nitrate		
All samples	Total dissolved solids	J	The %R was above the QC limits in the MS and MSD
MW-5S and BLIND DUPLICATE	Nitrite		

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 7/15/2019
VALIDATION PERFORMED BY SIGNATURE:	

APPENDIX D

LABORATORY DATA REPORTS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

June 14, 2019

Tom Fox
Dvirka & Bartilucci
330 Crossways Park Drive
Woodbury, NY 11797

RE: Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Dear Tom Fox:
Enclosed are the analytical results for sample(s) received by the laboratory between May 22, 2019 and May 24, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Jennifer Aracri
jennifer.aracri@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Keith Robins, Dvirka & Bartilucci

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Long Island Certification IDs

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

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7090528001	**TRIP BLANK_5/22/19**	EPA 8260C/5030C	MJF	34	PACE-MV
7090528002	**OBS-1_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528003	**OBS-1_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528004	**MW-09B_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528005	**MW-09B_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528006	**MW-09C_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528007	**MW-09C_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528008	**BLIND DUPLICATE_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528009	**BLIND DUPLICATE_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528010	**MW-05B_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528011	**MW-05B_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528012	**MW-08B_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528013	**MW-08B_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528014	**MW-08A_5/22/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV

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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528015	**MW-08A_5/22/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528016	**TRIP BLANK_5/23/19**	EPA 8260C/5030C	MJF	34	PACE-MV
7090528017	**LF-2_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528018	**LF-2_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528019	**MW-06F_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV

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Melville, NY 11747
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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528020	**MW-06F_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528021	**MW-06C_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528022	**MW-06C_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528023	**MW-06B_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528024	**MW-06B_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528025	**MW-06E_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528026	**MW-06E_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528027	**MW-06A_5/23/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	KM1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528028	**MW-06A_5/23/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM22 3500-Cr B	KM1	1	PACE-MV
7090528029	**TRIP BLANK_5/24/19**	EPA 8260C/5030C	MJF	34	PACE-MV
7090528030	**LF-1_5/24/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528031	**LF-1_5/24/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV
7090528032	**FIELD BLANK_5/24/19**	EPA 200.7	JMW	13	PACE-MV
		EPA 245.1	JMW	1	PACE-MV
		EPA 8260C/5030C	MJF	34	PACE-MV
		SM22 2320B	AK1	3	PACE-MV
		SM22 2340C	AK1	1	PACE-MV
		SM22 2540C	KS1	1	PACE-MV
		SM22 3500-Cr B	AK1	1	PACE-MV
		EPA 300.0	BNK	1	PACE-MV
		EPA 351.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		EPA 353.2	SDO	1	PACE-MV
		SM22 4500-CN-E	JM3	1	PACE-MV
		SM22 4500-Cl-E	BNK	1	PACE-MV
		SM22 4500 NH3 H	BNK	1	PACE-MV
7090528033	**FIELD BLANK_5/24/19 DISS**	EPA 200.7	JMW	13	PACE-MV
		245.1 Rev. 3.0, 1994	KAS	1	PASI-PA
		SM22 3500-Cr B	AK1	1	PACE-MV

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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: TRIP BLANK_5/22/19 **Lab ID: 7090528001** Collected: 05/22/19 00:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 13:29	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 13:29	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 13:29	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:29	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 13:29	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 13:29	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 13:29	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 13:29	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	68-153	1		05/28/19 13:29	17060-07-0	
4-Bromofluorobenzene (S)	90	%	79-124	1		05/28/19 13:29	460-00-4	
Toluene-d8 (S)	88	%	69-124	1		05/28/19 13:29	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: OBS-1_5/22/19 **Lab ID: 7090528002** Collected: 05/22/19 09:15 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 12:52	7429-90-5	
Barium	**50.6J**	ug/L	200	1	06/04/19 09:09	06/11/19 12:52	7440-39-3	
Calcium	**16900**	ug/L	200	1	06/04/19 09:09	06/11/19 12:52	7440-70-2	
Chromium	**3.0J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:52	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 12:52	7440-50-8	
Iron	**65.5J**	ug/L	100	1	06/04/19 09:09	06/11/19 12:52	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 12:52	7439-92-1	
Magnesium	**13200**	ug/L	200	1	06/04/19 09:09	06/11/19 12:52	7439-95-4	
Manganese	**2430**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:52	7439-96-5	
Nickel	**6.5J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 12:52	7440-02-0	
Potassium	**24500**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:52	7440-09-7	
Sodium	**62100**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:52	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 12:52	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 10:53	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-25-2	CL,L2, M0
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 13:50	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 13:50	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 13:50	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 13:50	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 13:50	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: OBS-1_5/22/19 **Lab ID: 7090528002** Collected: 05/22/19 09:15 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 13:50	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 13:50	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 13:50	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	68-153	1		05/28/19 13:50	17060-07-0	
4-Bromofluorobenzene (S)	90	%	79-124	1		05/28/19 13:50	460-00-4	
Toluene-d8 (S)	89	%	69-124	1		05/28/19 13:50	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**186**	mg/L	1.0	1		05/31/19 18:58		
Alkalinity,Bicarbonate (CaCO3)	**186**	mg/L	1.0	1		05/31/19 18:58		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/31/19 18:58		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**85.0**	mg/L	5.0	1		06/11/19 12:34		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**498**	mg/L	20.0	1		05/29/19 09:59		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:11	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**32.0**	mg/L	5.0	1		06/08/19 04:40	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**18.0**	mg/L	1.0	10	06/07/19 05:57	06/07/19 13:15	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.42**	mg/L	0.050	1		05/23/19 01:34	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/22/19 23:31	14797-65-0	M1
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:32	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**77.3**	mg/L	10.0	5		06/07/19 12:17	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**19.7**	mg/L	1.0	10		06/11/19 14:55	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: OBS-1_5/22/19 DISS **Lab ID: 7090528003** Collected: 05/22/19 09:15 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 14:50	7429-90-5	
Barium, Dissolved	**49.3J**	ug/L	200	1		06/11/19 14:50	7440-39-3	
Calcium, Dissolved	**16600**	ug/L	1000	1		06/11/19 14:50	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 14:50	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 14:50	7440-50-8	
Iron, Dissolved	**39.8**	ug/L	20.0	1		06/11/19 14:50	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 14:50	7439-92-1	
Magnesium, Dissolved	**13000**	ug/L	1000	1		06/11/19 14:50	7439-95-4	
Manganese, Dissolved	**2330**	ug/L	10.0	1		06/11/19 14:50	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		06/11/19 14:50	7440-02-0	
Potassium, Dissolved	**23600**	ug/L	5000	1		06/11/19 14:50	7440-09-7	
Sodium, Dissolved	**60500**	ug/L	5000	1		06/11/19 14:50	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 14:50	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.050J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:47	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:11	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-09B_5/22/19 **Lab ID: 7090528004** Collected: 05/22/19 11:40 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 12:54	7429-90-5	
Barium	**80.4J**	ug/L	200	1	06/04/19 09:09	06/11/19 12:54	7440-39-3	
Calcium	**11700**	ug/L	200	1	06/04/19 09:09	06/11/19 12:54	7440-70-2	
Chromium	**3.9J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:54	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 12:54	7440-50-8	
Iron	**38.2J**	ug/L	100	1	06/04/19 09:09	06/11/19 12:54	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 12:54	7439-92-1	
Magnesium	**5040**	ug/L	200	1	06/04/19 09:09	06/11/19 12:54	7439-95-4	
Manganese	**2630**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:54	7439-96-5	
Nickel	**5.5J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 12:54	7440-02-0	
Potassium	**8580**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:54	7440-09-7	
Sodium	**52700**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:54	7440-23-5	
Zinc	**12.6J**	ug/L	20.0	1	06/04/19 09:09	06/11/19 12:54	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 10:59	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 14:10	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 14:10	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 14:10	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:10	71-55-6	
Trichloroethene	**1.1**	ug/L	1.0	1		05/28/19 14:10	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 14:10	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-09B_5/22/19 **Lab ID: 7090528004** Collected: 05/22/19 11:40 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 14:10	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 14:10	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 14:10	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	68-153	1		05/28/19 14:10	17060-07-0	
4-Bromofluorobenzene (S)	92	%	79-124	1		05/28/19 14:10	460-00-4	
Toluene-d8 (S)	91	%	69-124	1		05/28/19 14:10	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**30.3**	mg/L	1.0	1		05/31/19 19:04		
Alkalinity,Bicarbonate (CaCO3)	**30.3**	mg/L	1.0	1		05/31/19 19:04		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/31/19 19:04		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**46.7**	mg/L	5.0	1		06/11/19 12:36		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**308**	mg/L	20.0	1		05/29/19 10:00		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:12	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**20.7**	mg/L	5.0	1		06/08/19 04:57	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.86**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:31	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**4.6**	mg/L	0.50	10		05/23/19 01:36	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/22/19 23:34	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:33	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**76.9**	mg/L	10.0	5		06/07/19 12:18	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**1.7**	mg/L	0.10	1		06/10/19 14:46	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-09B_5/22/19 DISS **Lab ID: 7090528005** Collected: 05/22/19 11:40 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 14:55	7429-90-5	
Barium, Dissolved	**77.2J**	ug/L	200	1		06/11/19 14:55	7440-39-3	
Calcium, Dissolved	**11700**	ug/L	1000	1		06/11/19 14:55	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 14:55	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 14:55	7440-50-8	
Iron, Dissolved	**12.9J**	ug/L	20.0	1		06/11/19 14:55	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 14:55	7439-92-1	
Magnesium, Dissolved	**5040**	ug/L	1000	1		06/11/19 14:55	7439-95-4	
Manganese, Dissolved	**2440**	ug/L	10.0	1		06/11/19 14:55	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		06/11/19 14:55	7440-02-0	
Potassium, Dissolved	**8500**	ug/L	5000	1		06/11/19 14:55	7440-09-7	
Sodium, Dissolved	**52300**	ug/L	5000	1		06/11/19 14:55	7440-23-5	
Zinc, Dissolved	**10.5J**	ug/L	20.0	1		06/11/19 14:55	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.050J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:52	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:14	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-09C_5/22/19 **Lab ID: 7090528006** Collected: 05/22/19 11:45 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 12:57	7429-90-5	
Barium	**53.7J**	ug/L	200	1	06/04/19 09:09	06/11/19 12:57	7440-39-3	
Calcium	**7910**	ug/L	200	1	06/04/19 09:09	06/11/19 12:57	7440-70-2	
Chromium	**5.1J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:57	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 12:57	7440-50-8	
Iron	**35.7J**	ug/L	100	1	06/04/19 09:09	06/11/19 12:57	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 12:57	7439-92-1	
Magnesium	**8750**	ug/L	200	1	06/04/19 09:09	06/11/19 12:57	7439-95-4	
Manganese	**156**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:57	7439-96-5	
Nickel	**6.6J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 12:57	7440-02-0	
Potassium	**12000**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:57	7440-09-7	
Sodium	**65100**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:57	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 12:57	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:00	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 14:41	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 14:41	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 14:41	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 14:41	71-55-6	
Trichloroethene	**3.2**	ug/L	1.0	1		05/28/19 14:41	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 14:41	75-01-4	

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
Pace Project No.: 7090528

Sample: MW-09C_5/22/19 **Lab ID: 7090528006** Collected: 05/22/19 11:45 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 14:41	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 14:41	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 14:41	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	68-153	1		05/28/19 14:41	17060-07-0	
4-Bromofluorobenzene (S)	94	%	79-124	1		05/28/19 14:41	460-00-4	
Toluene-d8 (S)	91	%	69-124	1		05/28/19 14:41	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**38.9**	mg/L	1.0	1		05/31/19 19:11		
Alkalinity,Bicarbonate (CaCO3)	**38.9**	mg/L	1.0	1		05/31/19 19:11		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/31/19 19:11		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**43.3**	mg/L	5.0	1		06/11/19 12:38		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**310**	mg/L	20.0	1		05/29/19 10:02		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:16	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**21.4**	mg/L	5.0	1		06/08/19 05:14	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**2.0**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:32	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**2.3**	mg/L	0.50	10		05/23/19 01:37	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/22/19 23:36	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:35	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**102**	mg/L	10.0	5		06/07/19 12:19	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**2.2**	mg/L	0.10	1		06/10/19 14:47	7664-41-7	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-09C_5/22/19 DISS **Lab ID: 7090528007** Collected: 05/22/19 11:45 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 14:58	7429-90-5	
Barium, Dissolved	**51.8J**	ug/L	200	1		06/11/19 14:58	7440-39-3	
Calcium, Dissolved	**7660**	ug/L	1000	1		06/11/19 14:58	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 14:58	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 14:58	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 14:58	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 14:58	7439-92-1	
Magnesium, Dissolved	**8480**	ug/L	1000	1		06/11/19 14:58	7439-95-4	
Manganese, Dissolved	**140**	ug/L	10.0	1		06/11/19 14:58	7439-96-5	
Nickel, Dissolved	**4.9J**	ug/L	40.0	1		06/11/19 14:58	7440-02-0	
Potassium, Dissolved	**11500**	ug/L	5000	1		06/11/19 14:58	7440-09-7	
Sodium, Dissolved	**62900**	ug/L	5000	1		06/11/19 14:58	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 14:58	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.060J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:53	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:16	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Melville, NY 11747
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: BLIND DUPLICATE_5/22/19 **Lab ID: 7090528008** Collected: 05/22/19 00:00 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 12:59	7429-90-5	
Barium	**38.0J**	ug/L	200	1	06/04/19 09:09	06/11/19 12:59	7440-39-3	
Calcium	**13000**	ug/L	200	1	06/04/19 09:09	06/11/19 12:59	7440-70-2	
Chromium	**3.1J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:59	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 12:59	7440-50-8	
Iron	**26.9J**	ug/L	100	1	06/04/19 09:09	06/11/19 12:59	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 12:59	7439-92-1	
Magnesium	**5770**	ug/L	200	1	06/04/19 09:09	06/11/19 12:59	7439-95-4	
Manganese	**3670**	ug/L	10.0	1	06/04/19 09:09	06/11/19 12:59	7439-96-5	
Nickel	**9.7J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 12:59	7440-02-0	
Potassium	**11300**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:59	7440-09-7	
Sodium	**62600**	ug/L	5000	1	06/04/19 09:09	06/11/19 12:59	7440-23-5	
Zinc	**5.1J**	ug/L	20.0	1	06/04/19 09:09	06/11/19 12:59	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:02	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 15:01	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 15:01	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 15:01	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:01	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:01	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: BLIND DUPLICATE_5/22/19 **Lab ID: 7090528008** Collected: 05/22/19 00:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 15:01	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 15:01	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 15:01	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	68-153	1		05/28/19 15:01	17060-07-0	
4-Bromofluorobenzene (S)	87	%	79-124	1		05/28/19 15:01	460-00-4	
Toluene-d8 (S)	85	%	69-124	1		05/28/19 15:01	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**29.6**	mg/L	1.0	1		05/31/19 19:17		
Alkalinity,Bicarbonate (CaCO3)	**29.6**	mg/L	1.0	1		05/31/19 19:17		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		05/31/19 19:17		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**53.3**	mg/L	5.0	1		06/11/19 12:48		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**340**	mg/L	20.0	1		05/29/19 10:02		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:09	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**24.5**	mg/L	5.0	1		06/08/19 06:37	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.23**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:33	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**4.8**	mg/L	0.50	10		05/23/19 01:38	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**0.13**	mg/L	0.050	1		05/22/19 23:37	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**3.5J**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:36	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**97.2**	mg/L	10.0	5		06/07/19 12:19	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.055J**	mg/L	0.10	1		06/10/19 14:50	7664-41-7	

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
Pace Project No.: 7090528

Sample: BLIND DUPLICATE_5/22/19 DISS **Lab ID: 7090528009** Collected: 05/22/19 00:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:02	7429-90-5	
Barium, Dissolved	**36.3J**	ug/L	200	1		06/11/19 15:02	7440-39-3	
Calcium, Dissolved	**12700**	ug/L	1000	1		06/11/19 15:02	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:02	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:02	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:02	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:02	7439-92-1	
Magnesium, Dissolved	**5650**	ug/L	1000	1		06/11/19 15:02	7439-95-4	
Manganese, Dissolved	**3510**	ug/L	10.0	1		06/11/19 15:02	7439-96-5	
Nickel, Dissolved	**6.6J**	ug/L	40.0	1		06/11/19 15:02	7440-02-0	
Potassium, Dissolved	**10800**	ug/L	5000	1		06/11/19 15:02	7440-09-7	
Sodium, Dissolved	**61000**	ug/L	5000	1		06/11/19 15:02	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:02	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.060J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:55	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:10	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-05B_5/22/19 **Lab ID: 7090528010** Collected: 05/22/19 14:00 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:01	7429-90-5	
Barium	**38.0J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:01	7440-39-3	
Calcium	**13000**	ug/L	200	1	06/04/19 09:09	06/11/19 13:01	7440-70-2	
Chromium	**3.0J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:01	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:01	7440-50-8	
Iron	**25.4J**	ug/L	100	1	06/04/19 09:09	06/11/19 13:01	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:01	7439-92-1	
Magnesium	**5810**	ug/L	200	1	06/04/19 09:09	06/11/19 13:01	7439-95-4	
Manganese	**3690**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:01	7439-96-5	
Nickel	**9.7J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:01	7440-02-0	
Potassium	**11300**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:01	7440-09-7	
Sodium	**62900**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:01	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:01	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:04	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 15:27	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 15:27	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 15:27	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:27	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:27	75-01-4	

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
Pace Project No.: 7090528

Sample: MW-05B_5/22/19 **Lab ID: 7090528010** Collected: 05/22/19 14:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 15:27	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 15:27	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 15:27	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	68-153	1		05/28/19 15:27	17060-07-0	
4-Bromofluorobenzene (S)	95	%	79-124	1		05/28/19 15:27	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/28/19 15:27	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**30.3**	mg/L	1.0	1		06/03/19 18:49		
Alkalinity,Bicarbonate (CaCO3)	**30.3**	mg/L	1.0	1		06/03/19 18:49		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 18:49		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**53.3**	mg/L	5.0	1		06/11/19 12:50		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**362**	mg/L	20.0	1		05/29/19 10:02		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:19	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**24.3**	mg/L	5.0	1		06/08/19 06:54	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:34	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**4.7**	mg/L	0.50	10		05/23/19 01:39	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**0.13**	mg/L	0.050	1		05/22/19 23:38	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:38	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**94.8**	mg/L	10.0	5		06/07/19 12:22	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**<0.10**	mg/L	0.10	1		06/10/19 14:54	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-05B_5/22/19 DISS **Lab ID: 7090528011** Collected: 05/22/19 14:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:03	7429-90-5	
Barium, Dissolved	**36.9J**	ug/L	200	1		06/11/19 15:03	7440-39-3	
Calcium, Dissolved	**12700**	ug/L	1000	1		06/11/19 15:03	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:03	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:03	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:03	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:03	7439-92-1	
Magnesium, Dissolved	**5660**	ug/L	1000	1		06/11/19 15:03	7439-95-4	
Manganese, Dissolved	**3530**	ug/L	10.0	1		06/11/19 15:03	7439-96-5	
Nickel, Dissolved	**6.9J**	ug/L	40.0	1		06/11/19 15:03	7440-02-0	
Potassium, Dissolved	**10800**	ug/L	5000	1		06/11/19 15:03	7440-09-7	
Sodium, Dissolved	**61200**	ug/L	5000	1		06/11/19 15:03	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:03	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.070J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:57	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:19	18540-29-9	

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
Pace Project No.: 7090528

Sample: MW-08B_5/22/19 **Lab ID: 7090528012** Collected: 05/22/19 16:45 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:04	7429-90-5	
Barium	**141J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:04	7440-39-3	
Calcium	**23100**	ug/L	200	1	06/04/19 09:09	06/11/19 13:04	7440-70-2	
Chromium	**4.0J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:04	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:04	7440-50-8	
Iron	**32.6J**	ug/L	100	1	06/04/19 09:09	06/11/19 13:04	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:04	7439-92-1	
Magnesium	**7890**	ug/L	200	1	06/04/19 09:09	06/11/19 13:04	7439-95-4	
Manganese	**1120**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:04	7439-96-5	
Nickel	**27.9J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:04	7440-02-0	
Potassium	**10800**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:04	7440-09-7	
Sodium	**150000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:04	7440-23-5	
Zinc	**66.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:04	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:05	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 15:48	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 15:48	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 15:48	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 15:48	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 15:48	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-08B_5/22/19 **Lab ID: 7090528012** Collected: 05/22/19 16:45 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 15:48	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 15:48	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 15:48	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	68-153	1		05/28/19 15:48	17060-07-0	
4-Bromofluorobenzene (S)	93	%	79-124	1		05/28/19 15:48	460-00-4	
Toluene-d8 (S)	88	%	69-124	1		05/28/19 15:48	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**4.1**	mg/L	1.0	1		06/03/19 18:53		
Alkalinity,Bicarbonate (CaCO3)	**4.1**	mg/L	1.0	1		06/03/19 18:53		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 18:53		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**85.0**	mg/L	5.0	1		06/11/19 12:52		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**718**	mg/L	20.0	1		05/29/19 10:03		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:20	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**31.6**	mg/L	5.0	1		06/08/19 07:11	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.15**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:35	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**1.1**	mg/L	0.050	1		05/23/19 01:40	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/22/19 23:39	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:39	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**294**	mg/L	10.0	5		06/07/19 12:22	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.32**	mg/L	0.10	1		06/10/19 14:55	7664-41-7	

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
Pace Project No.: 7090528

Sample: MW-08B_5/22/19 DISS **Lab ID: 7090528013** Collected: 05/22/19 16:45 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:04	7429-90-5	
Barium, Dissolved	**141J**	ug/L	200	1		06/11/19 15:04	7440-39-3	
Calcium, Dissolved	**23400**	ug/L	1000	1		06/11/19 15:04	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:04	7440-47-3	
Copper, Dissolved	**5.3J**	ug/L	25.0	1		06/11/19 15:04	7440-50-8	
Iron, Dissolved	**8.0J**	ug/L	20.0	1		06/11/19 15:04	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:04	7439-92-1	
Magnesium, Dissolved	**7980**	ug/L	1000	1		06/11/19 15:04	7439-95-4	
Manganese, Dissolved	**1110**	ug/L	10.0	1		06/11/19 15:04	7439-96-5	
Nickel, Dissolved	**25.5J**	ug/L	40.0	1		06/11/19 15:04	7440-02-0	
Potassium, Dissolved	**10600**	ug/L	5000	1		06/11/19 15:04	7440-09-7	
Sodium, Dissolved	**151000**	ug/L	5000	1		06/11/19 15:04	7440-23-5	
Zinc, Dissolved	**65.9**	ug/L	20.0	1		06/11/19 15:04	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.13J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 17:58	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:20	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-08A_5/22/19 **Lab ID: 7090528014** Collected: 05/22/19 18:00 Received: 05/22/19 18:30 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:06	7429-90-5	
Barium	**55.8J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:06	7440-39-3	
Calcium	**12500**	ug/L	200	1	06/04/19 09:09	06/11/19 13:06	7440-70-2	
Chromium	**6.1J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:06	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:06	7440-50-8	
Iron	**48.6J**	ug/L	100	1	06/04/19 09:09	06/11/19 13:06	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:06	7439-92-1	
Magnesium	**5110**	ug/L	200	1	06/04/19 09:09	06/11/19 13:06	7439-95-4	
Manganese	**75.1**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:06	7439-96-5	
Nickel	**9.3J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:06	7440-02-0	
Potassium	**6420**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:06	7440-09-7	
Sodium	**41700**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:06	7440-23-5	
Zinc	**17.7J**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:06	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:07	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 16:18	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 16:18	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-35-4	
cis-1,2-Dichloroethene	**10.0**	ug/L	1.0	1		05/28/19 16:18	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 16:18	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-09-2	
Tetrachloroethene	**2.2**	ug/L	1.0	1		05/28/19 16:18	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:18	71-55-6	
Trichloroethene	**1.9**	ug/L	1.0	1		05/28/19 16:18	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 16:18	75-01-4	

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
Pace Project No.: 7090528

Sample: MW-08A_5/22/19 **Lab ID: 7090528014** Collected: 05/22/19 18:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 16:18	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 16:18	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 16:18	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	68-153	1		05/28/19 16:18	17060-07-0	
4-Bromofluorobenzene (S)	89	%	79-124	1		05/28/19 16:18	460-00-4	
Toluene-d8 (S)	89	%	69-124	1		05/28/19 16:18	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**21.6**	mg/L	1.0	1		06/03/19 18:59		
Alkalinity,Bicarbonate (CaCO3)	**21.6**	mg/L	1.0	1		06/03/19 18:59		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 18:59		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**40.0**	mg/L	5.0	1		06/11/19 13:00		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**179**	mg/L	10.0	1		05/29/19 10:14		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:21	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**27.9**	mg/L	5.0	1		06/08/19 07:28	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.18**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:36	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**2.3**	mg/L	0.50	10		05/23/19 01:42	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/22/19 23:40	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/30/19 07:59	05/30/19 13:40	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**47.4**	mg/L	10.0	5		06/07/19 12:24	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.72**	mg/L	0.10	1		06/10/19 14:56	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-08A_5/22/19 DISS **Lab ID: 7090528015** Collected: 05/22/19 18:00 Received: 05/22/19 18:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:05	7429-90-5	
Barium, Dissolved	**55.7J**	ug/L	200	1		06/11/19 15:05	7440-39-3	
Calcium, Dissolved	**12600**	ug/L	1000	1		06/11/19 15:05	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:05	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:05	7440-50-8	
Iron, Dissolved	**6.0J**	ug/L	20.0	1		06/11/19 15:05	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:05	7439-92-1	
Magnesium, Dissolved	**5210**	ug/L	1000	1		06/11/19 15:05	7439-95-4	
Manganese, Dissolved	**66.4**	ug/L	10.0	1		06/11/19 15:05	7439-96-5	
Nickel, Dissolved	**6.0J**	ug/L	40.0	1		06/11/19 15:05	7440-02-0	
Potassium, Dissolved	**6290**	ug/L	5000	1		06/11/19 15:05	7440-09-7	
Sodium, Dissolved	**42000**	ug/L	5000	1		06/11/19 15:05	7440-23-5	
Zinc, Dissolved	**16.9J**	ug/L	20.0	1		06/11/19 15:05	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.070J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:04	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/22/19 22:21	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Melville, NY 11747
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: TRIP BLANK_5/23/19 **Lab ID: 7090528016** Collected: 05/23/19 00:00 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 16:39	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 16:39	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 16:39	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 16:39	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 16:39	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 16:39	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 16:39	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 16:39	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%	68-153	1		05/28/19 16:39	17060-07-0	
4-Bromofluorobenzene (S)	92	%	79-124	1		05/28/19 16:39	460-00-4	
Toluene-d8 (S)	90	%	69-124	1		05/28/19 16:39	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-2_5/23/19 **Lab ID: 7090528017** Collected: 05/23/19 10:15 Received: 05/23/19 18:45 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:08	7429-90-5	
Barium	**47.0J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:08	7440-39-3	
Calcium	**29800**	ug/L	200	1	06/04/19 09:09	06/11/19 13:08	7440-70-2	
Chromium	**13.8**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:08	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:08	7440-50-8	
Iron	**7280**	ug/L	100	1	06/04/19 09:09	06/11/19 13:08	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:08	7439-92-1	
Magnesium	**20400**	ug/L	200	1	06/04/19 09:09	06/11/19 13:08	7439-95-4	
Manganese	**162**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:08	7439-96-5	
Nickel	**18.9J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:08	7440-02-0	
Potassium	**132000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:08	7440-09-7	
Sodium	**420000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:08	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:08	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:09	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**2.3**	ug/L	1.0	1		05/28/19 17:02	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 17:02	56-23-5	
Chlorobenzene	**1.2**	ug/L	1.0	1		05/28/19 17:02	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 17:02	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	541-73-1	
1,4-Dichlorobenzene	**1.6**	ug/L	1.0	1		05/28/19 17:02	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	100-41-4	
Isopropylbenzene (Cumene)	**5.0**	ug/L	1.0	1		05/28/19 17:02	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:02	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:02	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-2_5/23/19 **Lab ID: 7090528017** Collected: 05/23/19 10:15 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 17:02	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 17:02	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 17:02	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	68-153	1		05/28/19 17:02	17060-07-0	
4-Bromofluorobenzene (S)	87	%	79-124	1		05/28/19 17:02	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/28/19 17:02	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**1230**	mg/L	5.0	1		06/05/19 10:17		
Alkalinity,Bicarbonate (CaCO3)	**1230**	mg/L	5.0	1		06/05/19 10:17		
Alkalinity,Carbonate (CaCO3)	**1230**	mg/L	5.0	1		06/05/19 10:17		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**100**	mg/L	5.0	1		06/11/19 13:28		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**1690**	mg/L	40.0	1		05/29/19 10:30		M1
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**<5.0**	mg/L	5.0	1		06/08/19 07:44	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**131**	mg/L	5.0	10	06/07/19 05:57	06/07/19 13:16	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/24/19 10:39	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 08:53	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:08	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**383**	mg/L	10.0	5		06/07/19 12:25	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**145**	mg/L	5.0	50		06/10/19 16:02	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-2_5/23/19 DISS **Lab ID: 7090528018** Collected: 05/23/19 10:15 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:06	7429-90-5	
Barium, Dissolved	**45.8J**	ug/L	200	1		06/11/19 15:06	7440-39-3	
Calcium, Dissolved	**29100**	ug/L	1000	1		06/11/19 15:06	7440-70-2	
Chromium, Dissolved	**5.8J**	ug/L	10.0	1		06/11/19 15:06	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:06	7440-50-8	
Iron, Dissolved	**7180**	ug/L	20.0	1		06/11/19 15:06	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:06	7439-92-1	
Magnesium, Dissolved	**19500**	ug/L	1000	1		06/11/19 15:06	7439-95-4	
Manganese, Dissolved	**151**	ug/L	10.0	1		06/11/19 15:06	7439-96-5	
Nickel, Dissolved	**15.2J**	ug/L	40.0	1		06/11/19 15:06	7440-02-0	
Potassium, Dissolved	**128000**	ug/L	5000	1		06/11/19 15:06	7440-09-7	
Sodium, Dissolved	**411000**	ug/L	5000	1		06/11/19 15:06	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:06	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.030J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:06	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06F_5/23/19 **Lab ID: 7090528019** Collected: 05/23/19 13:15 Received: 05/23/19 18:45 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							
Aluminum	**155J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:15	7429-90-5	
Barium	**212**	ug/L	200	1	06/04/19 09:09	06/11/19 13:15	7440-39-3	
Calcium	**36900**	ug/L	200	1	06/04/19 09:09	06/11/19 13:15	7440-70-2	
Chromium	**4.0J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:15	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:15	7440-50-8	
Iron	**137**	ug/L	100	1	06/04/19 09:09	06/11/19 13:15	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:15	7439-92-1	
Magnesium	**14500**	ug/L	200	1	06/04/19 09:09	06/11/19 13:15	7439-95-4	
Manganese	**119**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:15	7439-96-5	
Nickel	**28.9J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:15	7440-02-0	
Potassium	**8570**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:15	7440-09-7	
Sodium	**127000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:15	7440-23-5	
Zinc	**29.3**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:15	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**0.21**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:14	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 17:23	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 17:23	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 17:23	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:23	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:23	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06F_5/23/19 **Lab ID: 7090528019** Collected: 05/23/19 13:15 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 17:23	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 17:23	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 17:23	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	68-153	1		05/28/19 17:23	17060-07-0	
4-Bromofluorobenzene (S)	89	%	79-124	1		05/28/19 17:23	460-00-4	
Toluene-d8 (S)	90	%	69-124	1		05/28/19 17:23	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0	1		06/03/19 23:23		
Alkalinity,Bicarbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 23:23		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 23:23		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**120**	mg/L	5.0	1		06/11/19 13:07		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**666**	mg/L	20.0	1		05/30/19 09:20		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 09:09	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**<5.0**	mg/L	5.0	1		06/08/19 08:01	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.58**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:39	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**3.6**	mg/L	0.50	10		05/24/19 10:41	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 08:57	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:08	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**374**	mg/L	10.0	5		06/07/19 12:26	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**3.3**	mg/L	0.10	1		06/10/19 14:59	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06F_5/23/19 DISS **Lab ID: 7090528020** Collected: 05/23/19 13:15 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**139J**	ug/L	200	1		06/11/19 15:07	7429-90-5	
Barium, Dissolved	**203**	ug/L	200	1		06/11/19 15:07	7440-39-3	
Calcium, Dissolved	**35400**	ug/L	1000	1		06/11/19 15:07	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:07	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:07	7440-50-8	
Iron, Dissolved	**99.6**	ug/L	20.0	1		06/11/19 15:07	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:07	7439-92-1	
Magnesium, Dissolved	**13900**	ug/L	1000	1		06/11/19 15:07	7439-95-4	
Manganese, Dissolved	**107**	ug/L	10.0	1		06/11/19 15:07	7439-96-5	
Nickel, Dissolved	**25.9J**	ug/L	40.0	1		06/11/19 15:07	7440-02-0	
Potassium, Dissolved	**8400**	ug/L	5000	1		06/11/19 15:07	7440-09-7	
Sodium, Dissolved	**123000**	ug/L	5000	1		06/11/19 15:07	7440-23-5	
Zinc, Dissolved	**27.1**	ug/L	20.0	1		06/11/19 15:07	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.10J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:08	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 09:09	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06C_5/23/19 **Lab ID: 7090528021** Collected: 05/23/19 13:25 Received: 05/23/19 18:45 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:18	7429-90-5	
Barium	**46.7J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:18	7440-39-3	
Calcium	**52700**	ug/L	200	1	06/04/19 09:09	06/11/19 13:18	7440-70-2	
Chromium	**3.8J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:18	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:18	7440-50-8	
Iron	**6700**	ug/L	100	1	06/04/19 09:09	06/11/19 13:18	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:18	7439-92-1	
Magnesium	**21000**	ug/L	200	1	06/04/19 09:09	06/11/19 13:18	7439-95-4	
Manganese	**131**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:18	7439-96-5	
Nickel	**23.0J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:18	7440-02-0	
Potassium	**139000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:18	7440-09-7	
Sodium	**429000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:18	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:18	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:16	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**0.92J**	ug/L	1.0	1		05/28/19 17:43	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 17:43	56-23-5	
Chlorobenzene	**2.3**	ug/L	1.0	1		05/28/19 17:43	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 17:43	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	541-73-1	
1,4-Dichlorobenzene	**1.3**	ug/L	1.0	1		05/28/19 17:43	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	100-41-4	
Isopropylbenzene (Cumene)	**1.4**	ug/L	1.0	1		05/28/19 17:43	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 17:43	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 17:43	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06C_5/23/19 **Lab ID: 7090528021** Collected: 05/23/19 13:25 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 17:43	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 17:43	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 17:43	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	68-153	1		05/28/19 17:43	17060-07-0	
4-Bromofluorobenzene (S)	87	%	79-124	1		05/28/19 17:43	460-00-4	
Toluene-d8 (S)	90	%	69-124	1		05/28/19 17:43	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**620**	mg/L	1.0	1		06/03/19 23:57		
Alkalinity,Bicarbonate (CaCO3)	**620**	mg/L	1.0	1		06/03/19 23:57		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/03/19 23:57		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**70.0**	mg/L	5.0	1		06/11/19 13:31		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**896**	mg/L	20.0	1		05/30/19 09:22		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**4.7J**	mg/L	5.0	1		06/08/19 08:18	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**128**	mg/L	10.0	100	06/07/19 05:57	06/07/19 13:25	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/24/19 10:42	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 08:58	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**3.6J**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:10	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**228**	mg/L	10.0	5		06/07/19 12:26	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**66.5**	mg/L	2.0	20		06/10/19 15:59	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06C_5/23/19 DISS **Lab ID: 7090528022** Collected: 05/23/19 13:25 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:09	7429-90-5	
Barium, Dissolved	**21.6J**	ug/L	200	1		06/11/19 15:09	7440-39-3	
Calcium, Dissolved	**24500**	ug/L	1000	1		06/11/19 15:09	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:09	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:09	7440-50-8	
Iron, Dissolved	**3070**	ug/L	20.0	1		06/11/19 15:09	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:09	7439-92-1	
Magnesium, Dissolved	**9730**	ug/L	1000	1		06/11/19 15:09	7439-95-4	
Manganese, Dissolved	**61.3**	ug/L	10.0	1		06/11/19 15:09	7439-96-5	
Nickel, Dissolved	**9.6J**	ug/L	40.0	1		06/11/19 15:09	7440-02-0	
Potassium, Dissolved	**63000**	ug/L	5000	1		06/11/19 15:09	7440-09-7	
Sodium, Dissolved	**207000**	ug/L	5000	1		06/11/19 15:09	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:09	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.030J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:09	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06B_5/23/19 **Lab ID: 7090528023** Collected: 05/23/19 16:00 Received: 05/23/19 18:45 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:20	7429-90-5	
Barium	**53.3J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:20	7440-39-3	
Calcium	**18000**	ug/L	200	1	06/04/19 09:09	06/11/19 13:20	7440-70-2	
Chromium	**7.7J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:20	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:20	7440-50-8	
Iron	**10800**	ug/L	100	1	06/04/19 09:09	06/11/19 13:20	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:20	7439-92-1	
Magnesium	**14500**	ug/L	200	1	06/04/19 09:09	06/11/19 13:20	7439-95-4	
Manganese	**53.3**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:20	7439-96-5	
Nickel	**11.9J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:20	7440-02-0	
Potassium	**92200**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:20	7440-09-7	
Sodium	**217000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:20	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:20	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:18	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**2.1**	ug/L	1.0	1		05/28/19 18:04	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 18:04	56-23-5	
Chlorobenzene	**5.4**	ug/L	1.0	1		05/28/19 18:04	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 18:04	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	541-73-1	
1,4-Dichlorobenzene	**2.4**	ug/L	1.0	1		05/28/19 18:04	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	100-41-4	
Isopropylbenzene (Cumene)	**2.7**	ug/L	1.0	1		05/28/19 18:04	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:04	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:04	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06B_5/23/19 **Lab ID: 7090528023** Collected: 05/23/19 16:00 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 18:04	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 18:04	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 18:04	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	68-153	1		05/28/19 18:04	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-124	1		05/28/19 18:04	460-00-4	
Toluene-d8 (S)	89	%	69-124	1		05/28/19 18:04	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**808**	mg/L	1.0	1		06/04/19 00:27		
Alkalinity,Bicarbonate (CaCO3)	**808**	mg/L	1.0	1		06/04/19 00:27		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/04/19 00:27		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**80.0**	mg/L	5.0	1		06/11/19 13:34		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**996**	mg/L	20.0	1		05/30/19 09:41		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**<5.0**	mg/L	5.0	1		06/08/19 08:35	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**137**	mg/L	10.0	100	06/07/19 05:57	06/07/19 13:26	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/24/19 10:43	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 08:59	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**3.6J**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:11	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**231**	mg/L	10.0	5		06/07/19 12:27	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**96.5**	mg/L	2.0	20		06/10/19 16:13	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06B_5/23/19 DISS **Lab ID: 7090528024** Collected: 05/23/19 16:00 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:10	7429-90-5	
Barium, Dissolved	**50.9J**	ug/L	200	1		06/11/19 15:10	7440-39-3	
Calcium, Dissolved	**17200**	ug/L	1000	1		06/11/19 15:10	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:10	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:10	7440-50-8	
Iron, Dissolved	**9570**	ug/L	20.0	1		06/11/19 15:10	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:10	7439-92-1	
Magnesium, Dissolved	**13600**	ug/L	1000	1		06/11/19 15:10	7439-95-4	
Manganese, Dissolved	**47.2**	ug/L	10.0	1		06/11/19 15:10	7439-96-5	
Nickel, Dissolved	**7.2J**	ug/L	40.0	1		06/11/19 15:10	7440-02-0	
Potassium, Dissolved	**87000**	ug/L	5000	1		06/11/19 15:10	7440-09-7	
Sodium, Dissolved	**207000**	ug/L	5000	1		06/11/19 15:10	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:10	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**0.040J**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:11	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:09	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06E_5/23/19 **Lab ID: 7090528025** Collected: 05/23/19 16:55 Received: 05/23/19 18:45 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:22	7429-90-5	
Barium	**212**	ug/L	200	1	06/04/19 09:09	06/11/19 13:22	7440-39-3	
Calcium	**33300**	ug/L	200	1	06/04/19 09:09	06/11/19 13:22	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:22	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:22	7440-50-8	
Iron	**16200**	ug/L	100	1	06/04/19 09:09	06/11/19 13:22	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:22	7439-92-1	
Magnesium	**15500**	ug/L	200	1	06/04/19 09:09	06/11/19 13:22	7439-95-4	
Manganese	**479**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:22	7439-96-5	
Nickel	**15.2J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:22	7440-02-0	
Potassium	**39200**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:22	7440-09-7	
Sodium	**168000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:22	7440-23-5	
Zinc	**16.4J**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:22	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:19	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 18:22	56-23-5	
Chlorobenzene	**2.2**	ug/L	1.0	1		05/28/19 18:22	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 18:22	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 18:22	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:22	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:22	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06E_5/23/19 **Lab ID: 7090528025** Collected: 05/23/19 16:55 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 18:22	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 18:22	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 18:22	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	68-153	1		05/28/19 18:22	17060-07-0	
4-Bromofluorobenzene (S)	90	%	79-124	1		05/28/19 18:22	460-00-4	
Toluene-d8 (S)	87	%	69-124	1		05/28/19 18:22	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**217**	mg/L	1.0	1		06/04/19 00:39		
Alkalinity,Bicarbonate (CaCO3)	**217**	mg/L	1.0	1		06/04/19 00:39		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/04/19 00:39		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**80.0**	mg/L	5.0	1		06/11/19 13:48		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**1100**	mg/L	20.0	1		05/30/19 09:41		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:10	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**24.7**	mg/L	5.0	1		06/10/19 18:54	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**37.2**	mg/L	2.0	20	06/07/19 05:57	06/07/19 13:20	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**2.3**	mg/L	0.50	10		05/24/19 10:47	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 09:00	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**3.6J**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:13	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**325**	mg/L	10.0	5		06/07/19 12:28	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**36.0**	mg/L	1.0	10		06/10/19 16:07	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06E_5/23/19 DISS **Lab ID: 7090528026** Collected: 05/23/19 16:55 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:11	7429-90-5	
Barium, Dissolved	**210**	ug/L	200	1		06/11/19 15:11	7440-39-3	
Calcium, Dissolved	**33300**	ug/L	1000	1		06/11/19 15:11	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:11	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:11	7440-50-8	
Iron, Dissolved	**16000**	ug/L	20.0	1		06/11/19 15:11	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:11	7439-92-1	
Magnesium, Dissolved	**15400**	ug/L	1000	1		06/11/19 15:11	7439-95-4	
Manganese, Dissolved	**467**	ug/L	10.0	1		06/11/19 15:11	7439-96-5	
Nickel, Dissolved	**13.4J**	ug/L	40.0	1		06/11/19 15:11	7440-02-0	
Potassium, Dissolved	**38500**	ug/L	5000	1		06/11/19 15:11	7440-09-7	
Sodium, Dissolved	**166000**	ug/L	5000	1		06/11/19 15:11	7440-23-5	
Zinc, Dissolved	**15.1J**	ug/L	20.0	1		06/11/19 15:11	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994		Preparation Method: 245.1 Rev. 3.0, 1994					
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:16	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.10**	mg/L	0.10	5		05/24/19 09:10	18540-29-9	

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
Pace Project No.: 7090528

Sample: MW-06A_5/23/19 **Lab ID: 7090528027** Collected: 05/23/19 18:00 Received: 05/23/19 18:45 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:25	7429-90-5	
Barium	**50.1J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:25	7440-39-3	
Calcium	**3130**	ug/L	200	1	06/04/19 09:09	06/11/19 13:25	7440-70-2	
Chromium	**3.7J**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:25	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:25	7440-50-8	
Iron	**29.4J**	ug/L	100	1	06/04/19 09:09	06/11/19 13:25	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:25	7439-92-1	
Magnesium	**3110**	ug/L	200	1	06/04/19 09:09	06/11/19 13:25	7439-95-4	
Manganese	**21.4**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:25	7439-96-5	
Nickel	**9.4J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:25	7440-02-0	
Potassium	**3580J**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:25	7440-09-7	
Sodium	**17600**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:25	7440-23-5	
Zinc	**12.0J**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:25	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:21	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 18:43	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 18:43	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 18:43	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 18:43	71-55-6	
Trichloroethene	**1.2**	ug/L	1.0	1		05/28/19 18:43	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 18:43	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06A_5/23/19 **Lab ID: 7090528027** Collected: 05/23/19 18:00 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 18:43	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 18:43	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 18:43	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	68-153	1		05/28/19 18:43	17060-07-0	
4-Bromofluorobenzene (S)	94	%	79-124	1		05/28/19 18:43	460-00-4	
Toluene-d8 (S)	87	%	69-124	1		05/28/19 18:43	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**2.5**	mg/L	1.0	1		06/04/19 00:44		
Alkalinity,Bicarbonate (CaCO3)	**2.5**	mg/L	1.0	1		06/04/19 00:44		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/04/19 00:44		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**14.0**	mg/L	5.0	1		06/11/19 13:51		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**224**	mg/L	10.0	1		05/30/19 09:42		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 09:10	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**13.3**	mg/L	5.0	1		06/10/19 19:11	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**0.77**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:43	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**1.5**	mg/L	0.050	1		05/24/19 10:48	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/24/19 09:01	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:20	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**20.5**	mg/L	10.0	5		06/07/19 12:30	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**1.1**	mg/L	0.10	1		06/10/19 15:04	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: MW-06A_5/23/19 DISS **Lab ID: 7090528028** Collected: 05/23/19 18:00 Received: 05/23/19 18:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:12	7429-90-5	
Barium, Dissolved	**46.7J**	ug/L	200	1		06/11/19 15:12	7440-39-3	
Calcium, Dissolved	**3000**	ug/L	1000	1		06/11/19 15:12	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:12	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:12	7440-50-8	
Iron, Dissolved	**13.2J**	ug/L	20.0	1		06/11/19 15:12	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:12	7439-92-1	
Magnesium, Dissolved	**2930**	ug/L	1000	1		06/11/19 15:12	7439-95-4	
Manganese, Dissolved	**17.4**	ug/L	10.0	1		06/11/19 15:12	7439-96-5	
Nickel, Dissolved	**7.5J**	ug/L	40.0	1		06/11/19 15:12	7440-02-0	
Potassium, Dissolved	**3200J**	ug/L	5000	1		06/11/19 15:12	7440-09-7	
Sodium, Dissolved	**16100**	ug/L	5000	1		06/11/19 15:12	7440-23-5	
Zinc, Dissolved	**8.7J**	ug/L	20.0	1		06/11/19 15:12	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:18	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 09:10	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: TRIP BLANK_5/24/19 **Lab ID: 7090528029** Collected: 05/24/19 00:00 Received: 05/24/19 12:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 19:03	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 19:03	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 19:03	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:03	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 19:03	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 19:03	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 19:03	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 19:03	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	68-153	1		05/28/19 19:03	17060-07-0	
4-Bromofluorobenzene (S)	91	%	79-124	1		05/28/19 19:03	460-00-4	
Toluene-d8 (S)	87	%	69-124	1		05/28/19 19:03	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-1_5/24/19 **Lab ID: 7090528030** Collected: 05/24/19 11:40 Received: 05/24/19 12:59 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:27	7429-90-5	
Barium	**71.2J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:27	7440-39-3	
Calcium	**13100**	ug/L	200	1	06/04/19 09:09	06/11/19 13:27	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:27	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:27	7440-50-8	
Iron	**9520**	ug/L	100	1	06/04/19 09:09	06/11/19 13:27	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:27	7439-92-1	
Magnesium	**10100**	ug/L	200	1	06/04/19 09:09	06/11/19 13:27	7439-95-4	
Manganese	**1930**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:27	7439-96-5	
Nickel	**8.1J**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:27	7440-02-0	
Potassium	**16800**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:27	7440-09-7	
Sodium	**59700**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:27	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:27	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:24	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-25-2	CL,L2
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/28/19 19:24	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/28/19 19:24	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/28/19 19:24	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	127-18-4	CL
Toluene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/28/19 19:24	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/28/19 19:24	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-1_5/24/19 **Lab ID: 7090528030** Collected: 05/24/19 11:40 Received: 05/24/19 12:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/28/19 19:24	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/28/19 19:24	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/28/19 19:24	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	68-153	1		05/28/19 19:24	17060-07-0	
4-Bromofluorobenzene (S)	92	%	79-124	1		05/28/19 19:24	460-00-4	
Toluene-d8 (S)	91	%	69-124	1		05/28/19 19:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**117**	mg/L	1.0	1		06/06/19 17:51		
Alkalinity,Bicarbonate (CaCO3)	**117**	mg/L	1.0	1		06/06/19 17:51		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/06/19 17:51		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**25.0**	mg/L	5.0	1		06/11/19 13:52		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**400**	mg/L	20.0	1		05/30/19 10:17		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 23:24	18540-29-9	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**36.6**	mg/L	5.0	1		06/10/19 19:28	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**11.2**	mg/L	0.50	5	06/07/19 05:57	06/07/19 13:21	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**0.47**	mg/L	0.050	1		05/25/19 10:49	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/25/19 08:21	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:22	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**76.2**	mg/L	10.0	5		06/07/19 12:31	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**11.7**	mg/L	0.50	5		06/11/19 14:57	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: LF-1_5/24/19 DISS **Lab ID: 7090528031** Collected: 05/24/19 11:40 Received: 05/24/19 12:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:16	7429-90-5	
Barium, Dissolved	**69.0J**	ug/L	200	1		06/11/19 15:16	7440-39-3	
Calcium, Dissolved	**13000**	ug/L	1000	1		06/11/19 15:16	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:16	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:16	7440-50-8	
Iron, Dissolved	**8970**	ug/L	20.0	1		06/11/19 15:16	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:16	7439-92-1	
Magnesium, Dissolved	**9990**	ug/L	1000	1		06/11/19 15:16	7439-95-4	
Manganese, Dissolved	**1870**	ug/L	10.0	1		06/11/19 15:16	7439-96-5	
Nickel, Dissolved	**7.6J**	ug/L	40.0	1		06/11/19 15:16	7440-02-0	
Potassium, Dissolved	**16000**	ug/L	5000	1		06/11/19 15:16	7440-09-7	
Sodium, Dissolved	**58700**	ug/L	5000	1		06/11/19 15:16	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:16	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:19	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 23:29	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: FIELD BLANK_5/24/19 **Lab ID: 7090528032** Collected: 05/24/19 12:00 Received: 05/24/19 12:59 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							
Aluminum	**<200**	ug/L	200	1	06/04/19 09:09	06/11/19 13:29	7429-90-5	
Barium	**1.5J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:29	7440-39-3	
Calcium	**89.3J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:29	7440-70-2	
Chromium	**<10.0**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:29	7440-47-3	
Copper	**<25.0**	ug/L	25.0	1	06/04/19 09:09	06/11/19 13:29	7440-50-8	
Iron	**14.2J**	ug/L	100	1	06/04/19 09:09	06/11/19 13:29	7439-89-6	
Lead	**<5.0**	ug/L	5.0	1	06/04/19 09:09	06/11/19 13:29	7439-92-1	
Magnesium	**18.9J**	ug/L	200	1	06/04/19 09:09	06/11/19 13:29	7439-95-4	
Manganese	**<10.0**	ug/L	10.0	1	06/04/19 09:09	06/11/19 13:29	7439-96-5	
Nickel	**<40.0**	ug/L	40.0	1	06/04/19 09:09	06/11/19 13:29	7440-02-0	
Potassium	**<5000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:29	7440-09-7	
Sodium	**<5000**	ug/L	5000	1	06/04/19 09:09	06/11/19 13:29	7440-23-5	
Zinc	**<20.0**	ug/L	20.0	1	06/04/19 09:09	06/11/19 13:29	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	**<0.20**	ug/L	0.20	1	05/31/19 14:00	06/04/19 11:26	7439-97-6	
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Benzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	71-43-2	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-25-2	CL,L2, M0
n-Butylbenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	104-51-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	98-06-6	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		05/31/19 16:26	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	108-90-7	
Chloroethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		05/31/19 16:26	67-66-3	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	124-48-1	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	106-46-7	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	78-87-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	100-41-4	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		05/31/19 16:26	98-82-8	
Methylene Chloride	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-09-2	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	127-18-4	
Toluene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	108-88-3	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		05/31/19 16:26	71-55-6	
Trichloroethene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	79-01-6	
Vinyl chloride	**<1.0**	ug/L	1.0	1		05/31/19 16:26	75-01-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: FIELD BLANK_5/24/19 **Lab ID: 7090528032** Collected: 05/24/19 12:00 Received: 05/24/19 12:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Xylene (Total)	**<3.0**	ug/L	3.0	1		05/31/19 16:26	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		05/31/19 16:26	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		05/31/19 16:26	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	68-153	1		05/31/19 16:26	17060-07-0	
4-Bromofluorobenzene (S)	95	%	79-124	1		05/31/19 16:26	460-00-4	
Toluene-d8 (S)	92	%	69-124	1		05/31/19 16:26	2037-26-5	
2320B Alkalinity	Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	**<1.0**	mg/L	1.0	1		06/06/19 17:55		
Alkalinity,Bicarbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/06/19 17:55		
Alkalinity,Carbonate (CaCO3)	**<1.0**	mg/L	1.0	1		06/06/19 17:55		
2340C Hardness, Total	Analytical Method: SM22 2340C							
Tot Hardness asCaCO3 (SM 2340B	**<5.0**	mg/L	5.0	1		06/11/19 14:00		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C							
Total Dissolved Solids	**51.0**	mg/L	10.0	1		05/30/19 10:18		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 23:29	18540-29-9	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**<5.0**	mg/L	5.0	1		06/10/19 19:44	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	**<0.10**	mg/L	0.10	1	06/07/19 05:57	06/07/19 12:46	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	**<0.050**	mg/L	0.050	1		05/25/19 10:50	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2							
Nitrite as N	**<0.050**	mg/L	0.050	1		05/25/19 08:22	14797-65-0	
SM 4500 CNE Cyanide, Total	Analytical Method: SM22 4500-CN-E Preparation Method: SM20/22 4500-CN-C							
Cyanide	**<10.0**	ug/L	10.0	1	05/31/19 08:11	05/31/19 13:23	57-12-5	
4500 Chloride	Analytical Method: SM22 4500-Cl-E							
Chloride	**<10.0**	mg/L	10.0	5		06/07/19 12:31	16887-00-6	
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	**0.14**	mg/L	0.10	1		06/10/19 15:08	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Sample: FIELD BLANK_5/24/19 DISS **Lab ID: 7090528033** Collected: 05/24/19 12:00 Received: 05/24/19 12:59 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Metals, Dissolved	Analytical Method: EPA 200.7							
Aluminum, Dissolved	**<200**	ug/L	200	1		06/11/19 15:17	7429-90-5	
Barium, Dissolved	**<200**	ug/L	200	1		06/11/19 15:17	7440-39-3	
Calcium, Dissolved	**<1000**	ug/L	1000	1		06/11/19 15:17	7440-70-2	
Chromium, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:17	7440-47-3	
Copper, Dissolved	**<25.0**	ug/L	25.0	1		06/11/19 15:17	7440-50-8	
Iron, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:17	7439-89-6	
Lead, Dissolved	**<5.0**	ug/L	5.0	1		06/11/19 15:17	7439-92-1	
Magnesium, Dissolved	**<1000**	ug/L	1000	1		06/11/19 15:17	7439-95-4	
Manganese, Dissolved	**<10.0**	ug/L	10.0	1		06/11/19 15:17	7439-96-5	
Nickel, Dissolved	**<40.0**	ug/L	40.0	1		06/11/19 15:17	7440-02-0	
Potassium, Dissolved	**<5000**	ug/L	5000	1		06/11/19 15:17	7440-09-7	
Sodium, Dissolved	**<5000**	ug/L	5000	1		06/11/19 15:17	7440-23-5	
Zinc, Dissolved	**<20.0**	ug/L	20.0	1		06/11/19 15:17	7440-66-6	
245.1 Mercury, Dissolved	Analytical Method: 245.1 Rev. 3.0, 1994 Preparation Method: 245.1 Rev. 3.0, 1994							
Mercury, Dissolved	**<0.20**	ug/L	0.20	1	06/13/19 11:16	06/13/19 18:25	7439-97-6	
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B							
Chromium, Hexavalent	**<0.020**	mg/L	0.020	1		05/24/19 23:30	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 117214 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Dissolved
Associated Lab Samples: 7090528003, 7090528005, 7090528007, 7090528009, 7090528011, 7090528013, 7090528015, 7090528018, 7090528020, 7090528022, 7090528024, 7090528026, 7090528028, 7090528031, 7090528033

METHOD BLANK: 554952 Matrix: Water
Associated Lab Samples: 7090528003, 7090528005, 7090528007, 7090528009, 7090528011, 7090528013, 7090528015, 7090528018, 7090528020, 7090528022, 7090528024, 7090528026, 7090528028, 7090528031, 7090528033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<200	200	06/11/19 14:48	
Barium, Dissolved	ug/L	<200	200	06/11/19 14:48	
Calcium, Dissolved	ug/L	<1000	1000	06/11/19 14:48	
Chromium, Dissolved	ug/L	<10.0	10.0	06/11/19 14:48	
Copper, Dissolved	ug/L	<25.0	25.0	06/11/19 14:48	
Iron, Dissolved	ug/L	<20.0	20.0	06/11/19 14:48	
Lead, Dissolved	ug/L	<5.0	5.0	06/11/19 14:48	
Magnesium, Dissolved	ug/L	<1000	1000	06/11/19 14:48	
Manganese, Dissolved	ug/L	<10.0	10.0	06/11/19 14:48	
Nickel, Dissolved	ug/L	<40.0	40.0	06/11/19 14:48	
Potassium, Dissolved	ug/L	<5000	5000	06/11/19 14:48	
Sodium, Dissolved	ug/L	<5000	5000	06/11/19 14:48	
Zinc, Dissolved	ug/L	<20.0	20.0	06/11/19 14:48	

LABORATORY CONTROL SAMPLE: 554953

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	4960	99	85-115	
Barium, Dissolved	ug/L	500	489	98	85-115	
Calcium, Dissolved	ug/L	25000	25000	100	85-115	
Chromium, Dissolved	ug/L	250	244	98	85-115	
Copper, Dissolved	ug/L	250	243	97	85-115	
Iron, Dissolved	ug/L	2000	1990	100	85-115	
Lead, Dissolved	ug/L	500	500	100	85-115	
Magnesium, Dissolved	ug/L	25000	24800	99	85-115	
Manganese, Dissolved	ug/L	250	245	98	85-115	
Nickel, Dissolved	ug/L	250	248	99	85-115	
Potassium, Dissolved	ug/L	50000	48200	96	85-115	
Sodium, Dissolved	ug/L	50000	49100	98	85-115	
Zinc, Dissolved	ug/L	1000	996	100	85-115	

MATRIX SPIKE SAMPLE: 554956

Parameter	Units	7090528003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	<200	5000	5050	101	70-130	
Barium, Dissolved	ug/L	49.3J	500	554	101	70-130	
Calcium, Dissolved	ug/L	16600	25000	41700	100	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

MATRIX SPIKE SAMPLE: 554956

Parameter	Units	7090528003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	<10.0	250	248	99	70-130	
Copper, Dissolved	ug/L	<25.0	250	249	99	70-130	
Iron, Dissolved	ug/L	39.8	2000	2070	102	70-130	
Lead, Dissolved	ug/L	<5.0	500	441	88	70-130	
Magnesium, Dissolved	ug/L	13000	25000	38000	100	70-130	
Manganese, Dissolved	ug/L	2330	250	2540	84	70-130	
Nickel, Dissolved	ug/L	<40.0	250	256	101	70-130	
Potassium, Dissolved	ug/L	23600	50000	68900	91	70-130	
Sodium, Dissolved	ug/L	60500	50000	110000	99	70-130	
Zinc, Dissolved	ug/L	<20.0	1000	1020	102	70-130	

MATRIX SPIKE SAMPLE: 554958

Parameter	Units	7090528005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	<200	5000	5030	101	70-130	
Barium, Dissolved	ug/L	77.2J	500	578	100	70-130	
Calcium, Dissolved	ug/L	11700	25000	36900	101	70-130	
Chromium, Dissolved	ug/L	<10.0	250	248	99	70-130	
Copper, Dissolved	ug/L	<25.0	250	247	97	70-130	
Iron, Dissolved	ug/L	12.9J	2000	2030	101	70-130	
Lead, Dissolved	ug/L	<5.0	500	433	87	70-130	
Magnesium, Dissolved	ug/L	5040	25000	30200	101	70-130	
Manganese, Dissolved	ug/L	2440	250	2670	92	70-130	
Nickel, Dissolved	ug/L	<40.0	250	255	101	70-130	
Potassium, Dissolved	ug/L	8500	50000	54000	91	70-130	
Sodium, Dissolved	ug/L	52300	50000	101000	97	70-130	
Zinc, Dissolved	ug/L	10.5J	1000	1030	102	70-130	

SAMPLE DUPLICATE: 554955

Parameter	Units	7090528003 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	<200	<200		
Barium, Dissolved	ug/L	49.3J	48.7J		
Calcium, Dissolved	ug/L	16600	16400	1	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	39.8	39.3	1	
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	13000	12800	2	
Manganese, Dissolved	ug/L	2330	2300	1	
Nickel, Dissolved	ug/L	<40.0	<40.0		
Potassium, Dissolved	ug/L	23600	23300	1	
Sodium, Dissolved	ug/L	60500	60000	1	
Zinc, Dissolved	ug/L	<20.0	<20.0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

SAMPLE DUPLICATE: 554957

Parameter	Units	7090528005 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved	ug/L	<200	<200		
Barium, Dissolved	ug/L	77.2J	76.4J		
Calcium, Dissolved	ug/L	11700	11500	2	
Chromium, Dissolved	ug/L	<10.0	<10.0		
Copper, Dissolved	ug/L	<25.0	<25.0		
Iron, Dissolved	ug/L	12.9J	12.1J		
Lead, Dissolved	ug/L	<5.0	<5.0		
Magnesium, Dissolved	ug/L	5040	4980	1	
Manganese, Dissolved	ug/L	2440	2410	1	
Nickel, Dissolved	ug/L	<40.0	<40.0		
Potassium, Dissolved	ug/L	8500	8320	2	
Sodium, Dissolved	ug/L	52300	51900	1	
Zinc, Dissolved	ug/L	10.5J	10.9J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115860 Analysis Method: EPA 245.1
QC Batch Method: EPA 245.1 Analysis Description: 245.1 Mercury
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 547157 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	06/04/19 10:40	

LABORATORY CONTROL SAMPLE: 547158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.94	94	85-115	

MATRIX SPIKE SAMPLE: 547159

Parameter	Units	7090528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.94	84	70-130	

MATRIX SPIKE SAMPLE: 547161

Parameter	Units	30295764001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	1	0.97	93	70-130	

SAMPLE DUPLICATE: 547160

Parameter	Units	7090528002 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

SAMPLE DUPLICATE: 547162

Parameter	Units	30295764001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	ND	<0.20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 347106 Analysis Method: 245.1 Rev. 3.0, 1994
QC Batch Method: 245.1 Rev. 3.0, 1994 Analysis Description: 245.1 Mercury - Dissolved
Associated Lab Samples: 7090528003, 7090528005, 7090528007, 7090528009, 7090528011, 7090528013, 7090528015, 7090528018, 7090528020, 7090528022, 7090528024, 7090528026, 7090528028, 7090528031, 7090528033

METHOD BLANK: 1688271 Matrix: Water
Associated Lab Samples: 7090528003, 7090528005, 7090528007, 7090528009, 7090528011, 7090528013, 7090528015, 7090528018, 7090528020, 7090528022, 7090528024, 7090528026, 7090528028, 7090528031, 7090528033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.20	0.20	06/13/19 17:44	

LABORATORY CONTROL SAMPLE: 1688272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	1	1.0	101	85-115	

MATRIX SPIKE SAMPLE: 1688274

Parameter	Units	7090528003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	0.050J	2.5	2.6	103	70-130	

MATRIX SPIKE SAMPLE: 1688276

Parameter	Units	7090528024 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	0.040J	2.5	2.4	95	70-130	

SAMPLE DUPLICATE: 1688273

Parameter	Units	7090528003 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	0.050J	0.060J		

SAMPLE DUPLICATE: 1688275

Parameter	Units	7090528024 Result	Dup Result	RPD	Qualifiers
Mercury, Dissolved	ug/L	0.040J	0.050J		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116227 Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 Analysis Description: 200.7 Metals, Total
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 548925 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	06/07/19 17:16	
Barium	ug/L	<200	200	06/07/19 17:16	
Calcium	ug/L	<200	200	06/07/19 17:16	
Chromium	ug/L	<10.0	10.0	06/07/19 17:16	
Copper	ug/L	<25.0	25.0	06/07/19 17:16	
Iron	ug/L	<100	100	06/07/19 17:16	
Lead	ug/L	<5.0	5.0	06/07/19 17:16	
Magnesium	ug/L	<200	200	06/07/19 17:16	
Manganese	ug/L	<10.0	10.0	06/07/19 17:16	
Nickel	ug/L	<40.0	40.0	06/07/19 17:16	
Potassium	ug/L	<5000	5000	06/07/19 17:16	
Sodium	ug/L	<5000	5000	06/07/19 17:16	
Zinc	ug/L	<20.0	20.0	06/07/19 17:16	

LABORATORY CONTROL SAMPLE: 548926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4960	99	85-115	
Barium	ug/L	500	502	100	85-115	
Calcium	ug/L	25000	25500	102	85-115	
Chromium	ug/L	250	254	102	85-115	
Copper	ug/L	250	254	102	85-115	
Iron	ug/L	2000	2070	104	85-115	
Lead	ug/L	500	508	102	85-115	
Magnesium	ug/L	25000	24900	100	85-115	
Manganese	ug/L	250	263	105	85-115	
Nickel	ug/L	250	257	103	85-115	
Potassium	ug/L	50000	48000	96	85-115	
Sodium	ug/L	50000	49800	100	85-115	
Zinc	ug/L	1000	1010	101	85-115	

MATRIX SPIKE SAMPLE: 548928

Parameter	Units	30296124023 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	643	5000	5920	106	70-130	
Barium	ug/L	ND	500	511	93	70-130	
Calcium	ug/L	5880	25000	29200	93	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

MATRIX SPIKE SAMPLE: 548928

Parameter	Units	30296124023 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	ND	250	239	93	70-130	
Copper	ug/L	ND	250	244	96	70-130	
Iron	ug/L	2480	2000	4490	100	70-130	
Lead	ug/L	ND	500	462	92	70-130	
Magnesium	ug/L	2430	25000	25600	93	70-130	
Manganese	ug/L	81.4	250	312	92	70-130	
Nickel	ug/L	ND	250	246	95	70-130	
Potassium	ug/L	ND	50000	48100	93	70-130	
Sodium	ug/L	9380	50000	55300	92	70-130	
Zinc	ug/L	ND	1000	960	95	70-130	

MATRIX SPIKE SAMPLE: 548930

Parameter	Units	30296124021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	1690	5000	14100	248	70-130	M1
Barium	ug/L	ND	500	499	96	70-130	
Calcium	ug/L	9050	25000	32700	95	70-130	
Chromium	ug/L	ND	250	248	97	70-130	
Copper	ug/L	ND	250	255	97	70-130	
Iron	ug/L	2170	2000	8080	296	70-130	M1
Lead	ug/L	ND	500	465	93	70-130	
Magnesium	ug/L	1520	25000	25200	95	70-130	
Manganese	ug/L	189	250	426	95	70-130	
Nickel	ug/L	ND	250	268	103	70-130	
Potassium	ug/L	ND	50000	51400	95	70-130	
Sodium	ug/L	10200	50000	57100	94	70-130	
Zinc	ug/L	60.8	1000	1020	96	70-130	

SAMPLE DUPLICATE: 548927

Parameter	Units	30296124023 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	643	589	9	
Barium	ug/L	ND	47.7J		
Calcium	ug/L	5880	5810	1	
Chromium	ug/L	ND	5.6J		
Copper	ug/L	ND	<25.0		
Iron	ug/L	2480	2480	0	
Lead	ug/L	ND	<5.0		
Magnesium	ug/L	2430	2410	1	
Manganese	ug/L	81.4	82.1	1	
Nickel	ug/L	ND	9.3J		
Potassium	ug/L	ND	1560J		
Sodium	ug/L	9380	8580	9	
Zinc	ug/L	ND	14.1J		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

SAMPLE DUPLICATE: 548929

Parameter	Units	30296124021 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	1690	2870	52	D6
Barium	ug/L	ND	18.2J		
Calcium	ug/L	9050	8940	1	
Chromium	ug/L	ND	7.6J		
Copper	ug/L	ND	14.8J		
Iron	ug/L	2170	3960	58	D6
Lead	ug/L	ND	<5.0		
Magnesium	ug/L	1520	1570	3	
Manganese	ug/L	189	193	2	
Nickel	ug/L	ND	14.7J		
Potassium	ug/L	ND	3960J		
Sodium	ug/L	10200	9990	2	
Zinc	ug/L	60.8	62.6	3	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115419 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7090528001, 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528016, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528029, 7090528030

METHOD BLANK: 544854 Matrix: Water
Associated Lab Samples: 7090528001, 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528016, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528029, 7090528030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	05/28/19 11:28	
1,1-Dichloroethane	ug/L	<1.0	1.0	05/28/19 11:28	
1,1-Dichloroethene	ug/L	<1.0	1.0	05/28/19 11:28	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	05/28/19 11:28	
1,2-Dichloroethane	ug/L	<1.0	1.0	05/28/19 11:28	
1,2-Dichloropropane	ug/L	<1.0	1.0	05/28/19 11:28	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	05/28/19 11:28	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	05/28/19 11:28	
Benzene	ug/L	<1.0	1.0	05/28/19 11:28	
Bromodichloromethane	ug/L	<1.0	1.0	05/28/19 11:28	
Bromoform	ug/L	<1.0	1.0	05/28/19 11:28	CL
Carbon tetrachloride	ug/L	<1.0	1.0	05/28/19 11:28	
Chlorobenzene	ug/L	<1.0	1.0	05/28/19 11:28	
Chloroethane	ug/L	<1.0	1.0	05/28/19 11:28	
Chloroform	ug/L	<1.0	1.0	05/28/19 11:28	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	05/28/19 11:28	
Dibromochloromethane	ug/L	<1.0	1.0	05/28/19 11:28	
Dichlorodifluoromethane	ug/L	<1.0	1.0	05/28/19 11:28	
Ethylbenzene	ug/L	<1.0	1.0	05/28/19 11:28	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	05/28/19 11:28	
m&p-Xylene	ug/L	<2.0	2.0	05/28/19 11:28	
Methylene Chloride	ug/L	<1.0	1.0	05/28/19 11:28	
n-Butylbenzene	ug/L	<1.0	1.0	05/28/19 11:28	
o-Xylene	ug/L	<1.0	1.0	05/28/19 11:28	
tert-Butylbenzene	ug/L	<1.0	1.0	05/28/19 11:28	
Tetrachloroethene	ug/L	<1.0	1.0	05/28/19 11:28	CL
Toluene	ug/L	<1.0	1.0	05/28/19 11:28	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	05/28/19 11:28	
Trichloroethene	ug/L	<1.0	1.0	05/28/19 11:28	
Vinyl chloride	ug/L	<1.0	1.0	05/28/19 11:28	
Xylene (Total)	ug/L	<3.0	3.0	05/28/19 11:28	
1,2-Dichloroethane-d4 (S)	%	96	68-153	05/28/19 11:28	
4-Bromofluorobenzene (S)	%	92	79-124	05/28/19 11:28	
Toluene-d8 (S)	%	89	69-124	05/28/19 11:28	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

LABORATORY CONTROL SAMPLE: 544855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.9	104	65-118	
1,1-Dichloroethane	ug/L	50	51.5	103	83-151	
1,1-Dichloroethene	ug/L	50	48.5	97	45-146	
1,2-Dichlorobenzene	ug/L	50	39.2	78	74-113	
1,2-Dichloroethane	ug/L	50	45.7	91	74-129	
1,2-Dichloropropane	ug/L	50	44.7	89	75-117	
1,3-Dichlorobenzene	ug/L	50	40.5	81	71-112	
1,4-Dichlorobenzene	ug/L	50	40.5	81	71-113	
Benzene	ug/L	50	47.6	95	73-119	
Bromodichloromethane	ug/L	50	47.6	95	78-117	
Bromoform	ug/L	50	26.7	53	65-122	CL,L2
Carbon tetrachloride	ug/L	50	49.6	99	59-120	
Chlorobenzene	ug/L	50	40.1	80	75-113	
Chloroethane	ug/L	50	50.3	101	49-151	
Chloroform	ug/L	50	47.7	95	72-122	
cis-1,2-Dichloroethene	ug/L	50	44.8	90	72-121	
Dibromochloromethane	ug/L	50	36.3	73	70-120	
Dichlorodifluoromethane	ug/L	50	42.1	84	22-154	
Ethylbenzene	ug/L	50	43.9	88	70-113	
Isopropylbenzene (Cumene)	ug/L	50	44.0	88	67-115	
m&p-Xylene	ug/L	100	86.6	87	72-115	
Methylene Chloride	ug/L	50	48.9	98	61-142	
n-Butylbenzene	ug/L	50	49.3	99	73-107	
o-Xylene	ug/L	50	41.4	83	73-117	
tert-Butylbenzene	ug/L	50	45.4	91	68-100	
Tetrachloroethene	ug/L	50	43.8	88	60-128	CL
Toluene	ug/L	50	49.2	98	72-119	
trans-1,2-Dichloroethene	ug/L	50	51.1	102	56-142	
Trichloroethene	ug/L	50	48.8	98	69-117	
Vinyl chloride	ug/L	50	38.7	77	43-143	
Xylene (Total)	ug/L	150	128	85	71-109	
1,2-Dichloroethane-d4 (S)	%			90	68-153	
4-Bromofluorobenzene (S)	%			100	79-124	
Toluene-d8 (S)	%			88	69-124	

MATRIX SPIKE SAMPLE: 544856

Parameter	Units	7090528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	50	56.5	113	65-118	
1,1-Dichloroethane	ug/L	<1.0	50	55.5	111	83-151	
1,1-Dichloroethene	ug/L	<1.0	50	52.0	104	45-146	
1,2-Dichlorobenzene	ug/L	<1.0	50	42.2	84	74-113	
1,2-Dichloroethane	ug/L	<1.0	50	49.2	98	74-129	
1,2-Dichloropropane	ug/L	<1.0	50	48.2	96	75-117	
1,3-Dichlorobenzene	ug/L	<1.0	50	43.5	87	71-112	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

MATRIX SPIKE SAMPLE: 544856

Parameter	Units	7090528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<1.0	50	44.1	88	71-113	
Benzene	ug/L	<1.0	50	49.9	100	73-119	
Bromodichloromethane	ug/L	<1.0	50	47.6	95	78-117	
Bromoform	ug/L	<1.0	50	30.5	61	65-122	CL,M0
Carbon tetrachloride	ug/L	<1.0	50	53.8	108	59-120	
Chlorobenzene	ug/L	<1.0	50	43.5	87	75-113	
Chloroethane	ug/L	<1.0	50	54.8	110	49-151	
Chloroform	ug/L	<1.0	50	50.1	100	72-122	
cis-1,2-Dichloroethene	ug/L	<1.0	50	48.6	97	72-121	
Dibromochloromethane	ug/L	<1.0	50	39.4	79	70-120	
Dichlorodifluoromethane	ug/L	<1.0	50	44.8	90	22-154	
Ethylbenzene	ug/L	<1.0	50	47.8	96	70-113	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	46.2	92	67-115	
m&p-Xylene	ug/L	<2.0	100	92.0	92	72-115	
Methylene Chloride	ug/L	<1.0	50	49.2	98	61-142	
n-Butylbenzene	ug/L	<1.0	50	52.4	105	73-107	
o-Xylene	ug/L	<1.0	50	45.4	91	73-117	
tert-Butylbenzene	ug/L	<1.0	50	46.6	93	68-100	
Tetrachloroethene	ug/L	<1.0	50	38.4	77	60-128	CL
Toluene	ug/L	<1.0	50	51.2	102	72-119	
trans-1,2-Dichloroethene	ug/L	<1.0	50	56.6	113	56-142	
Trichloroethene	ug/L	<1.0	50	52.2	104	69-117	
Vinyl chloride	ug/L	<1.0	50	43.0	86	43-143	
Xylene (Total)	ug/L	<3.0	150	137	92	71-109	
1,2-Dichloroethane-d4 (S)	%				98	68-153	
4-Bromofluorobenzene (S)	%				99	79-124	
Toluene-d8 (S)	%				87	69-124	

SAMPLE DUPLICATE: 544857

Parameter	Units	7090528017 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethene	ug/L	<1.0	<1.0		
1,2-Dichlorobenzene	ug/L	<1.0	<1.0		
1,2-Dichloroethane	ug/L	<1.0	<1.0		
1,2-Dichloropropane	ug/L	<1.0	<1.0		
1,3-Dichlorobenzene	ug/L	<1.0	<1.0		
1,4-Dichlorobenzene	ug/L	1.6	1.6	3	
Benzene	ug/L	2.3	2.3	1	
Bromodichloromethane	ug/L	<1.0	<1.0		
Bromoform	ug/L	<1.0	<1.0		CL
Carbon tetrachloride	ug/L	<1.0	<1.0		
Chlorobenzene	ug/L	1.2	1.4	8	
Chloroethane	ug/L	<1.0	<1.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

SAMPLE DUPLICATE: 544857

Parameter	Units	7090528017 Result	Dup Result	RPD	Qualifiers
Chloroform	ug/L	<1.0	<1.0		
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0		
Dibromochloromethane	ug/L	<1.0	<1.0		
Dichlorodifluoromethane	ug/L	<1.0	<1.0		
Ethylbenzene	ug/L	<1.0	<1.0		
Isopropylbenzene (Cumene)	ug/L	5.0	5.1	2	
m&p-Xylene	ug/L	<2.0	<2.0		
Methylene Chloride	ug/L	<1.0	<1.0		
n-Butylbenzene	ug/L	<1.0	<1.0		
o-Xylene	ug/L	<1.0	<1.0		
tert-Butylbenzene	ug/L	<1.0	<1.0		
Tetrachloroethene	ug/L	<1.0	<1.0		CL
Toluene	ug/L	<1.0	<1.0		
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0		
Trichloroethene	ug/L	<1.0	<1.0		
Vinyl chloride	ug/L	<1.0	<1.0		
Xylene (Total)	ug/L	<3.0	<3.0		
1,2-Dichloroethane-d4 (S)	%	93	97		
4-Bromofluorobenzene (S)	%	87	93		
Toluene-d8 (S)	%	92	90		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115968 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 7090528032

METHOD BLANK: 547915 Matrix: Water
Associated Lab Samples: 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	1.0	05/31/19 12:20	
1,1-Dichloroethane	ug/L	<1.0	1.0	05/31/19 12:20	
1,1-Dichloroethene	ug/L	<1.0	1.0	05/31/19 12:20	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	05/31/19 12:20	
1,2-Dichloroethane	ug/L	<1.0	1.0	05/31/19 12:20	
1,2-Dichloropropane	ug/L	<1.0	1.0	05/31/19 12:20	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	05/31/19 12:20	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	05/31/19 12:20	
Benzene	ug/L	<1.0	1.0	05/31/19 12:20	
Bromodichloromethane	ug/L	<1.0	1.0	05/31/19 12:20	
Bromoform	ug/L	<1.0	1.0	05/31/19 12:20	CL
Carbon tetrachloride	ug/L	<1.0	1.0	05/31/19 12:20	
Chlorobenzene	ug/L	<1.0	1.0	05/31/19 12:20	
Chloroethane	ug/L	<1.0	1.0	05/31/19 12:20	
Chloroform	ug/L	<1.0	1.0	05/31/19 12:20	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	05/31/19 12:20	
Dibromochloromethane	ug/L	<1.0	1.0	05/31/19 12:20	
Dichlorodifluoromethane	ug/L	<1.0	1.0	05/31/19 12:20	
Ethylbenzene	ug/L	<1.0	1.0	05/31/19 12:20	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	05/31/19 12:20	
m&p-Xylene	ug/L	<2.0	2.0	05/31/19 12:20	
Methylene Chloride	ug/L	<1.0	1.0	05/31/19 12:20	
n-Butylbenzene	ug/L	<1.0	1.0	05/31/19 12:20	
o-Xylene	ug/L	<1.0	1.0	05/31/19 12:20	
tert-Butylbenzene	ug/L	<1.0	1.0	05/31/19 12:20	
Tetrachloroethene	ug/L	<1.0	1.0	05/31/19 12:20	
Toluene	ug/L	<1.0	1.0	05/31/19 12:20	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	05/31/19 12:20	
Trichloroethene	ug/L	<1.0	1.0	05/31/19 12:20	
Vinyl chloride	ug/L	<1.0	1.0	05/31/19 12:20	
Xylene (Total)	ug/L	<3.0	3.0	05/31/19 12:20	
1,2-Dichloroethane-d4 (S)	%	101	68-153	05/31/19 12:20	
4-Bromofluorobenzene (S)	%	86	79-124	05/31/19 12:20	
Toluene-d8 (S)	%	87	69-124	05/31/19 12:20	

LABORATORY CONTROL SAMPLE: 547916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.0	98	65-118	
1,1-Dichloroethane	ug/L	50	51.3	103	83-151	

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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
Pace Project No.: 7090528

LABORATORY CONTROL SAMPLE: 547916

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	47.8	96	45-146	
1,2-Dichlorobenzene	ug/L	50	39.1	78	74-113	
1,2-Dichloroethane	ug/L	50	46.1	92	74-129	
1,2-Dichloropropane	ug/L	50	46.3	93	75-117	
1,3-Dichlorobenzene	ug/L	50	42.4	85	71-112	
1,4-Dichlorobenzene	ug/L	50	39.4	79	71-113	
Benzene	ug/L	50	45.8	92	73-119	
Bromodichloromethane	ug/L	50	46.0	92	78-117	
Bromoform	ug/L	50	30.4	61	65-122	CL,L2
Carbon tetrachloride	ug/L	50	47.6	95	59-120	
Chlorobenzene	ug/L	50	42.5	85	75-113	
Chloroethane	ug/L	50	50.8	102	49-151	
Chloroform	ug/L	50	46.6	93	72-122	
cis-1,2-Dichloroethene	ug/L	50	43.4	87	72-121	
Dibromochloromethane	ug/L	50	40.4	81	70-120	
Dichlorodifluoromethane	ug/L	50	37.8	76	22-154	
Ethylbenzene	ug/L	50	47.5	95	70-113	
Isopropylbenzene (Cumene)	ug/L	50	41.5	83	67-115	
m&p-Xylene	ug/L	100	92.5	92	72-115	
Methylene Chloride	ug/L	50	47.2	94	61-142	
n-Butylbenzene	ug/L	50	47.1	94	73-107	
o-Xylene	ug/L	50	42.6	85	73-117	
tert-Butylbenzene	ug/L	50	41.5	83	68-100	
Tetrachloroethene	ug/L	50	50.9	102	60-128	
Toluene	ug/L	50	48.7	97	72-119	
trans-1,2-Dichloroethene	ug/L	50	50.1	100	56-142	
Trichloroethene	ug/L	50	47.6	95	69-117	
Vinyl chloride	ug/L	50	41.1	82	43-143	
Xylene (Total)	ug/L	150	135	90	71-109	
1,2-Dichloroethane-d4 (S)	%			92	68-153	
4-Bromofluorobenzene (S)	%			102	79-124	
Toluene-d8 (S)	%			90	69-124	

MATRIX SPIKE SAMPLE: 547918

Parameter	Units	7090528032 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	<1.0	50	54.8	110	65-118	
1,1-Dichloroethane	ug/L	<1.0	50	54.9	110	83-151	
1,1-Dichloroethene	ug/L	<1.0	50	47.8	96	45-146	
1,2-Dichlorobenzene	ug/L	<1.0	50	37.7	75	74-113	
1,2-Dichloroethane	ug/L	<1.0	50	52.8	106	74-129	
1,2-Dichloropropane	ug/L	<1.0	50	51.3	103	75-117	
1,3-Dichlorobenzene	ug/L	<1.0	50	39.3	79	71-112	
1,4-Dichlorobenzene	ug/L	<1.0	50	39.9	80	71-113	
Benzene	ug/L	<1.0	50	50.3	101	73-119	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

MATRIX SPIKE SAMPLE: 547918

Parameter	Units	7090528032 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	<1.0	50	51.8	104	78-117	
Bromoform	ug/L	<1.0	50	30.4	61	65-122	CL,M0
Carbon tetrachloride	ug/L	<1.0	50	51.8	104	59-120	
Chlorobenzene	ug/L	<1.0	50	42.5	85	75-113	
Chloroethane	ug/L	<1.0	50	51.6	103	49-151	
Chloroform	ug/L	<1.0	50	51.5	103	72-122	
cis-1,2-Dichloroethene	ug/L	<1.0	50	49.3	99	72-121	
Dibromochloromethane	ug/L	<1.0	50	40.9	82	70-120	
Dichlorodifluoromethane	ug/L	<1.0	50	34.2	68	22-154	
Ethylbenzene	ug/L	<1.0	50	44.6	89	70-113	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	39.5	79	67-115	
m&p-Xylene	ug/L	<2.0	100	92.5	92	72-115	
Methylene Chloride	ug/L	<1.0	50	53.2	106	61-142	
n-Butylbenzene	ug/L	<1.0	50	43.0	86	73-107	
o-Xylene	ug/L	<1.0	50	43.6	87	73-117	
tert-Butylbenzene	ug/L	<1.0	50	39.1	78	68-100	
Tetrachloroethene	ug/L	<1.0	50	35.9	72	60-128	
Toluene	ug/L	<1.0	50	53.3	107	72-119	
trans-1,2-Dichloroethene	ug/L	<1.0	50	53.7	107	56-142	
Trichloroethene	ug/L	<1.0	50	52.9	106	69-117	
Vinyl chloride	ug/L	<1.0	50	37.3	75	43-143	
Xylene (Total)	ug/L	<3.0	150	136	91	71-109	
1,2-Dichloroethane-d4 (S)	%				103	68-153	
4-Bromofluorobenzene (S)	%				95	79-124	
Toluene-d8 (S)	%				83	69-124	

SAMPLE DUPLICATE: 547917

Parameter	Units	7091244001 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	<10.0	<10.0		
1,1-Dichloroethane	ug/L	<10.0	<10.0		
1,1-Dichloroethene	ug/L	<10.0	<10.0		
1,2-Dichlorobenzene	ug/L	<10.0	<10.0		
1,2-Dichloroethane	ug/L	<10.0	<10.0		
1,2-Dichloropropane	ug/L	<10.0	<10.0		
1,3-Dichlorobenzene	ug/L	<10.0	<10.0		
1,4-Dichlorobenzene	ug/L	<10.0	<10.0		
Benzene	ug/L	<10.0	<10.0		
Bromodichloromethane	ug/L	<10.0	<10.0		
Bromoform	ug/L	<10.0	<10.0		CL
Carbon tetrachloride	ug/L	<10.0	<10.0		
Chlorobenzene	ug/L	<10.0	<10.0		
Chloroethane	ug/L	<10.0	<10.0		
Chloroform	ug/L	<10.0	11.8		
cis-1,2-Dichloroethene	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

SAMPLE DUPLICATE: 547917

Parameter	Units	7091244001 Result	Dup Result	RPD	Qualifiers
Dibromochloromethane	ug/L	<10.0	<10.0		
Dichlorodifluoromethane	ug/L	<10.0	<10.0		
Ethylbenzene	ug/L	<10.0	<10.0		
Isopropylbenzene (Cumene)	ug/L	<10.0	<10.0		
m&p-Xylene	ug/L	<20.0	<20.0		
Methylene Chloride	ug/L	<10.0	<10.0		
n-Butylbenzene	ug/L	<10.0	<10.0		
o-Xylene	ug/L	<10.0	<10.0		
tert-Butylbenzene	ug/L	<10.0	<10.0		
Tetrachloroethene	ug/L	<10.0	<10.0		
Toluene	ug/L	<10.0	<10.0		
trans-1,2-Dichloroethene	ug/L	<10.0	<10.0		
Trichloroethene	ug/L	<10.0	<10.0		
Vinyl chloride	ug/L	<10.0	<10.0		
Xylene (Total)	ug/L	<30.0	<30.0		
1,2-Dichloroethane-d4 (S)	%	107	104		
4-Bromofluorobenzene (S)	%	90	86		
Toluene-d8 (S)	%	87	90		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115859 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008

METHOD BLANK: 547153 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	05/31/19 16:10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	05/31/19 16:10	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	05/31/19 16:10	

LABORATORY CONTROL SAMPLE: 547154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	25.8	103	85-115	

MATRIX SPIKE SAMPLE: 547176

Parameter	Units	30295777001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	76.2	25	101	100	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	76.2	25	101	100	75-125	
Alkalinity,Carbonate (CaCO3)	mg/L	ND		<1.0			

SAMPLE DUPLICATE: 547175

Parameter	Units	30295777001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	76.2	76.0	0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	76.2	76.0	0	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	<1.0		

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116069 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7090528010, 7090528012, 7090528014

METHOD BLANK: 548322 Matrix: Water
Associated Lab Samples: 7090528010, 7090528012, 7090528014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	06/03/19 16:16	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	06/03/19 16:16	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	06/03/19 16:16	

LABORATORY CONTROL SAMPLE: 548323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	26.1	105	85-115	

MATRIX SPIKE SAMPLE: 548363

Parameter	Units	7090582003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	24.0	25	49.4	102	75-125	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0		16.5			

SAMPLE DUPLICATE: 548362

Parameter	Units	7090582003 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	24.0	24.0	0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	24.0	24.0	0	
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
Pace Project No.: 7090528

QC Batch: 116123 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

METHOD BLANK: 548739 Matrix: Water
Associated Lab Samples: 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	06/03/19 21:59	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	06/03/19 21:59	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	06/03/19 21:59	

LABORATORY CONTROL SAMPLE: 548740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	26.4	106	85-115	

MATRIX SPIKE SAMPLE: 548742

Parameter	Units	7090528019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	25	27.4	110	75-125	

SAMPLE DUPLICATE: 548741

Parameter	Units	7090528019 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	<1.0		
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	<1.0		
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
Pace Project No.: 7090528

QC Batch: 116578 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 7090528030, 7090528032

METHOD BLANK: 550894 Matrix: Water
Associated Lab Samples: 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	06/06/19 14:33	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<1.0	1.0	06/06/19 14:33	
Alkalinity,Carbonate (CaCO3)	mg/L	<1.0	1.0	06/06/19 14:33	

LABORATORY CONTROL SAMPLE: 550895

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	26.0	104	85-115	

MATRIX SPIKE SAMPLE: 550994

Parameter	Units	7091234001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	59.3	25	85.4	104	75-125	

SAMPLE DUPLICATE: 550993

Parameter	Units	7091234001 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	59.3	58.8	1	
Alkalinity,Bicarbonate (CaCO3)	mg/L	59.3	58.8	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
Pace Project No.: 7090528

QC Batch: 116329 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity, High Level
Associated Lab Samples: 7090528017

METHOD BLANK: 549719 Matrix: Water
Associated Lab Samples: 7090528017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<5.0	5.0	06/05/19 10:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	<5.0	5.0	06/05/19 10:05	
Alkalinity,Carbonate (CaCO3)	mg/L	<5.0	5.0	06/05/19 10:05	

LABORATORY CONTROL SAMPLE: 549720

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	125	129	103	80-120	

MATRIX SPIKE SAMPLE: 549722

Parameter	Units	7091973007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5170	312	5100	-22	75-125	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5170	312	5100	-22	75-125	

SAMPLE DUPLICATE: 549721

Parameter	Units	7091973007 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	5170	5260	2	
Alkalinity,Bicarbonate (CaCO3)	mg/L	5170	5260	2	
Alkalinity,Carbonate (CaCO3)	mg/L	5170	5260	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 117167 Analysis Method: SM22 2340C
QC Batch Method: SM22 2340C Analysis Description: 2340C Hardness, Total
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 554822 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Tot Hardness asCaCO3 (SM 2340B	mg/L	<5.0	5.0	06/11/19 12:04	

LABORATORY CONTROL SAMPLE: 554823

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B	mg/L	100	99.0	99	90-110	

MATRIX SPIKE SAMPLE: 555024

Parameter	Units	7090528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B	mg/L	85.0	500	600	103	75-125	

SAMPLE DUPLICATE: 555025

Parameter	Units	7090528002 Result	Dup Result	RPD	Qualifiers
Tot Hardness asCaCO3 (SM 2340B	mg/L	85.0	90.0	6	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115374 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017

METHOD BLANK: 544746 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	05/29/19 09:47	

LABORATORY CONTROL SAMPLE: 544747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	564	113	85-115	

MATRIX SPIKE SAMPLE: 544749

Parameter	Units	30295547001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	234	600	1040	134	75-125	H1,M1

MATRIX SPIKE SAMPLE: 544751

Parameter	Units	7090528017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1690	1200	3330	137	75-125	M1

SAMPLE DUPLICATE: 544748

Parameter	Units	30295547001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	234	216	8	D6,H1

SAMPLE DUPLICATE: 544750

Parameter	Units	7090528017 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	1690	1720	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115543 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 545811 Matrix: Water
Associated Lab Samples: 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	05/30/19 09:19	

LABORATORY CONTROL SAMPLE: 545812

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	534	107	85-115	

MATRIX SPIKE SAMPLE: 545814

Parameter	Units	7090528019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	666	600	1410	125	75-125	

MATRIX SPIKE SAMPLE: 545845

Parameter	Units	7089474021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1140	600	1950	135	75-125	M1

SAMPLE DUPLICATE: 545813

Parameter	Units	7090528019 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	666	660	1	

SAMPLE DUPLICATE: 545844

Parameter	Units	7089474021 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	1140	1120	2	

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 114804 Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 7090528002, 7090528003, 7090528004, 7090528005, 7090528006, 7090528007, 7090528008, 7090528009, 7090528010, 7090528011, 7090528012, 7090528013, 7090528014, 7090528015

METHOD BLANK: 541089 Matrix: Water
Associated Lab Samples: 7090528002, 7090528003, 7090528004, 7090528005, 7090528006, 7090528007, 7090528008, 7090528009, 7090528010, 7090528011, 7090528012, 7090528013, 7090528014, 7090528015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/22/19 22:07	

LABORATORY CONTROL SAMPLE: 541090

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.20	101	85-115	

MATRIX SPIKE SAMPLE: 541106

Parameter	Units	7090528004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.20	102	75-125	

SAMPLE DUPLICATE: 541107

Parameter	Units	7090528004 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
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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 114991 Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 7090528017, 7090528018, 7090528019, 7090528020, 7090528021, 7090528022, 7090528023, 7090528024, 7090528025, 7090528026, 7090528027, 7090528028

METHOD BLANK: 542252 Matrix: Water
Associated Lab Samples: 7090528017, 7090528018, 7090528019, 7090528020, 7090528021, 7090528022, 7090528023, 7090528024, 7090528025, 7090528026, 7090528027, 7090528028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/24/19 09:08	

LABORATORY CONTROL SAMPLE: 542253

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: 542341

Parameter	Units	7090528019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.2	0.20	101	75-125	

SAMPLE DUPLICATE: 542342

Parameter	Units	7090528019 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		

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REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115140 Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 7090528030, 7090528031, 7090528032, 7090528033

METHOD BLANK: 543057 Matrix: Water
Associated Lab Samples: 7090528030, 7090528031, 7090528032, 7090528033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	05/24/19 23:22	

LABORATORY CONTROL SAMPLE: 543058

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: 543059

Parameter	Units	7090528030 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.45	0.33	74	75-125	M1

SAMPLE DUPLICATE: 543060

Parameter	Units	7090528030 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	<0.020		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116884 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 553247 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<5.0	5.0	06/08/19 04:07	

LABORATORY CONTROL SAMPLE: 553248

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	10	9.5	95	90-110	

MATRIX SPIKE SAMPLE: 553249

Parameter	Units	7090528006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	21.4	10	32.2	108	80-120	

SAMPLE DUPLICATE: 553250

Parameter	Units	7090528006 Result	Dup Result	RPD	Qualifiers
Sulfate	mg/L	21.4	21.7	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116702 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

METHOD BLANK: 552180 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	06/07/19 12:16	

LABORATORY CONTROL SAMPLE: 552181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	3.8	95	90-110	

MATRIX SPIKE SAMPLE: 552182

Parameter	Units	7092241001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	4	3.9	99	90-110	

MATRIX SPIKE SAMPLE: 552184

Parameter	Units	7092242001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	4	3.9	98	90-110	

MATRIX SPIKE SAMPLE: 552186

Parameter	Units	7092244001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	4	4.1	102	90-110	

SAMPLE DUPLICATE: 552183

Parameter	Units	7092241001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.045J		

SAMPLE DUPLICATE: 552185

Parameter	Units	7092242001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	<0.10		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

SAMPLE DUPLICATE: 552187

Parameter	Units	7092244001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.16		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116703 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Associated Lab Samples: 7090528030, 7090528032

METHOD BLANK: 552188 Matrix: Water
Associated Lab Samples: 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	06/07/19 12:43	

LABORATORY CONTROL SAMPLE: 552189

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	3.7	93	90-110	

MATRIX SPIKE SAMPLE: 552190

Parameter	Units	7091122002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.1	4	5.3	104	90-110	

MATRIX SPIKE SAMPLE: 552192

Parameter	Units	7091122006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	2.3	4	6.9	114	90-110	M1

SAMPLE DUPLICATE: 552191

Parameter	Units	7091122002 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.1	1.1	5	

SAMPLE DUPLICATE: 552193

Parameter	Units	7091122006 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	2.3	2.4	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 114808 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

METHOD BLANK: 541151 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	05/22/19 23:16	

LABORATORY CONTROL SAMPLE: 541152

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	101	90-110	

MATRIX SPIKE SAMPLE: 541153

Parameter	Units	7089474016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.62	119	90-110	M1

MATRIX SPIKE SAMPLE: 541155

Parameter	Units	7090528002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.63	122	90-110	M1

SAMPLE DUPLICATE: 541154

Parameter	Units	7089474016 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 541156

Parameter	Units	7090528002 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 114997 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

METHOD BLANK: 542274 Matrix: Water
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	05/24/19 08:47	

LABORATORY CONTROL SAMPLE: 542275

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: 542276

Parameter	Units	7090689001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.77	154	90-110	M1

MATRIX SPIKE SAMPLE: 542278

Parameter	Units	7090689006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.54	109	90-110	

SAMPLE DUPLICATE: 542277

Parameter	Units	7090689001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 542279

Parameter	Units	7090689006 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115146
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrite, Unpres.
Associated Lab Samples: 7090528030, 7090528032

METHOD BLANK: 543127 Matrix: Water
Associated Lab Samples: 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	05/25/19 07:56	

LABORATORY CONTROL SAMPLE: 543128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 543129

Parameter	Units	7089474021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.56	111	90-110	

MATRIX SPIKE SAMPLE: 543131

Parameter	Units	7090872001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.51	101	90-110	

SAMPLE DUPLICATE: 543130

Parameter	Units	7089474021 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 543132

Parameter	Units	7090872001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 114812 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

METHOD BLANK: 541182 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	05/23/19 01:12	

LABORATORY CONTROL SAMPLE: 541183

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	105	90-110	

MATRIX SPIKE SAMPLE: 541184

Parameter	Units	7090513001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.3	5	9.7	107	90-110	

MATRIX SPIKE SAMPLE: 541186

Parameter	Units	7089474016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	6.3	5	11.3	100	90-110	

SAMPLE DUPLICATE: 541185

Parameter	Units	7090513001 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.3	4.3	1	

SAMPLE DUPLICATE: 541187

Parameter	Units	7089474016 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	6.3	6.2	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115010 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

METHOD BLANK: 542334 Matrix: Water
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	05/24/19 10:23	

LABORATORY CONTROL SAMPLE: 542335

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	0.92	92	90-110	

MATRIX SPIKE SAMPLE: 542336

Parameter	Units	7090580006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	28.3	25	25.8	-10	90-110	M6

MATRIX SPIKE SAMPLE: 542338

Parameter	Units	7090757002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.2	5	9.2	99	90-110	

SAMPLE DUPLICATE: 542337

Parameter	Units	7090580006 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	28.3	27.0	5	

SAMPLE DUPLICATE: 542339

Parameter	Units	7090757002 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	4.2	4.1	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115152
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 7090528030, 7090528032

METHOD BLANK: 543150 Matrix: Water
Associated Lab Samples: 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	05/25/19 10:29	

LABORATORY CONTROL SAMPLE: 543151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.1	107	90-110	

MATRIX SPIKE SAMPLE: 543152

Parameter	Units	7090861010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	39.3	25	36.5	-11	90-110	M6

MATRIX SPIKE SAMPLE: 543154

Parameter	Units	7089474021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.10	0.5	0.67	113	90-110	M1

SAMPLE DUPLICATE: 543153

Parameter	Units	7090861010 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	39.3	36.6	7	

SAMPLE DUPLICATE: 543155

Parameter	Units	7089474021 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.10	0.088	16	

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REPORT OF LABORATORY ANALYSIS

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Melville, NY 11747
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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115545 Analysis Method: SM22 4500-CN-E
QC Batch Method: SM20/22 4500-CN-C Analysis Description: 4500 CNE Cyanide, Total
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

METHOD BLANK: 545819 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	05/30/19 13:27	

LABORATORY CONTROL SAMPLE: 545820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	68.7	92	85-115	

MATRIX SPIKE SAMPLE: 545821

Parameter	Units	7090132001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<10.0	100	95.8	94	75-125	

SAMPLE DUPLICATE: 545822

Parameter	Units	7090132001 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<10.0	<10.0		

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REPORT OF LABORATORY ANALYSIS

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(631)694-3040

QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 115742 Analysis Method: SM22 4500-CN-E
QC Batch Method: SM20/22 4500-CN-C Analysis Description: 4500 CNE Cyanide, Total
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 546650 Matrix: Water
Associated Lab Samples: 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	05/31/19 13:04	

LABORATORY CONTROL SAMPLE: 546651

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	66.5	89	85-115	

MATRIX SPIKE SAMPLE: 546652

Parameter	Units	7090926027 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	<0.010 mg/L	100	106	100	75-125	

SAMPLE DUPLICATE: 546653

Parameter	Units	7090926027 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	<0.010 mg/L	3.6J		

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
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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116735 Analysis Method: SM22 4500-Cl-E
QC Batch Method: SM22 4500-Cl-E Analysis Description: 4500 Chloride
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012

METHOD BLANK: 552262 Matrix: Water
Associated Lab Samples: 7090528002, 7090528004, 7090528006, 7090528008, 7090528010, 7090528012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	06/07/19 12:04	

LABORATORY CONTROL SAMPLE: 552263

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	

MATRIX SPIKE SAMPLE: 552264

Parameter	Units	7091449001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10.3	25	36.4	105	80-120	

SAMPLE DUPLICATE: 552265

Parameter	Units	7091449001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	10.3	10.4	1	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 116739 Analysis Method: SM22 4500-Cl-E
QC Batch Method: SM22 4500-Cl-E Analysis Description: 4500 Chloride
Associated Lab Samples: 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

METHOD BLANK: 552271 Matrix: Water
Associated Lab Samples: 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528030, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<2.0	2.0	06/07/19 12:23	

LABORATORY CONTROL SAMPLE: 552272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.5	103	90-110	

MATRIX SPIKE SAMPLE: 552273

Parameter	Units	7091994001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	7.4	25	34.0	106	80-120	

SAMPLE DUPLICATE: 552274

Parameter	Units	7091994001 Result	Dup Result	RPD	Qualifiers
Chloride	mg/L	7.4	7.5	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 117021 Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H Analysis Description: 4500 Ammonia
Associated Lab Samples: 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528032

METHOD BLANK: 553970 Matrix: Water
Associated Lab Samples: 7090528004, 7090528006, 7090528008, 7090528010, 7090528012, 7090528014, 7090528017, 7090528019, 7090528021, 7090528023, 7090528025, 7090528027, 7090528032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	06/10/19 14:40	

LABORATORY CONTROL SAMPLE: 553971

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.93	93	90-110	

MATRIX SPIKE SAMPLE: 553972

Parameter	Units	7090528006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2.2	1	2.9	71	75-125	M1

SAMPLE DUPLICATE: 553973

Parameter	Units	7090528006 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	2.2	2.0	9	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

QC Batch: 117397 Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H Analysis Description: 4500 Ammonia
Associated Lab Samples: 7090528002, 7090528030

METHOD BLANK: 555908 Matrix: Water
Associated Lab Samples: 7090528002, 7090528030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	06/11/19 14:53	

LABORATORY CONTROL SAMPLE: 555909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	100	90-110	

MATRIX SPIKE SAMPLE: 555910

Parameter	Units	7092254001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.39	1	1.5	109	75-125	

SAMPLE DUPLICATE: 555911

Parameter	Units	7092254001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.39	0.38	2	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

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.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PACE-MV	Pace Analytical Services - Melville
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA 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.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528002	OBS-1_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528004	MW-09B_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528006	MW-09C_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528008	BLIND DUPLICATE_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528010	MW-05B_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528012	MW-08B_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528014	MW-08A_5/22/19	EPA 200.7	116227	EPA 200.7	116243
7090528017	LF-2_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528019	MW-06F_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528021	MW-06C_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528023	MW-06B_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528025	MW-06E_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528027	MW-06A_5/23/19	EPA 200.7	116227	EPA 200.7	116243
7090528030	LF-1_5/24/19	EPA 200.7	116227	EPA 200.7	116243
7090528032	FIELD BLANK_5/24/19	EPA 200.7	116227	EPA 200.7	116243
7090528003	OBS-1_5/22/19 DISS	EPA 200.7	117214		
7090528005	MW-09B_5/22/19 DISS	EPA 200.7	117214		
7090528007	MW-09C_5/22/19 DISS	EPA 200.7	117214		
7090528009	BLIND DUPLICATE_5/22/19 DISS	EPA 200.7	117214		
7090528011	MW-05B_5/22/19 DISS	EPA 200.7	117214		
7090528013	MW-08B_5/22/19 DISS	EPA 200.7	117214		
7090528015	MW-08A_5/22/19 DISS	EPA 200.7	117214		
7090528018	LF-2_5/23/19 DISS	EPA 200.7	117214		
7090528020	MW-06F_5/23/19 DISS	EPA 200.7	117214		
7090528022	MW-06C_5/23/19 DISS	EPA 200.7	117214		
7090528024	MW-06B_5/23/19 DISS	EPA 200.7	117214		
7090528026	MW-06E_5/23/19 DISS	EPA 200.7	117214		
7090528028	MW-06A_5/23/19 DISS	EPA 200.7	117214		
7090528031	LF-1_5/24/19 DISS	EPA 200.7	117214		
7090528033	FIELD BLANK_5/24/19 DISS	EPA 200.7	117214		
7090528002	OBS-1_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528004	MW-09B_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528006	MW-09C_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528008	BLIND DUPLICATE_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528010	MW-05B_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528012	MW-08B_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528014	MW-08A_5/22/19	EPA 245.1	115860	EPA 245.1	115865
7090528017	LF-2_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528019	MW-06F_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528021	MW-06C_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528023	MW-06B_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528025	MW-06E_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528027	MW-06A_5/23/19	EPA 245.1	115860	EPA 245.1	115865
7090528030	LF-1_5/24/19	EPA 245.1	115860	EPA 245.1	115865
7090528032	FIELD BLANK_5/24/19	EPA 245.1	115860	EPA 245.1	115865
7090528003	OBS-1_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528005	MW-09B_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528007	MW-09C_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528009	BLIND DUPLICATE_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528011	MW-05B_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528013	MW-08B_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528015	MW-08A_5/22/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528018	LF-2_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528020	MW-06F_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528022	MW-06C_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528024	MW-06B_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528026	MW-06E_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528028	MW-06A_5/23/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528031	LF-1_5/24/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528033	FIELD BLANK_5/24/19 DISS	245.1 Rev. 3.0, 1994	347106	245.1 Rev. 3.0, 1994	347147
7090528001	TRIP BLANK_5/22/19	EPA 8260C/5030C	115419		
7090528002	OBS-1_5/22/19	EPA 8260C/5030C	115419		
7090528004	MW-09B_5/22/19	EPA 8260C/5030C	115419		
7090528006	MW-09C_5/22/19	EPA 8260C/5030C	115419		
7090528008	BLIND DUPLICATE_5/22/19	EPA 8260C/5030C	115419		
7090528010	MW-05B_5/22/19	EPA 8260C/5030C	115419		
7090528012	MW-08B_5/22/19	EPA 8260C/5030C	115419		
7090528014	MW-08A_5/22/19	EPA 8260C/5030C	115419		
7090528016	TRIP BLANK_5/23/19	EPA 8260C/5030C	115419		
7090528017	LF-2_5/23/19	EPA 8260C/5030C	115419		
7090528019	MW-06F_5/23/19	EPA 8260C/5030C	115419		
7090528021	MW-06C_5/23/19	EPA 8260C/5030C	115419		
7090528023	MW-06B_5/23/19	EPA 8260C/5030C	115419		
7090528025	MW-06E_5/23/19	EPA 8260C/5030C	115419		
7090528027	MW-06A_5/23/19	EPA 8260C/5030C	115419		
7090528029	TRIP BLANK_5/24/19	EPA 8260C/5030C	115419		
7090528030	LF-1_5/24/19	EPA 8260C/5030C	115419		
7090528032	FIELD BLANK_5/24/19	EPA 8260C/5030C	115968		
7090528002	OBS-1_5/22/19	SM22 2320B	115859		
7090528004	MW-09B_5/22/19	SM22 2320B	115859		
7090528006	MW-09C_5/22/19	SM22 2320B	115859		
7090528008	BLIND DUPLICATE_5/22/19	SM22 2320B	115859		
7090528010	MW-05B_5/22/19	SM22 2320B	116069		
7090528012	MW-08B_5/22/19	SM22 2320B	116069		
7090528014	MW-08A_5/22/19	SM22 2320B	116069		
7090528019	MW-06F_5/23/19	SM22 2320B	116123		
7090528021	MW-06C_5/23/19	SM22 2320B	116123		
7090528023	MW-06B_5/23/19	SM22 2320B	116123		
7090528025	MW-06E_5/23/19	SM22 2320B	116123		
7090528027	MW-06A_5/23/19	SM22 2320B	116123		
7090528030	LF-1_5/24/19	SM22 2320B	116578		
7090528032	FIELD BLANK_5/24/19	SM22 2320B	116578		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528017	LF-2_5/23/19	SM22 2320B	116329		
7090528002	OBS-1_5/22/19	SM22 2340C	117167		
7090528004	MW-09B_5/22/19	SM22 2340C	117167		
7090528006	MW-09C_5/22/19	SM22 2340C	117167		
7090528008	BLIND DUPLICATE_5/22/19	SM22 2340C	117167		
7090528010	MW-05B_5/22/19	SM22 2340C	117167		
7090528012	MW-08B_5/22/19	SM22 2340C	117167		
7090528014	MW-08A_5/22/19	SM22 2340C	117167		
7090528017	LF-2_5/23/19	SM22 2340C	117167		
7090528019	MW-06F_5/23/19	SM22 2340C	117167		
7090528021	MW-06C_5/23/19	SM22 2340C	117167		
7090528023	MW-06B_5/23/19	SM22 2340C	117167		
7090528025	MW-06E_5/23/19	SM22 2340C	117167		
7090528027	MW-06A_5/23/19	SM22 2340C	117167		
7090528030	LF-1_5/24/19	SM22 2340C	117167		
7090528032	FIELD BLANK_5/24/19	SM22 2340C	117167		
7090528002	OBS-1_5/22/19	SM22 2540C	115374		
7090528004	MW-09B_5/22/19	SM22 2540C	115374		
7090528006	MW-09C_5/22/19	SM22 2540C	115374		
7090528008	BLIND DUPLICATE_5/22/19	SM22 2540C	115374		
7090528010	MW-05B_5/22/19	SM22 2540C	115374		
7090528012	MW-08B_5/22/19	SM22 2540C	115374		
7090528014	MW-08A_5/22/19	SM22 2540C	115374		
7090528017	LF-2_5/23/19	SM22 2540C	115374		
7090528019	MW-06F_5/23/19	SM22 2540C	115543		
7090528021	MW-06C_5/23/19	SM22 2540C	115543		
7090528023	MW-06B_5/23/19	SM22 2540C	115543		
7090528025	MW-06E_5/23/19	SM22 2540C	115543		
7090528027	MW-06A_5/23/19	SM22 2540C	115543		
7090528030	LF-1_5/24/19	SM22 2540C	115543		
7090528032	FIELD BLANK_5/24/19	SM22 2540C	115543		
7090528002	OBS-1_5/22/19	SM22 3500-Cr B	114804		
7090528003	OBS-1_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528004	MW-09B_5/22/19	SM22 3500-Cr B	114804		
7090528005	MW-09B_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528006	MW-09C_5/22/19	SM22 3500-Cr B	114804		
7090528007	MW-09C_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528008	BLIND DUPLICATE_5/22/19	SM22 3500-Cr B	114804		
7090528009	BLIND DUPLICATE_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528010	MW-05B_5/22/19	SM22 3500-Cr B	114804		
7090528011	MW-05B_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528012	MW-08B_5/22/19	SM22 3500-Cr B	114804		
7090528013	MW-08B_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528014	MW-08A_5/22/19	SM22 3500-Cr B	114804		
7090528015	MW-08A_5/22/19 DISS	SM22 3500-Cr B	114804		
7090528017	LF-2_5/23/19	SM22 3500-Cr B	114991		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528018	**LF-2_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528019	**MW-06F_5/23/19**	SM22 3500-Cr B	114991		
7090528020	**MW-06F_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528021	**MW-06C_5/23/19**	SM22 3500-Cr B	114991		
7090528022	**MW-06C_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528023	**MW-06B_5/23/19**	SM22 3500-Cr B	114991		
7090528024	**MW-06B_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528025	**MW-06E_5/23/19**	SM22 3500-Cr B	114991		
7090528026	**MW-06E_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528027	**MW-06A_5/23/19**	SM22 3500-Cr B	114991		
7090528028	**MW-06A_5/23/19 DISS**	SM22 3500-Cr B	114991		
7090528030	**LF-1_5/24/19**	SM22 3500-Cr B	115140		
7090528031	**LF-1_5/24/19 DISS**	SM22 3500-Cr B	115140		
7090528032	**FIELD BLANK_5/24/19**	SM22 3500-Cr B	115140		
7090528033	**FIELD BLANK_5/24/19 DISS**	SM22 3500-Cr B	115140		
7090528002	**OBS-1_5/22/19**	EPA 300.0	116884		
7090528004	**MW-09B_5/22/19**	EPA 300.0	116884		
7090528006	**MW-09C_5/22/19**	EPA 300.0	116884		
7090528008	**BLIND DUPLICATE_5/22/19**	EPA 300.0	116884		
7090528010	**MW-05B_5/22/19**	EPA 300.0	116884		
7090528012	**MW-08B_5/22/19**	EPA 300.0	116884		
7090528014	**MW-08A_5/22/19**	EPA 300.0	116884		
7090528017	**LF-2_5/23/19**	EPA 300.0	116884		
7090528019	**MW-06F_5/23/19**	EPA 300.0	116884		
7090528021	**MW-06C_5/23/19**	EPA 300.0	116884		
7090528023	**MW-06B_5/23/19**	EPA 300.0	116884		
7090528025	**MW-06E_5/23/19**	EPA 300.0	116884		
7090528027	**MW-06A_5/23/19**	EPA 300.0	116884		
7090528030	**LF-1_5/24/19**	EPA 300.0	116884		
7090528032	**FIELD BLANK_5/24/19**	EPA 300.0	116884		
7090528002	**OBS-1_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528004	**MW-09B_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528006	**MW-09C_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528008	**BLIND DUPLICATE_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528010	**MW-05B_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528012	**MW-08B_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528014	**MW-08A_5/22/19**	EPA 351.2	116702	EPA 351.2	116727
7090528017	**LF-2_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528019	**MW-06F_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528021	**MW-06C_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528023	**MW-06B_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528025	**MW-06E_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528027	**MW-06A_5/23/19**	EPA 351.2	116702	EPA 351.2	116727
7090528030	**LF-1_5/24/19**	EPA 351.2	116703	EPA 351.2	116728
7090528032	**FIELD BLANK_5/24/19**	EPA 351.2	116703	EPA 351.2	116728
7090528002	**OBS-1_5/22/19**	EPA 353.2	114812		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528004	**MW-09B_5/22/19**	EPA 353.2	114812		
7090528006	**MW-09C_5/22/19**	EPA 353.2	114812		
7090528008	**BLIND DUPLICATE_5/22/19**	EPA 353.2	114812		
7090528010	**MW-05B_5/22/19**	EPA 353.2	114812		
7090528012	**MW-08B_5/22/19**	EPA 353.2	114812		
7090528014	**MW-08A_5/22/19**	EPA 353.2	114812		
7090528017	**LF-2_5/23/19**	EPA 353.2	115010		
7090528019	**MW-06F_5/23/19**	EPA 353.2	115010		
7090528021	**MW-06C_5/23/19**	EPA 353.2	115010		
7090528023	**MW-06B_5/23/19**	EPA 353.2	115010		
7090528025	**MW-06E_5/23/19**	EPA 353.2	115010		
7090528027	**MW-06A_5/23/19**	EPA 353.2	115010		
7090528030	**LF-1_5/24/19**	EPA 353.2	115152		
7090528032	**FIELD BLANK_5/24/19**	EPA 353.2	115152		
7090528002	**OBS-1_5/22/19**	EPA 353.2	114808		
7090528004	**MW-09B_5/22/19**	EPA 353.2	114808		
7090528006	**MW-09C_5/22/19**	EPA 353.2	114808		
7090528008	**BLIND DUPLICATE_5/22/19**	EPA 353.2	114808		
7090528010	**MW-05B_5/22/19**	EPA 353.2	114808		
7090528012	**MW-08B_5/22/19**	EPA 353.2	114808		
7090528014	**MW-08A_5/22/19**	EPA 353.2	114808		
7090528017	**LF-2_5/23/19**	EPA 353.2	114997		
7090528019	**MW-06F_5/23/19**	EPA 353.2	114997		
7090528021	**MW-06C_5/23/19**	EPA 353.2	114997		
7090528023	**MW-06B_5/23/19**	EPA 353.2	114997		
7090528025	**MW-06E_5/23/19**	EPA 353.2	114997		
7090528027	**MW-06A_5/23/19**	EPA 353.2	114997		
7090528030	**LF-1_5/24/19**	EPA 353.2	115146		
7090528032	**FIELD BLANK_5/24/19**	EPA 353.2	115146		
7090528002	**OBS-1_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528004	**MW-09B_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528006	**MW-09C_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528008	**BLIND DUPLICATE_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528010	**MW-05B_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528012	**MW-08B_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528014	**MW-08A_5/22/19**	SM20/22 4500-CN-C	115545	SM22 4500-CN-E	115558
7090528017	**LF-2_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528019	**MW-06F_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528021	**MW-06C_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528023	**MW-06B_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528025	**MW-06E_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528027	**MW-06A_5/23/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528030	**LF-1_5/24/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528032	**FIELD BLANK_5/24/19**	SM20/22 4500-CN-C	115742	SM22 4500-CN-E	115769
7090528002	**OBS-1_5/22/19**	SM22 4500-Cl-E	116735		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OLD BETHPAGE LANDFILL
Pace Project No.: 7090528

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7090528004	**MW-09B_5/22/19**	SM22 4500-Cl-E	116735		
7090528006	**MW-09C_5/22/19**	SM22 4500-Cl-E	116735		
7090528008	**BLIND DUPLICATE_5/22/19**	SM22 4500-Cl-E	116735		
7090528010	**MW-05B_5/22/19**	SM22 4500-Cl-E	116735		
7090528012	**MW-08B_5/22/19**	SM22 4500-Cl-E	116735		
7090528014	**MW-08A_5/22/19**	SM22 4500-Cl-E	116739		
7090528017	**LF-2_5/23/19**	SM22 4500-Cl-E	116739		
7090528019	**MW-06F_5/23/19**	SM22 4500-Cl-E	116739		
7090528021	**MW-06C_5/23/19**	SM22 4500-Cl-E	116739		
7090528023	**MW-06B_5/23/19**	SM22 4500-Cl-E	116739		
7090528025	**MW-06E_5/23/19**	SM22 4500-Cl-E	116739		
7090528027	**MW-06A_5/23/19**	SM22 4500-Cl-E	116739		
7090528030	**LF-1_5/24/19**	SM22 4500-Cl-E	116739		
7090528032	**FIELD BLANK_5/24/19**	SM22 4500-Cl-E	116739		
7090528002	**OBS-1_5/22/19**	SM22 4500 NH3 H	117397		
7090528004	**MW-09B_5/22/19**	SM22 4500 NH3 H	117021		
7090528006	**MW-09C_5/22/19**	SM22 4500 NH3 H	117021		
7090528008	**BLIND DUPLICATE_5/22/19**	SM22 4500 NH3 H	117021		
7090528010	**MW-05B_5/22/19**	SM22 4500 NH3 H	117021		
7090528012	**MW-08B_5/22/19**	SM22 4500 NH3 H	117021		
7090528014	**MW-08A_5/22/19**	SM22 4500 NH3 H	117021		
7090528017	**LF-2_5/23/19**	SM22 4500 NH3 H	117021		
7090528019	**MW-06F_5/23/19**	SM22 4500 NH3 H	117021		
7090528021	**MW-06C_5/23/19**	SM22 4500 NH3 H	117021		
7090528023	**MW-06B_5/23/19**	SM22 4500 NH3 H	117021		
7090528025	**MW-06E_5/23/19**	SM22 4500 NH3 H	117021		
7090528027	**MW-06A_5/23/19**	SM22 4500 NH3 H	117021		
7090528030	**LF-1_5/24/19**	SM22 4500 NH3 H	117397		
7090528032	**FIELD BLANK_5/24/19**	SM22 4500 NH3 H	117021		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Docu

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

WO# : 7090528

7090528

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company	Town of Oyster Bay	Report To	Russo, Matt	Attention	Town of Oyster Bay / D+B
Address	150 Miller Place	Copy To	Anthony Cangiano D+B Engineers and Architects P.C.	Company Name	D+B Engineers + Architects, P.C.
Syosset, NY 11791				Address	350 Crossways Park Drive Woodbury NY
Email	mrusso@tobays.net / ACangiano@db	Purchase Order #		Pace Quote	
Phone	NONE Fax	Project Name	Old Bethpage Landfill	Pace Project Manager	jennifer.aracri@pacelabs.com
Requested Due Date	Standard	Project #	3617 (D+B) Job number	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	START TIME	END DATE	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 (Field Filter)	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	Note for field filtered dissolved metals and dissolved Cr+6 bottles by Keith 4/24 E.
	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 - 5/22/19	AQ	-	5/22/19	-	5/22/19	-		2	-	-	-	2	-	-	-	-		✓	-	-	-	-	-	-	-	N	001
2	OBS-1 - 5/22/19	GW	G	5/22/19	0915	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	002+003
3	MW-09B - 5/22/19	GW	G	5/22/19	1140 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	004+005
4	MW-09C - 5/22/19	GW	G	5/22/19	1145 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	006+007
5	Blind Duplicate - 5/22/19	GW	G	5/22/19	0000	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	008+009
6	MW-05B - 5/22/19	GW	G	5/22/19	1200 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	010+011
7	MW-08B - 5/22/19	GW	G	5/22/19	1445 pm	5/22/19	-		8	2	1	2	2	1	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	012+013
8	MW-08A - 5/22/19	GW	G	5/22/19	1600 pm	5/22/19	-		8	2	1	2	2	0	-	-	-		✓	✓	✓	✓	✓	✓	✓	✓	N	014+015
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill / Provide Category "B" deliverable	Keith Robins / D+B	5/22/19	1830		5/22/19	1830	1.8	Y	N	Y
Field Filtered for metals (dissolved)										
and dissolved Cr+6										
Send data to Labdata@db-engineering.com										

SAMPLER NAME AND SIGNATURE			
PRINT Name of SAMPLER:	Keith Robins		
SIGNATURE of SAMPLER:	Keith Robins	DATE Signed:	5/22/19

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

Sample Condition Upon Receipt

Pace Analytical

WO#: 7090528
PM: JSA Due Date: 06/07/19
CLIENT: TOY

Client Name: TOWN OYSTERBAY Proje

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

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No Temperature Blank Present: ☐ Yes ☑ No

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

Thermometer Used: TH099 Correction Factor: 0.0 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 1.8 Cooler Temperature Corrected (°C): 1.8 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: 5/22/19 SP

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 orignate from a foreign source (internationally, 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 MS/MSD)	☑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/Analysis 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 # HC863463				Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☑Yes	☐No	☐N/A	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 #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	15.
Trip Blank Present:	☑Yes	☐No	☐N/A	16.
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.

F-LI-C-002-rev.02

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Doc

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

WO#: 7090528

PM: JSA Due Date: 06/07/19

CLIENT: TOY

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company	Town of Oyster Bay	Report To	Russo, Matt	Attention	Anthony Canuno
Address	150 Miller Place	Copy To	Anthony Canuno	Company Name	D+B Engineers + Architects P.C
Syosset, NY 11791		Email	D+B Engineers + Architects Pc	Address:	330 Crossways Park Drive
Email	mrusso@tobays.net / A CANUNO@db-eng	Purchase Order #		Pace Quote	
Phone	NONE Fax	Project Name	Old Bethpage Landfill	Pace Project Manager	jennifer.aracri@pacelabs.com,
Requested Due Date	STANDARD TURNAROUND TIME	Project #	3617 (D+B)	Pace Profile #	6466

Regulatory Agency	State / Location
	NY

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WF
Air	AR
Other	OT
Tissue	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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 (Field Filter)	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	
1	Trip Blank-5/24/19	AQ	-	5/24/19	-	5/24/19	-		2	-	-	-	2	-	-	-	-	Y	✓	-	-	-	-	-	-	N	029
2	LF-1-5/24/19	GW	G	5/24/19	1140	5/24/19	1140		8	2	1	2	2	1	-	-	-	Y	✓	✓	✓	✓	✓	✓	✓	N	030+031
3	Field Blank-5/24/19	AQ	G	5/24/19	1200	5/24/19	1200		8	2	1	2	2	1	-	-	-	Y	✓	✓	✓	✓	✓	✓	✓	N	032+033
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Old Bethpage Landfill	Keith Robins (D+B)	5/24/19	1700	[signature] PACE	5/24/19	12:59
Provide Category "B" Deliverables						
Send Data to Cobdata@db-eng.com						
Field Filtered dissolved VOCs						

6 bottles with "F" for dissolved metals and TKN

Job completed as of 5/24/19.

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH ROBINS

SIGNATURE of SAMPLER: Keith Robins DATE Signed: 5-24-19

Pace Analytical
Long Island Laboratory

Sample Condition Upon Receipt

WO#: 7090528
PM: JSA Due Date: 06/07/19
CLIENT: TOY

Client Name: TOY

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

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☐ No

Temperature Blank Present: ☐ Yes ☒ No

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

Type of Ice: Wet Blue None

Thermometer Used: TH091 Correction Factor: 0.0

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 4.1 Cooler Temperature Corrected (°C): 4.1

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: JKS 12/4/19

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 (internationally, 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 MS/MSD	☒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/Analysis 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 #				
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☒Yes	☐No	☐N/A	Sample #
				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
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	15.
Trip Blank Present:	☒Yes	☐No	☐N/A	16.
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.

F-LI-C-002-rev.02

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request

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

WO#: 7090528

PM: JSA Due Date: 06/07/19

CLIENT: TOY

Section A – Required Client Information:		Section B – Required Project Information:		Section C – Invoice Information:	
Company	Town of Oyster Bay	Report To	Russo, Matt	Attention	T. O B / D+B
Address	150 Miller Place	Copy To	Andrew Centuno (D+B) Eng. Surv. and Architects P.C.	Company Name	D+B Engineering Architect. P.C
Syosset, NY 11791		Purchase Order #		Address	330 Crossways Park Drive
Email	mrusso@tobays.net	Project Name	Old Bethpage Landfill	Pace Quote	
Phone	NONE Fax	Project #	36(T)	Pace Project Manager	jennifer.aracri@pacelabs.com
Requested Due Date	5-Day Turn			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 (Field Filter)	Alk,Cl,SO4,CO3,Cr6,HCO3	No2,TDS	Residual Chlorine (Y/N)	
	Requested Analysis Filtered (Y/N)																		N	N	N	N	N	N	N	N			
1	Trip Blank – 5/23/19	WQ	–	5/23/19	–	5/23/19	–		2	–	–	–	2	–	–	–	–		✓	–	–	–	–	–	–			N	016
2	EF-2 – 5/23/19	GW	G	5/23/19	1015	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	017+018
3	MW-06F – 5/23/19	GW	G	5/23/19	1145	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	~~018~~ 019+020
4	MW-06C – 5/23/19	GW	G	5/23/19	1250	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	~~019~~ 021+022
5	MW-06B – 5/23/19	GW	G	5/23/19	1400	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	~~020~~ 023+024
6	MW-06E – 5/23/19	GW	G	5/23/19	1455	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	~~021~~ 025+026
7	MW-06A – 5/23/19	GW	G	5/23/19	1600	5/23/19	–		8	2	1	2	2	1	–	–	–		✓	✓	✓	✓	✓	✓	✓			N	~~022~~ 027+028
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Old Bethpage Landfill / provide Category B deliverables	Keith Robins (D+B)	5/23/19			5/23/19	18:45	5,6	Y	N	Y
Filtered in Field bottles designated with "F" on them for dissolved metals and dissolved CR+6										
also send data to Labdata@obrien.com										

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: 5/23/19				

Sample Condition Upon Receipt

Pace Analytical

WO#: 7090528

PM: JSA Due Date: 06/07/19
CLIENT: TOY

Client Name: Town of Ogden Bu

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

Tracking #:

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

Temperature Blank Present: ☐ Yes ☒ No

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

Type of Ice: ☒ Wet ☐ Blue ☐ None

Thermometer Used: TH091 Correction Factor: 0.0

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 3.6 Cooler Temperature Corrected (°C): 3.6

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: JKS 12/3/19

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 (internationally, 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 MS/MSD)	☑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/Analysis 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 # HC863463				Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☑Yes	☐No	☐N/A	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 #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	15.
Trip Blank Present:	☑Yes	☐No	☐N/A	16.
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.

F-LI-C-002-rev.02

EnviroTest Laboratories Inc.

ANALYTICAL REPORT

Job Number: 420-154463-1

SDG Number: 7090528

Job Description: Pace Analytical Sevices, Inc.-Mellville

For:
Pace Analytical Mellville
575 Broadhollow Road
Melville, NY 11747

Attention: James Murphy

Laura Marciano

Laura L Marciano
Customer Service Manager
lmarciano@envirotestlaboratories.com
06/07/2019

cc: Ms. Jen Aracri
Betty Harrison
Accounts Payable
Sophia Sparkes

EnviroTest Laboratories, Inc. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOPH PH-0554

EXECUTIVE SUMMARY - Detections

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
420-154463-13	**MW-06A_5/23/19**				
Phenolics, Total Recoverable		0.011	0.010	mg/L	420.4 Rev. 1.0

METHOD SUMMARY

Client: Pace Analytical Mellville

Job Number: 420-154463-1
SDG Number: 7090528

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Phenols Semi-Automated	EnvTest	EPA 420.4 Rev. 1.0	
Distillation/Phenolics	EnvTest		Distill/Phenol

Lab References:

EnvTest = EnviroTest

Method References:

EPA = US Environmental Protection Agency

METHOD / ANALYST SUMMARY

Client: Pace Analytical Mellville

Job Number: 420-154463-1
SDG Number: 7090528

Method	Analyst	Analyst ID
EPA 420.4 Rev. 1.0	Mastrobuono, Danielle	DM

SAMPLE SUMMARY

Client: Pace Analytical Mellville

Job Number: 420-154463-1
SDG Number: 7090528

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
420-154463-1	OBS-1_5/22/19	Water	05/22/2019 0915	05/31/2019 0950
420-154463-2	MW-09B_05/22/19	Water	05/22/2019 1140	05/31/2019 0950
420-154463-3	MW-09C_05/22/19	Water	05/22/2019 1145	05/31/2019 0950
420-154463-4	BLIND DUPLICATE_05/22/19	Water	05/22/2019 0000	05/31/2019 0950
420-154463-5	MW-05B_5/22/19	Water	05/22/2019 1400	05/31/2019 0950
420-154463-6	MW-08B_5/22/19	Water	05/22/2019 1645	05/31/2019 0950
420-154463-7	MW-08A_5/22/19	Water	05/22/2019 1800	05/31/2019 0950
420-154463-8	LF-2_05/23/19	Water	05/23/2019 1015	05/31/2019 0950
420-154463-9	MW-06F_5/23/19	Water	05/23/2019 1315	05/31/2019 0950
420-154463-10	MW-06C_5/23/19	Water	05/23/2019 1325	05/31/2019 0950
420-154463-11	MW-06B_5/23/19	Water	05/23/2019 1600	05/31/2019 0950
420-154463-12	MW-06E_5/23/19	Water	05/23/2019 1655	05/31/2019 0950
420-154463-13	MW-06A_5/23/19	Water	05/23/2019 1800	05/31/2019 0950
420-154463-14	LF-1_5/24/19	Water	05/24/2019 1140	05/31/2019 0950
420-154463-15	FIELD BLANK_5/24/19	Water	05/24/2019 1200	05/31/2019 0950

SAMPLE RESULTS

General Chemistry

Client Sample ID: **OBS-1_5/22/19**

Lab Sample ID: 420-154463-1
Client Matrix: Water

Date Sampled: 05/22/2019 0915
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:	Date Analyzed	06/03/2019 1453					
Prep Batch:	Date Prepared:	06/03/2019 0952					

Client Sample ID: **MW-09B_05/22/19**

Lab Sample ID: 420-154463-2
Client Matrix: Water

Date Sampled: 05/22/2019 1140
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:	Date Analyzed	06/03/2019 1445					
Prep Batch:	Date Prepared:	06/03/2019 0952					

Client Sample ID: **MW-09C_05/22/19**

Lab Sample ID: 420-154463-3
Client Matrix: Water

Date Sampled: 05/22/2019 1145
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:	Date Analyzed	06/03/2019 1446					
Prep Batch:	Date Prepared:	06/03/2019 0952					

Client Sample ID: **BLIND DUPLICATE_05/22/19**

Lab Sample ID: 420-154463-4
Client Matrix: Water

Date Sampled: 05/22/2019 0000
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:	Date Analyzed	06/03/2019 1446					
Prep Batch:	Date Prepared:	06/03/2019 0952					

Client Sample ID: **MW-05B_5/22/19**

Lab Sample ID: 420-154463-5
Client Matrix: Water

Date Sampled: 05/22/2019 1400
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:	Date Analyzed	06/03/2019 1447					
Prep Batch:	Date Prepared:	06/03/2019 0952					

General Chemistry

Client Sample ID: **MW-08B_5/22/19**

Lab Sample ID: 420-154463-6
Client Matrix: Water

Date Sampled: 05/22/2019 1645
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1448				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **MW-08A_5/22/19**

Lab Sample ID: 420-154463-7
Client Matrix: Water

Date Sampled: 05/22/2019 1800
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1448				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **LF-2_05/23/19**

Lab Sample ID: 420-154463-8
Client Matrix: Water

Date Sampled: 05/23/2019 1015
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1449				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **MW-06F_5/23/19**

Lab Sample ID: 420-154463-9
Client Matrix: Water

Date Sampled: 05/23/2019 1315
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1502				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **MW-06C_5/23/19**

Lab Sample ID: 420-154463-10
Client Matrix: Water

Date Sampled: 05/23/2019 1325
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1503				
Prep Batch:		Date Prepared:	06/03/2019 0952				

General Chemistry

Client Sample ID: **MW-06B_5/23/19**

Lab Sample ID: 420-154463-11
Client Matrix: Water

Date Sampled: 05/23/2019 1600
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1504				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **MW-06E_5/23/19**

Lab Sample ID: 420-154463-12
Client Matrix: Water

Date Sampled: 05/23/2019 1655
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1520				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **MW-06A_5/23/19**

Lab Sample ID: 420-154463-13
Client Matrix: Water

Date Sampled: 05/23/2019 1800
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	0.011		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1505				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **LF-1_5/24/19**

Lab Sample ID: 420-154463-14
Client Matrix: Water

Date Sampled: 05/24/2019 1140
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1506				
Prep Batch:		Date Prepared:	06/03/2019 0952				

Client Sample ID: **FIELD BLANK_5/24/19**

Lab Sample ID: 420-154463-15
Client Matrix: Water

Date Sampled: 05/24/2019 1200
Date Received: 05/31/2019 0950

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Phenolics, Total Recoverable	<0.010		mg/L	0.010	0.010	1.0	420.4 Rev. 1.0
Anly Batch:		Date Analyzed	06/03/2019 1506				
Prep Batch:		Date Prepared:	06/03/2019 0952				

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

The following analytes are Not Part of the ELAP scope of accreditation:

Sulfur, Tungsten, Bicarbonate Alkalinity, 7 Day BOD 5210C, 28 Day BOD, Soluble BOD, Carbon Dioxide, Carbonate Alkalinity, CBOD Soluble, Chlorine, Cyanide (WAD), Ferrous Iron, Ferric Iron, Total Nitrogen, Total Organic Nitrogen, Dissolved Oxygen, pH, Solids (Fixed), Solids (Percent), Solids (Percent Moisture), Solids (Percent Volatile), Solids (Volatile Suspended), Temperature, TKN (Soluble), COD (Soluble), Total Inorganic Carbon, 2-Aminopyridine, 3-Picoline, 1-Methyl-2-pyrrilidinone, Aziridine, Dimethyl sulfoxide, 1-Chlorohexane, 1,2,4,5-Tetramethylbenzene, 4-Ethyl toluene, p-Diethylbenzene, Iron Bacteria, Salmonella, Sulfur Reducing Bacteria, & UOD (Ultimate Oxygen Demand).

The following analytes are Not Part of ELAP Potable Water scope of accreditation:

Ammonia (SM 4500NH3G), TKN (351.2), Phosphorus (365.3), Nitrate-Nitrite (10-107-4-1C, 353.2), m-Xylene & p-Xylene (502.2, 524), o-Xylene (502.2, 524), Sulfide (SM4500SD), Acenaphthene (525.2), Acenaphthylene (525.2), Fluoranthene (525.2), Fluorene (525.2), Phenanthrene (525.2), Anthracene (525.2), Pyrene (525.2), Benzo[a]anthracene (525.2), Benzo[b]fluoranthene (525.2), Benzo[g,h,i]perylene (525.2), Benzo[k]fluoranthene (525.2), Indeno[1,2,3-cd]pyrene (525.2), & Dibenz(a,h)anthracene (525.2).

The following analytes are Not Part of ELAP Solid and Hazardous Waste scope of accreditation:

Ammonia (SM 4500NH3G), TKN (351.2), Phosphorus (365.3), 1,2-Dichloro-1,1,2-trifluoroethane (8260), & Chlorodifluoromethane (8260).

The following analytes are Not Part of ELAP Non Potable Water scope of accreditation:

Dissolved Organic Carbon (5310C), Mecoprop (8151A), MCPA (8151A), Propylene Glycol (8015D).

Definitions and Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
DL, RA, RE	Indicates a Dilution, Reanalysis or Reextraction.
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit - an estimate of the minimum amount of a substance that an analytical process can reliably detect. A MDL is analyte- and matrix-specific and may be laboratory-dependent.
ND	Not detected at the reporting limit (or MDL if shown).
QC	Quality Control
RL	Reporting Limit - the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.
RPD	Relative Percent Difference - a measure of the relative difference between two points.

QUALITY CONTROL RESULTS

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 420-132161					
LCS 420-132161/3-A	Lab Control Spike	T	Water	Distill/Phenol	
LCS 420-132161/53-A	Lab Control Spike	T	Water	Distill/Phenol	
MB 420-132161/2-A	Method Blank	T	Water	Distill/Phenol	
MB 420-132161/27-A	Method Blank	T	Water	Distill/Phenol	
420-154463-1	OBS-1_5/22/19	T	Water	Distill/Phenol	
420-154463-1DU	Duplicate	T	Water	Distill/Phenol	
420-154463-1MS	Matrix Spike	T	Water	Distill/Phenol	
420-154463-2	MW-09B_05/22/19	T	Water	Distill/Phenol	
420-154463-3	MW-09C_05/22/19	T	Water	Distill/Phenol	
420-154463-4	BLIND DUPLICATE_05/22/19	T	Water	Distill/Phenol	
420-154463-5	MW-05B_5/22/19	T	Water	Distill/Phenol	
420-154463-6	MW-08B_5/22/19	T	Water	Distill/Phenol	
420-154463-7	MW-08A_5/22/19	T	Water	Distill/Phenol	
420-154463-8	LF-2_05/23/19	T	Water	Distill/Phenol	
420-154463-9	MW-06F_5/23/19	T	Water	Distill/Phenol	
420-154463-10	MW-06C_5/23/19	T	Water	Distill/Phenol	
420-154463-11	MW-06B_5/23/19	T	Water	Distill/Phenol	
420-154463-12	MW-06E_5/23/19	T	Water	Distill/Phenol	
420-154463-13	MW-06A_5/23/19	T	Water	Distill/Phenol	
420-154463-14	LF-1_5/24/19	T	Water	Distill/Phenol	
420-154463-15	FIELD BLANK_5/24/19	T	Water	Distill/Phenol	
420-154464-A-3-B DU	Duplicate	T	Water	Distill/Phenol	

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:420-132191					
LCS 420-132161/3-A	Lab Control Spike	T	Water	420.4 Rev. 1.0	420-132161
LCS 420-132161/53-A	Lab Control Spike	T	Water	420.4 Rev. 1.0	420-132161
MB 420-132161/2-A	Method Blank	T	Water	420.4 Rev. 1.0	420-132161
MB 420-132161/27-A	Method Blank	T	Water	420.4 Rev. 1.0	420-132161
420-154463-1	OBS-1_5/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-1DU	Duplicate	T	Water	420.4 Rev. 1.0	420-132161
420-154463-1MS	Matrix Spike	T	Water	420.4 Rev. 1.0	420-132161
420-154463-2	MW-09B_05/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-3	MW-09C_05/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-4	BLIND DUPLICATE_05/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-5	MW-05B_5/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-6	MW-08B_5/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-7	MW-08A_5/22/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-8	LF-2_05/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-9	MW-06F_5/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-10	MW-06C_5/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-11	MW-06B_5/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-12	MW-06E_5/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-13	MW-06A_5/23/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-14	LF-1_5/24/19	T	Water	420.4 Rev. 1.0	420-132161
420-154463-15	FIELD BLANK_5/24/19	T	Water	420.4 Rev. 1.0	420-132161
420-154464-A-3-B DU	Duplicate	T	Water	420.4 Rev. 1.0	420-132161

Report Basis
T = Total

Surrogate Recovery Report

Lab Sample ID	Client Sample ID

Surrogate	Acceptance Limits

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

Method Blank - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID:	MB 420-132161/2-A	Analysis Batch:	420-132191	Instrument ID:	Lachat Quikchem 8500 FIA
Client Matrix:	Water	Prep Batch:	420-132161	Lab File ID:	OM_6-3-2019_02-29-12PM.O
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	mL
Date Analyzed:	06/03/2019 1433			Final Weight/Volume:	mL
Date Prepared:	06/03/2019 0952				

Analyte	Result	Qual	RL	RL
Phenolics, Total Recoverable	<0.010		0.010	0.010

Method Blank - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID:	MB 420-132161/27-A	Analysis Batch:	420-132191	Instrument ID:	Lachat Quikchem 8500 FIA
Client Matrix:	Water	Prep Batch:	420-132161	Lab File ID:	OM_6-3-2019_02-29-12PM.O
Dilution:	1.0	Units:	mg/L	Initial Weight/Volume:	mL
Date Analyzed:	06/03/2019 1500			Final Weight/Volume:	mL
Date Prepared:	06/03/2019 0952				

Analyte	Result	Qual	RL	RL
Phenolics, Total Recoverable	<0.010		0.010	0.010

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

Lab Control Spike - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID: LCS 420-132161/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/03/2019 1433
Date Prepared: 06/03/2019 0952

Analysis Batch: 420-132191
Prep Batch: 420-132161
Units: mg/L

Instrument ID: Lachat Quikchem 8500 FIA
Lab File ID: OM_6-3-2019_02-29-12PM.O
Initial Weight/Volume: mL
Final Weight/Volume: mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenolics, Total Recoverable	0.0500	0.061	121	57 - 123	

Lab Control Spike - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID: LCS 420-132161/53-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/03/2019 1459
Date Prepared: 06/03/2019 0952

Analysis Batch: 420-132191
Prep Batch: 420-132161
Units: mg/L

Instrument ID: Lachat Quikchem 8500 FIA
Lab File ID: OM_6-3-2019_02-29-12PM.O
Initial Weight/Volume: mL
Final Weight/Volume: mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenolics, Total Recoverable	0.0500	0.060	119	57 - 123	

Matrix Spike - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID: 420-154463-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/03/2019 1453
Date Prepared: 06/03/2019 0952

Analysis Batch: 420-132191
Prep Batch: 420-132161
Units: mg/L

Instrument ID: Lachat Quikchem 8500 FIA
Lab File ID: OM_6-3-2019_02-29-12PM.O
Initial Weight/Volume: mL
Final Weight/Volume: mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Phenolics, Total Recoverable	<0.010	0.0300	0.032	106	55 - 136	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Pace Analytical Mellville

Job Number: 420-154463-1
Sdg Number: 7090528

Duplicate - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID: 420-154463-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/03/2019 1444
Date Prepared: 06/03/2019 0952

Analysis Batch: 420-132191
Prep Batch: 420-132161
Units: mg/L

Instrument ID: Lachat Quikchem 8500 FIA
Lab File ID: OM_6-3-2019_02-29-12PM.O
Initial Weight/Volume: mL
Final Weight/Volume: mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Phenolics, Total Recoverable	<0.010	-0.00036	NC	15	

Duplicate - Batch: 420-132161

Method: 420.4 Rev. 1.0
Preparation: Distill/Phenol

Lab Sample ID: 420-154464-A-3-B DU
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 06/03/2019 1512
Date Prepared: 06/03/2019 0952

Analysis Batch: 420-132191
Prep Batch: 420-132161
Units: mg/L

Instrument ID: Lachat Quikchem 8500 FIA
Lab File ID: OM_6-3-2019_02-29-12PM.O
Initial Weight/Volume: mL
Final Weight/Volume: mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Phenolics, Total Recoverable	<0.010	0.0085	NC	15	

Calculations are performed before rounding to avoid round-off errors in calculated results.

154463 pg 1 of 2

Chain of Custody

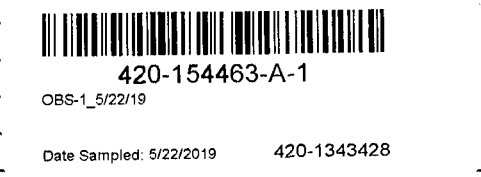
Pace Analytical®
www.pacelabs.com

Workorder: 7090528 **Workorder Name:** OLD BETHPAGE LANDFILL **Results Requested By:** 6/10/2019 for Level 2

Report / Invoice To	Subcontract To
Jennifer Aracri Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: jennifer.aracri@pacelabs.com	EnviroTest Laboratories, Inc. P.O. 7090528JSA 315 Fullerton Avenue Newburgh, NY 12550

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4 125 mL *	20.1 Phenolics, Total Recoverable	LAB USE ONLY
1	OBS-1_5/22/19	5/22/2019 09:15	7090528002	Water	1	X	
2	MW-09B_5/22/19	5/22/2019 11:40	7090528004	Water	1	X	
3	MW-09C_5/22/19	5/22/2019 11:45	7090528006	Water	1	X	
4	BLIND DUPLICATE_5/22/19	5/22/2019 00:00	7090528008	Water	1	X	
5	MW-05B_5/22/19	5/22/2019 14:00	7090528010	Water	1	X	
6	MW-08B_5/22/19	5/22/2019 16:45	7090528012	Water	1	X	
7	MW-08A_5/22/19	5/22/2019 18:00	7090528014	Water	1	X	
8	LF-2_5/23/19	5/23/2019 10:15	7090528017	Water	1	X	
9	MW-06F_5/23/19	5/23/2019 13:15	7090528019	Water	1	X	
10	MW-06C_5/23/19	5/23/2019 13:25	7090528021	Water	1	X	
11	MW-06B_5/23/19	5/23/2019 16:00	7090528023	Water	1	X	
12	MW-06E_5/23/19	5/23/2019 16:55	7090528025	Water	1	X	
13	MW-06A_5/23/19	5/23/2019 18:00	7090528027	Water	1	X	
14	LF-1_5/24/19	5/24/2019 11:40	7090528030	Water	1	X	
15	FIELD BLANK_5/24/19	5/24/2019 12:00	7090528032	Water	1	X	
16							
17							
18							
19							



154463 pg 2 of 2

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	[signature]	5/30/19 1600			
2			[signature]	5/31/19 0950	
3					

Cooler Temperature on Receipt 6.9 °C	Custody Seal Y or N	Received on Ice (Y) or N	Samples Intact (Y) or N

pH ✓ DONE IN LAB

Fed Ex Priority Overnight
Express

Tracking #
1024 9095 0758

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Pace Analytical Mellville

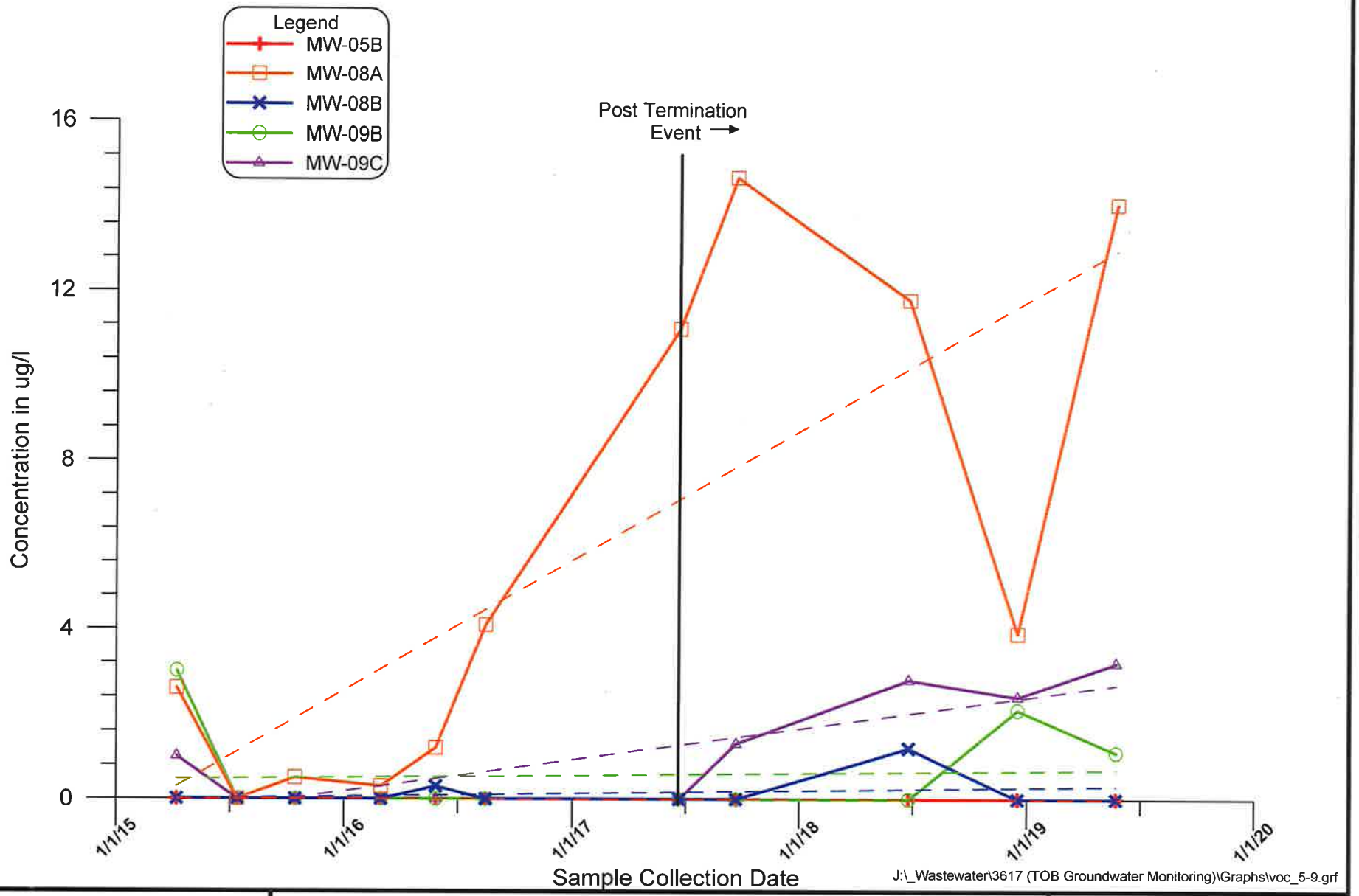
Job Number: 420-154463-1
SDG Number: 7090528

Login Number: **154463**

Question	T/F/NA	Comment
Samples were collected by ETL employee as per SOP-SAM-1	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is recorded.	True	6.9 C
Cooler Temp. is within method specified range.(0-6 C PW, 0-8 C NPW, or BAC <10 C	True	
If false, was sample received on ice within 6 hours of collection.	NA	
Based on above criteria cooler temperature is acceptable.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

APPENDIX E

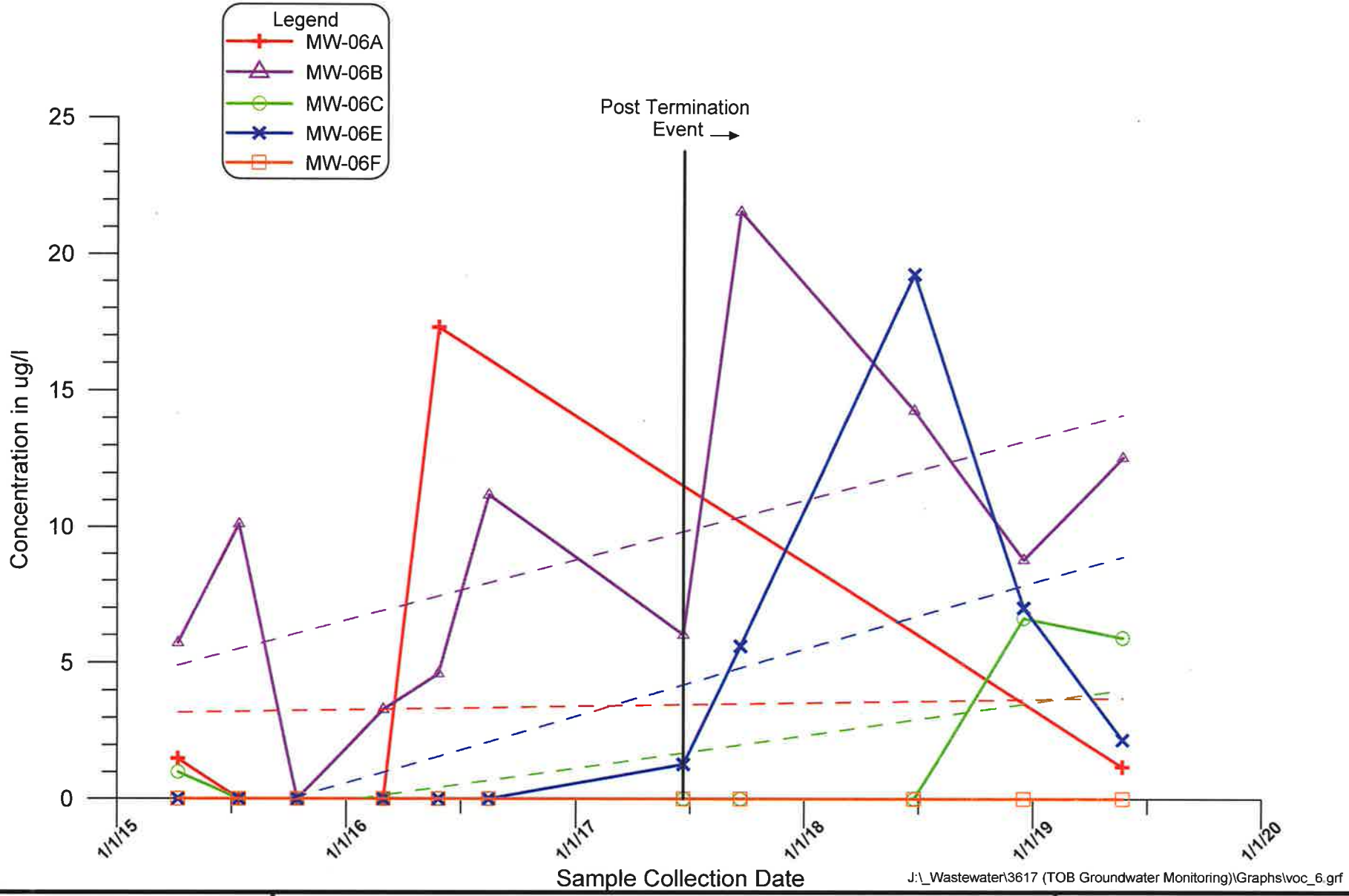
POST-TERMINATION HISTORICAL GROUNDWATER TREND GRAPHS



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Monitoring Wells 5, 8, & 9

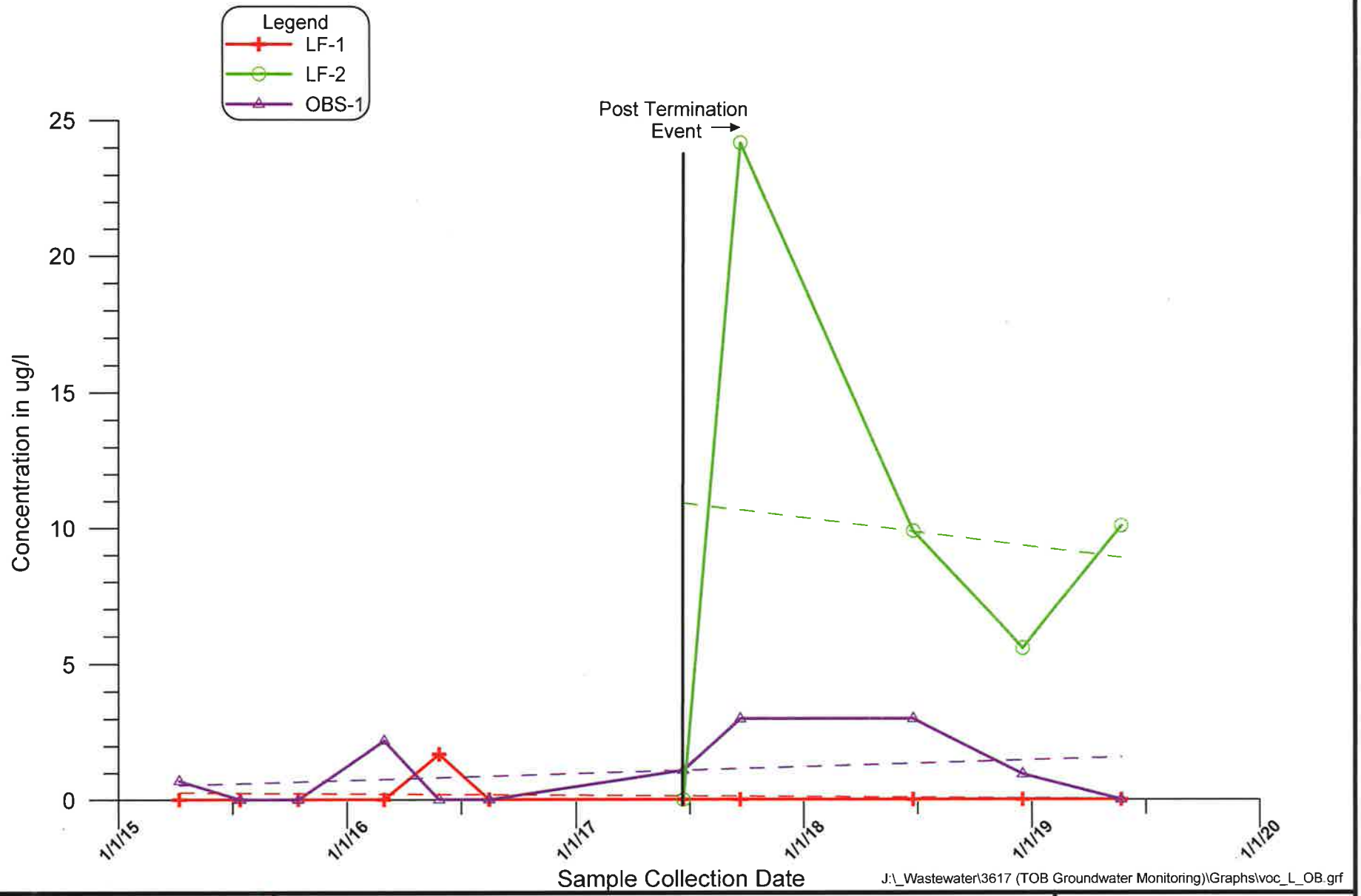
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Monitoring Well Cluster 6

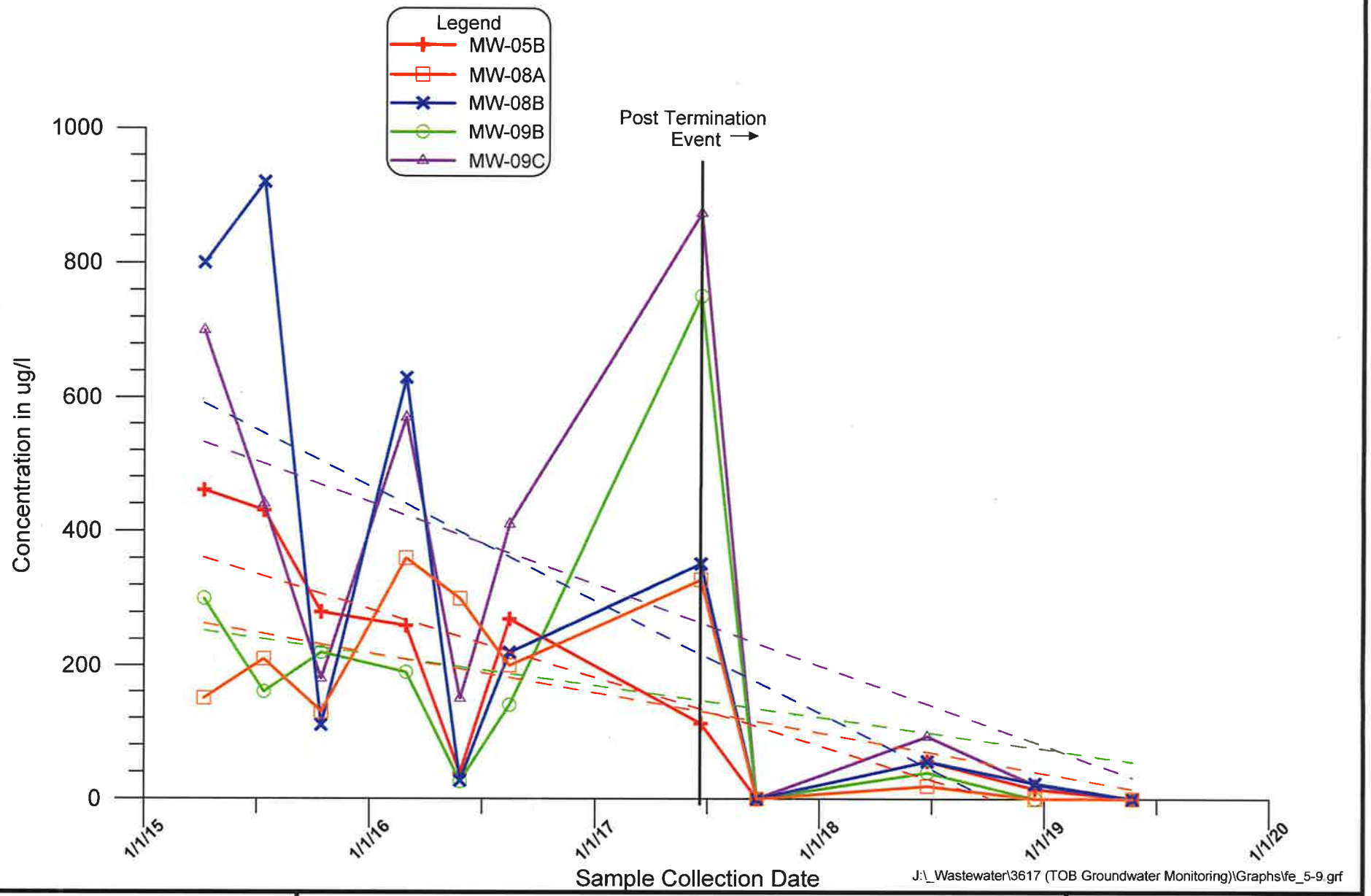
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Total Volatile Organic Compounds
Data for Wells LF-1, LF-2 & OBS-1

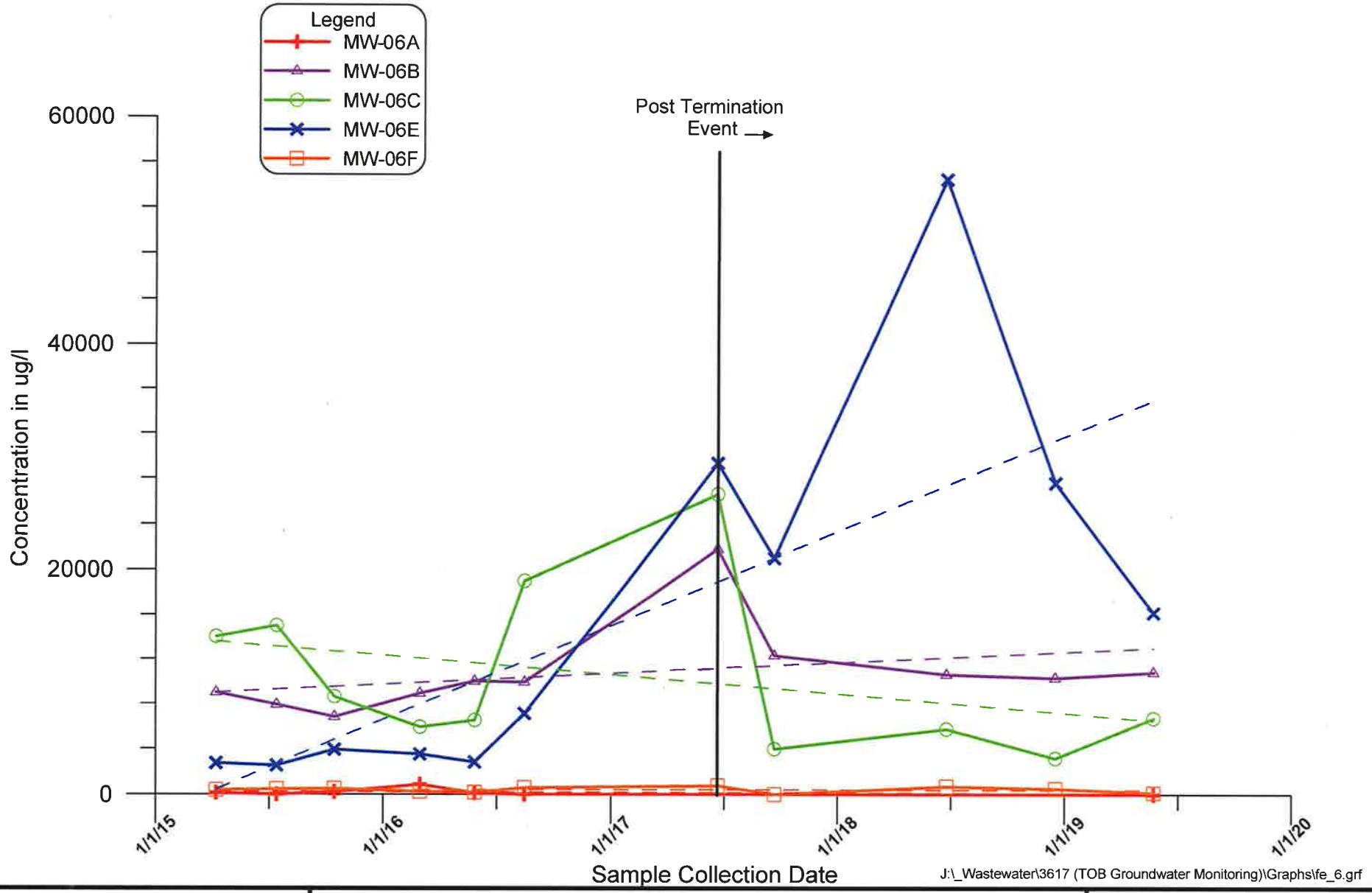
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Monitoring Wells 5, 8, & 9

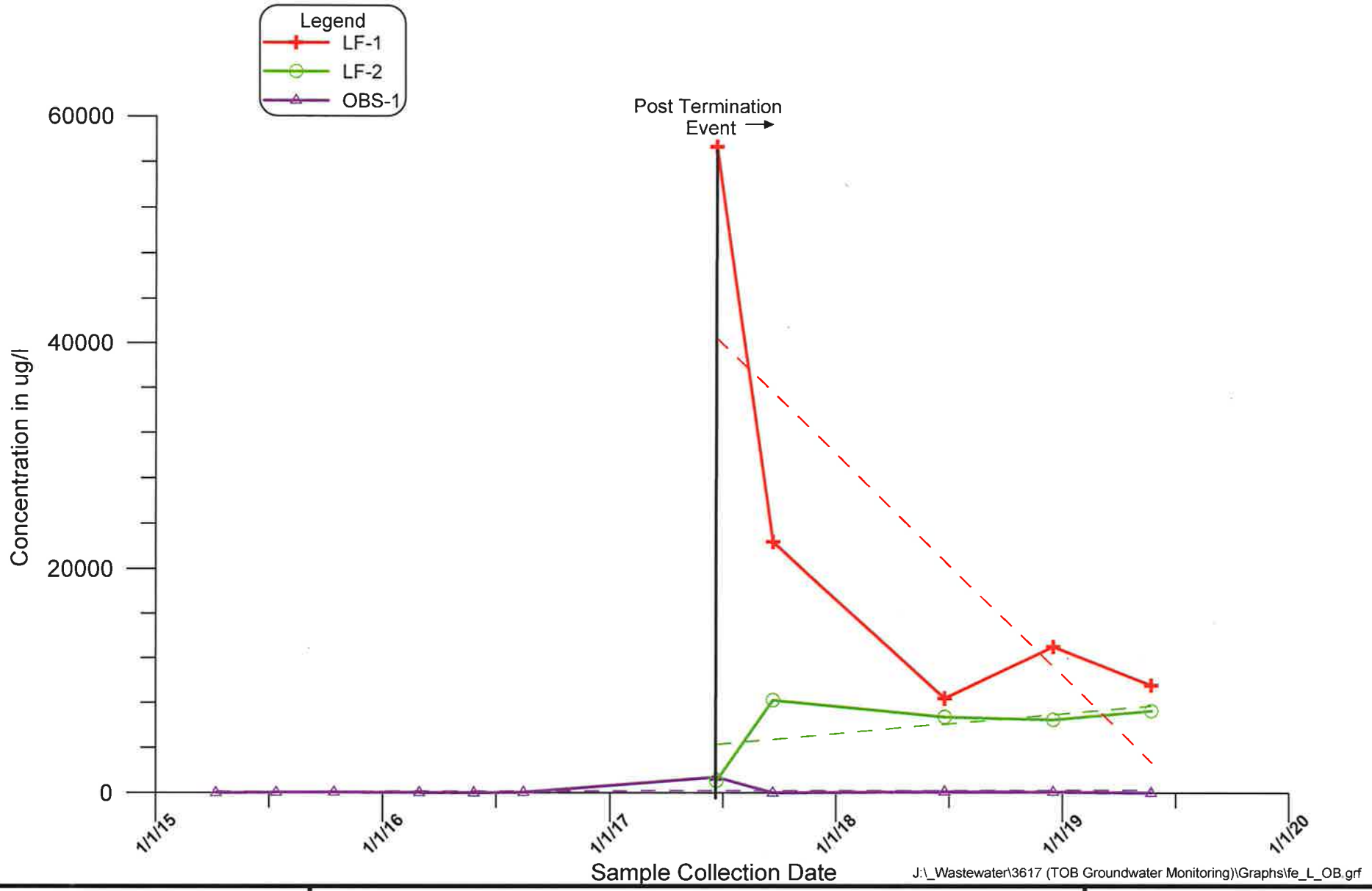
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Monitoring Well Cluster 6

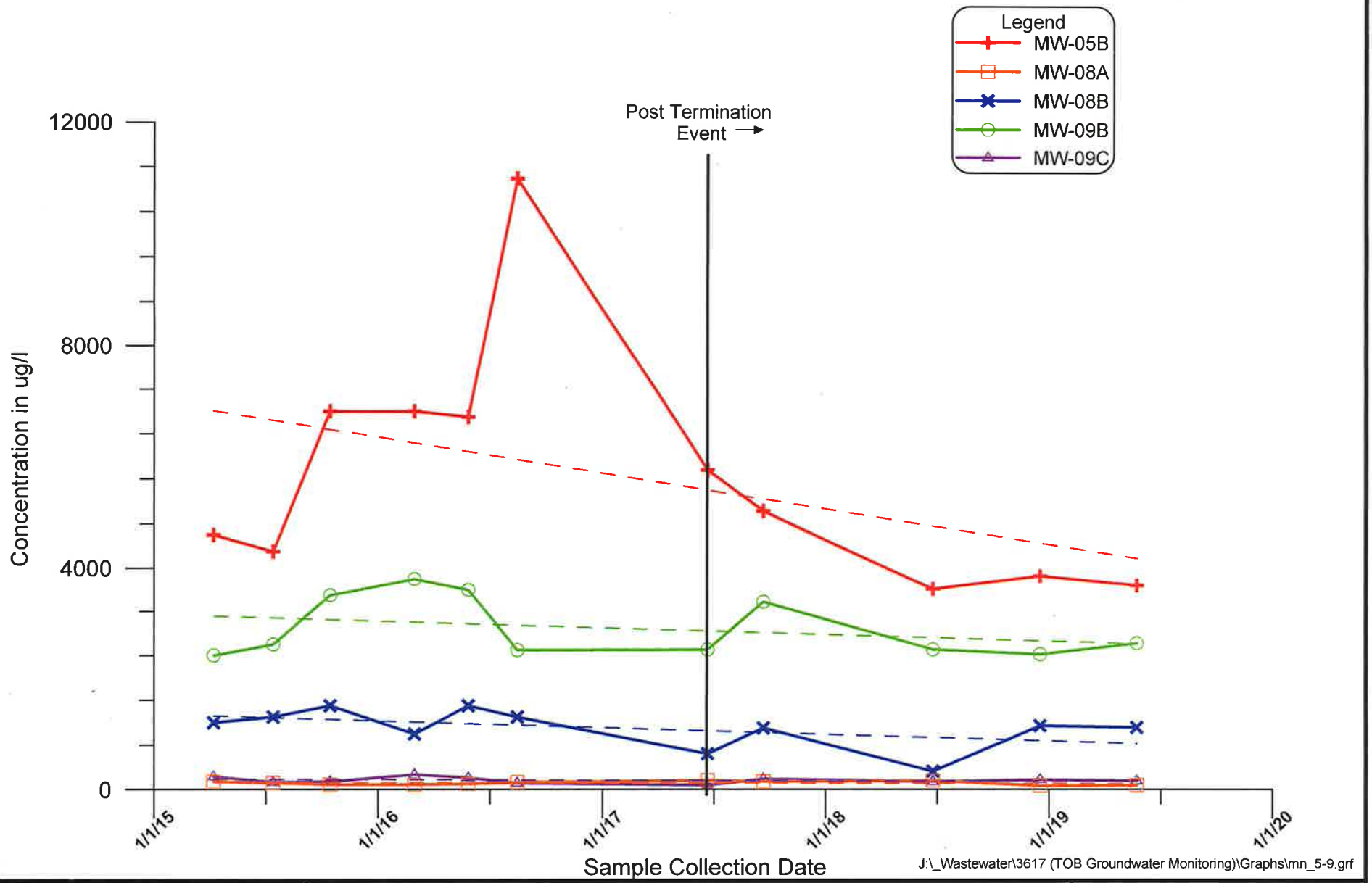
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Iron
Data for Wells LF-1, LF-2 & OBS-1

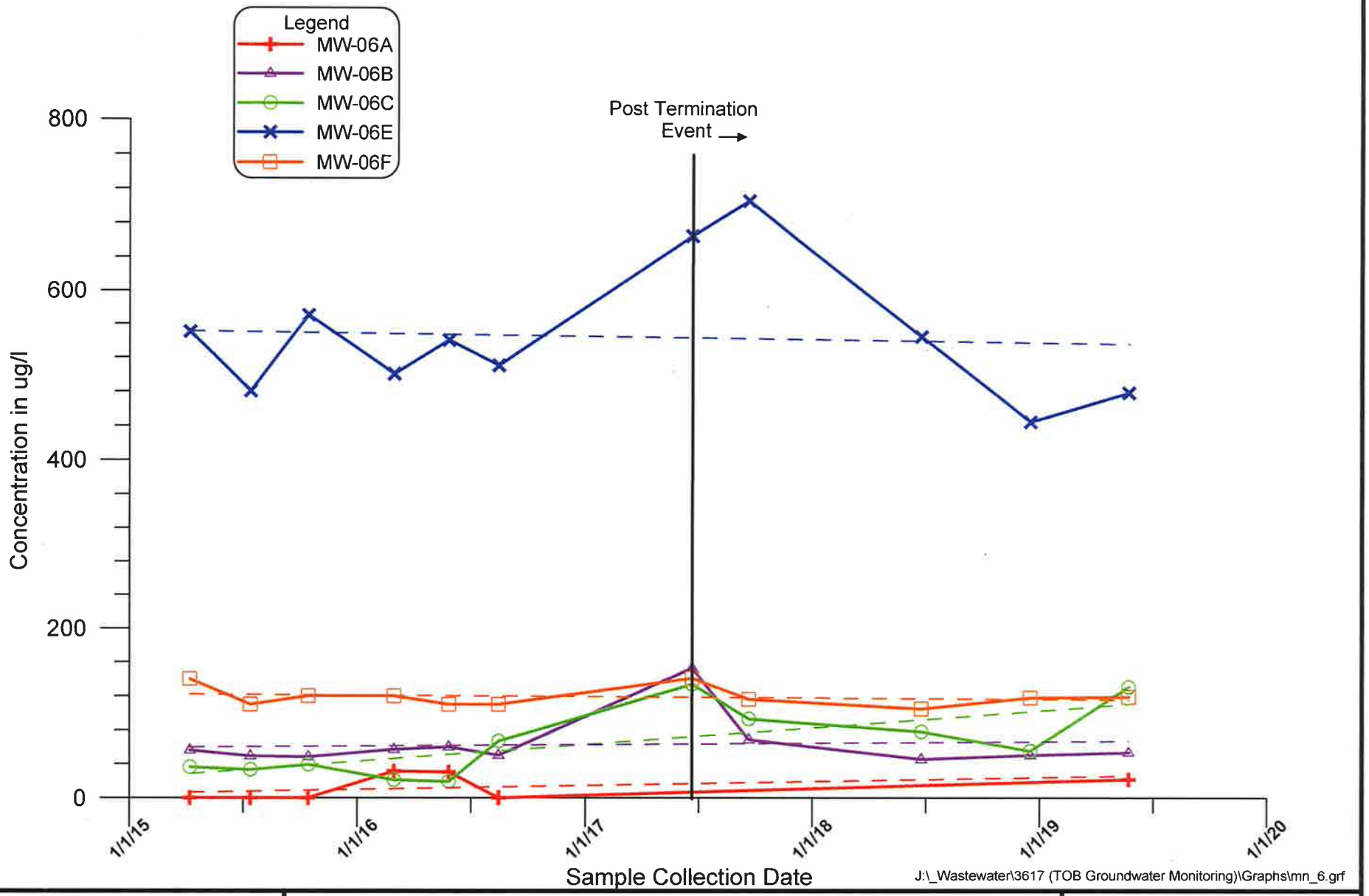
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Monitoring Wells 5, 8, & 9

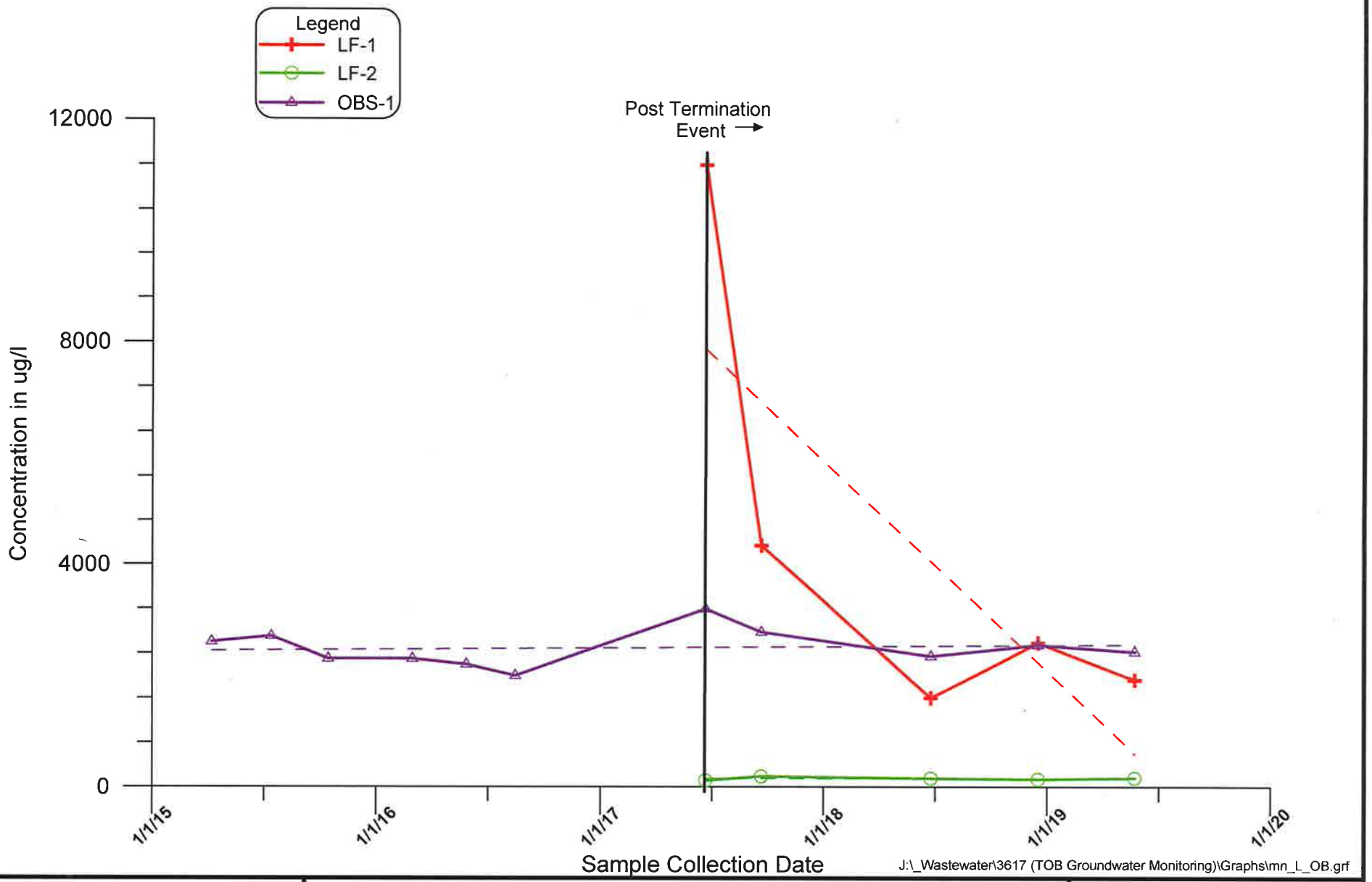
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Monitoring Well Cluster 6

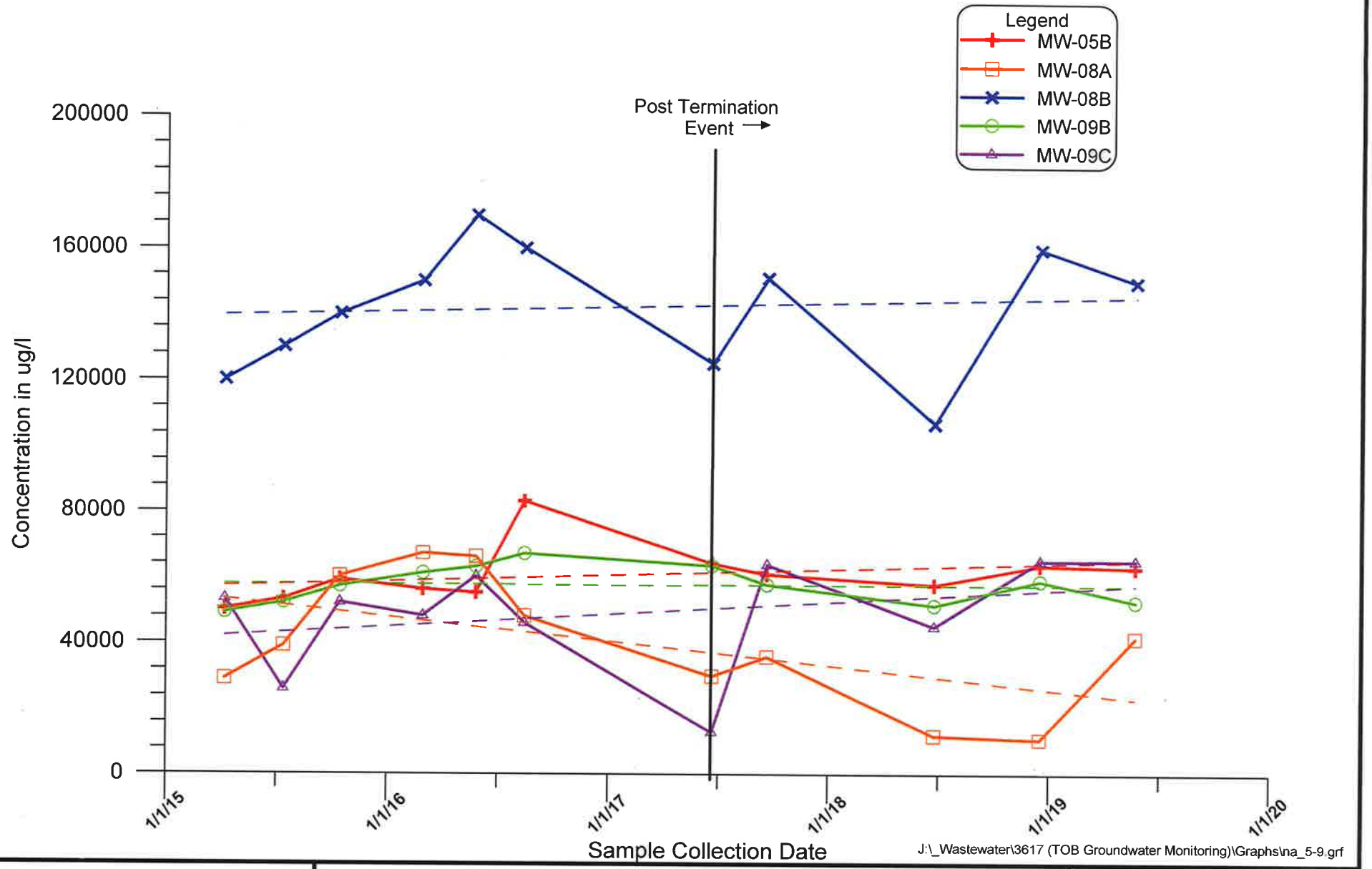
Figure E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Manganese
Data for Wells LF-1, LF-2 & OBS-1

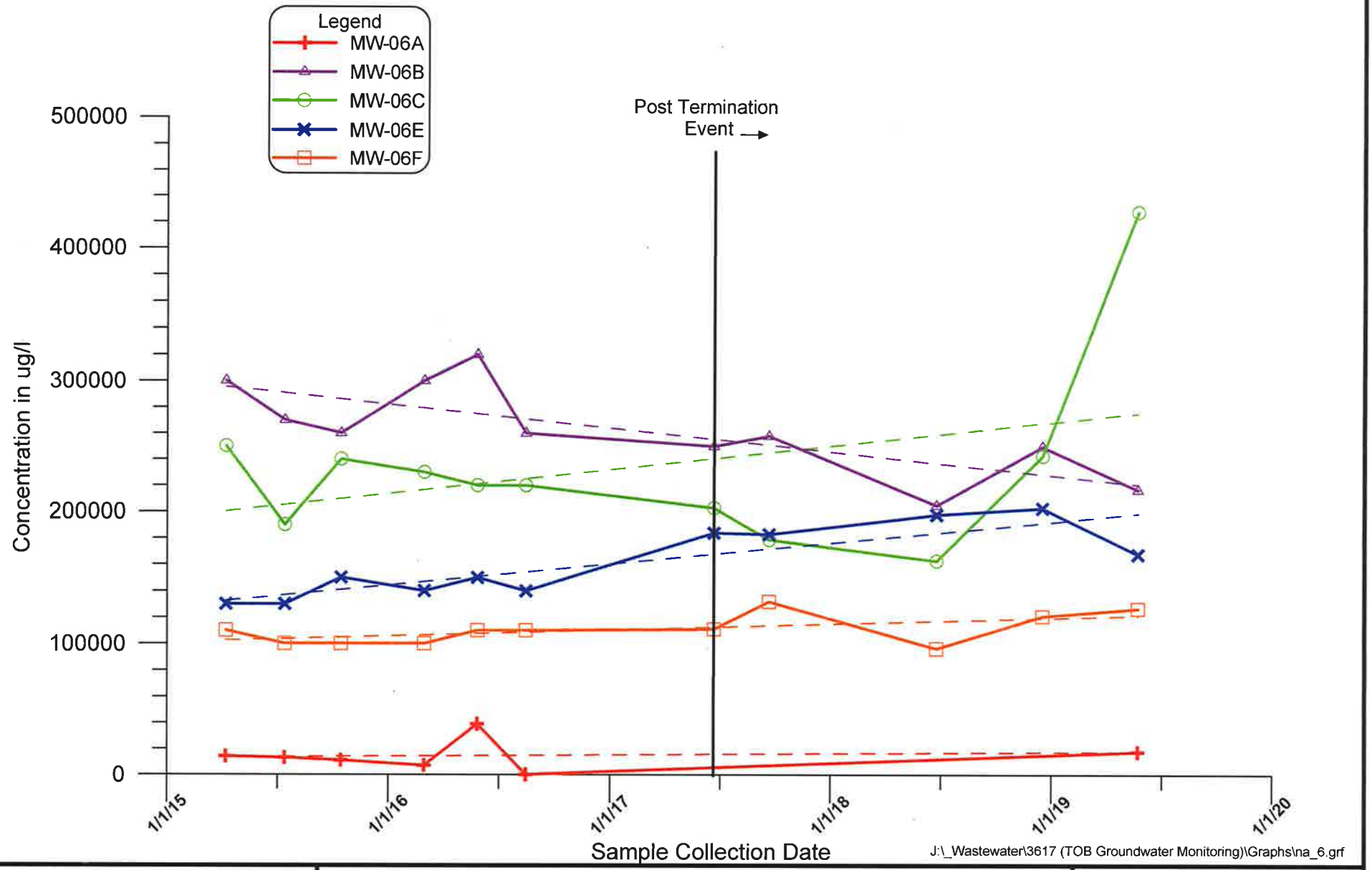
Figure E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Monitoring Wells 5, 8, & 9

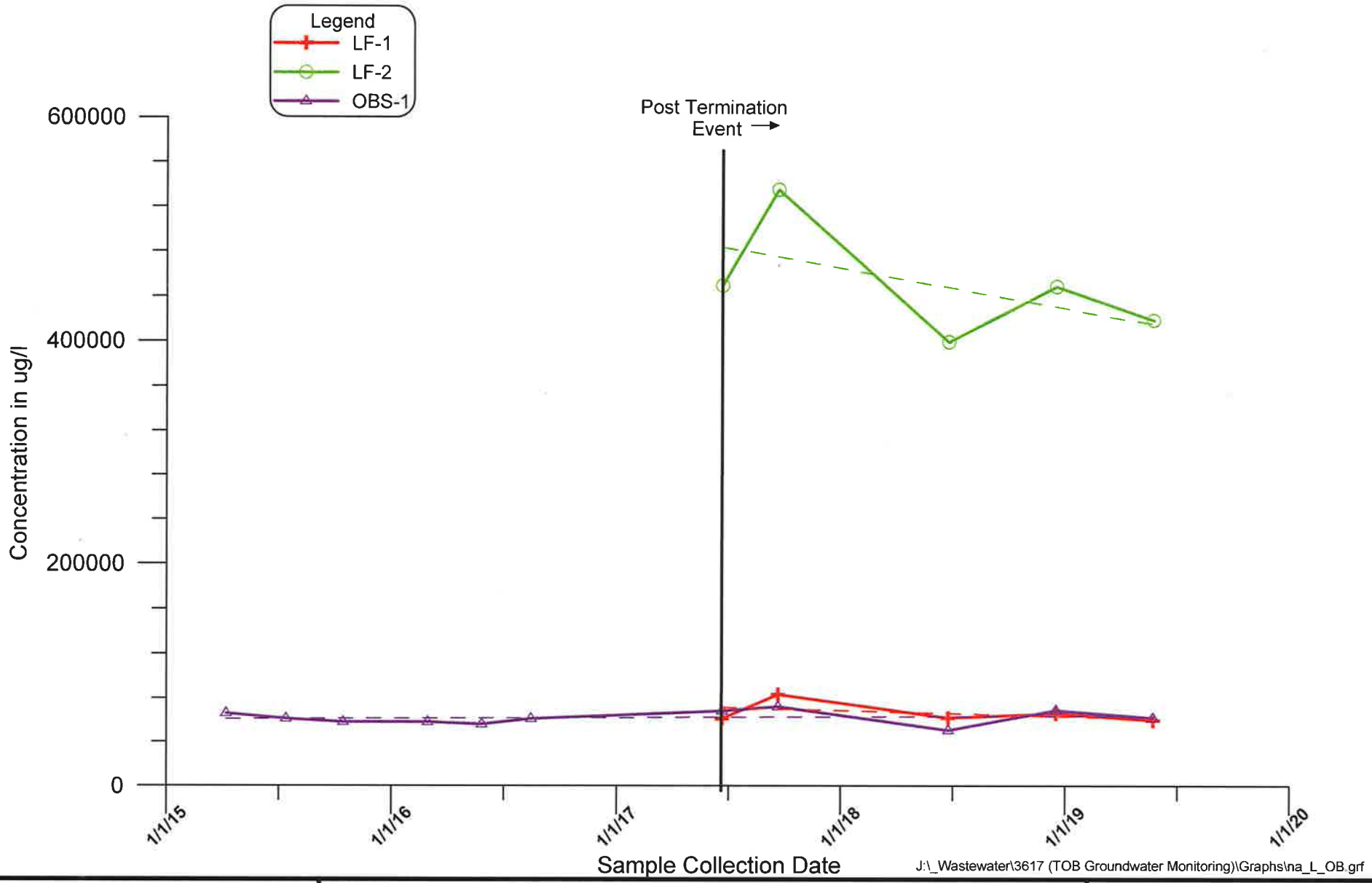
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Monitoring Well Cluster 6

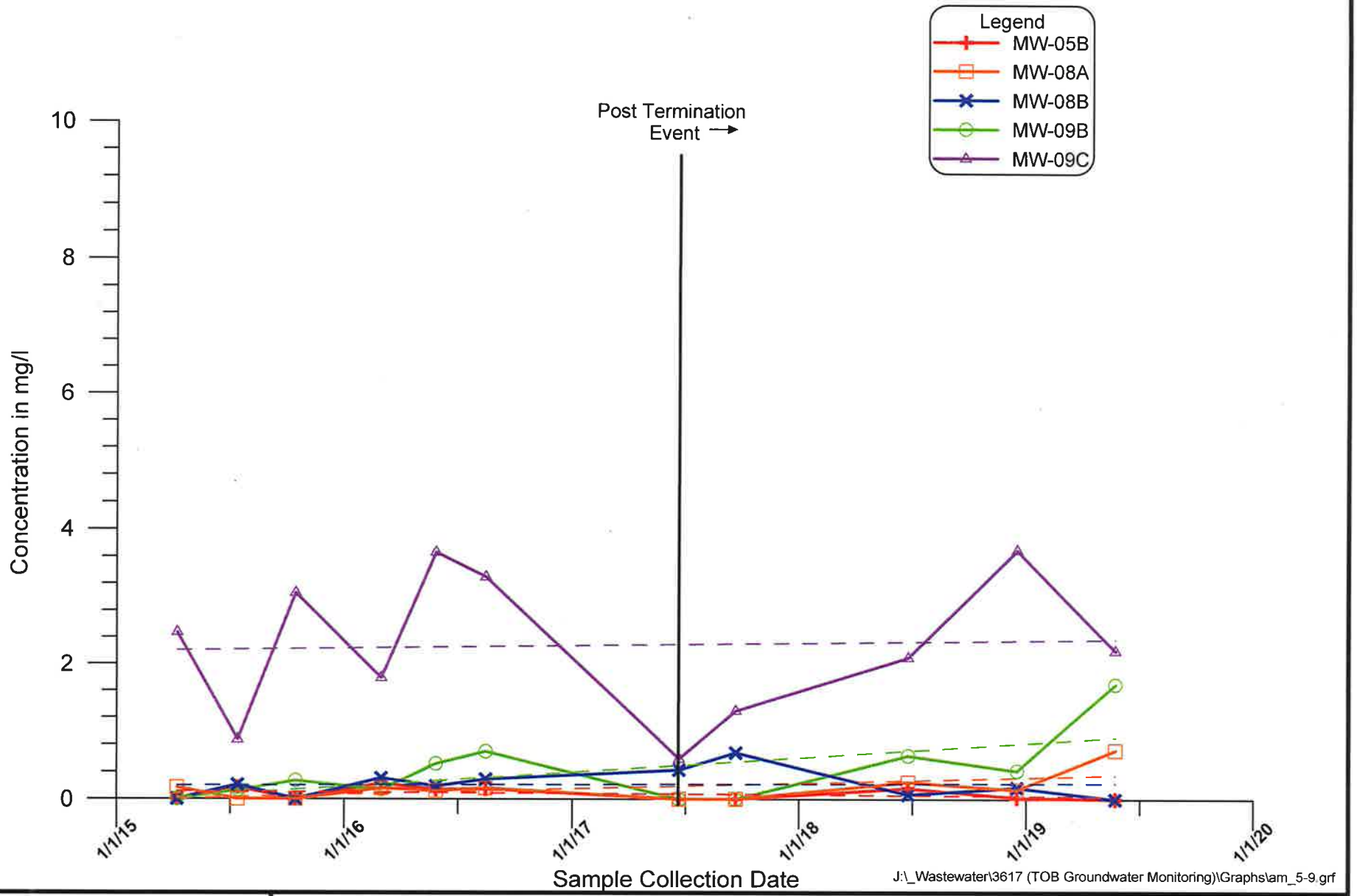
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Sodium
Data for Wells LF-1, LF-2 & OBS-1

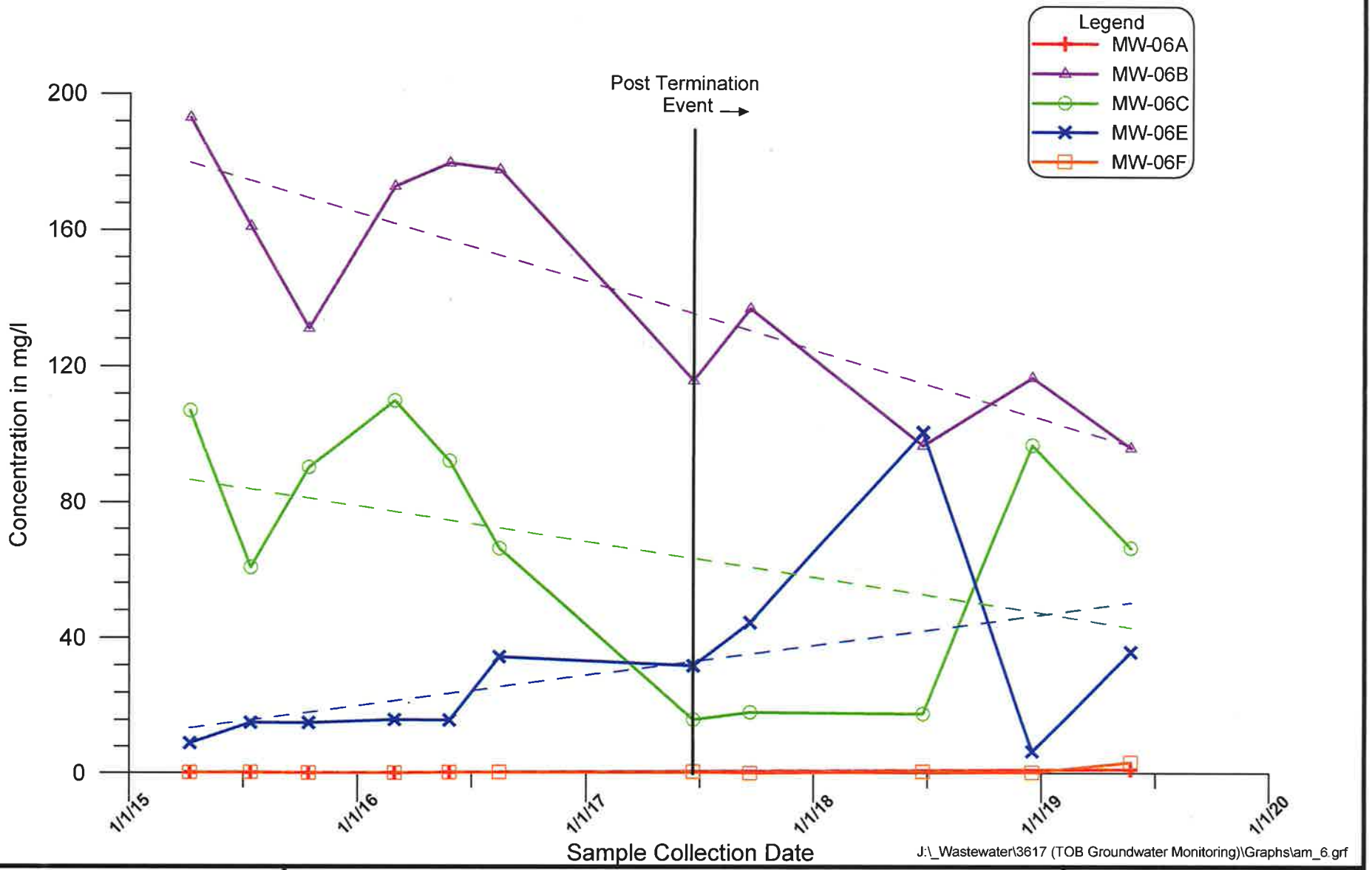
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Monitoring Wells 5, 8, & 9

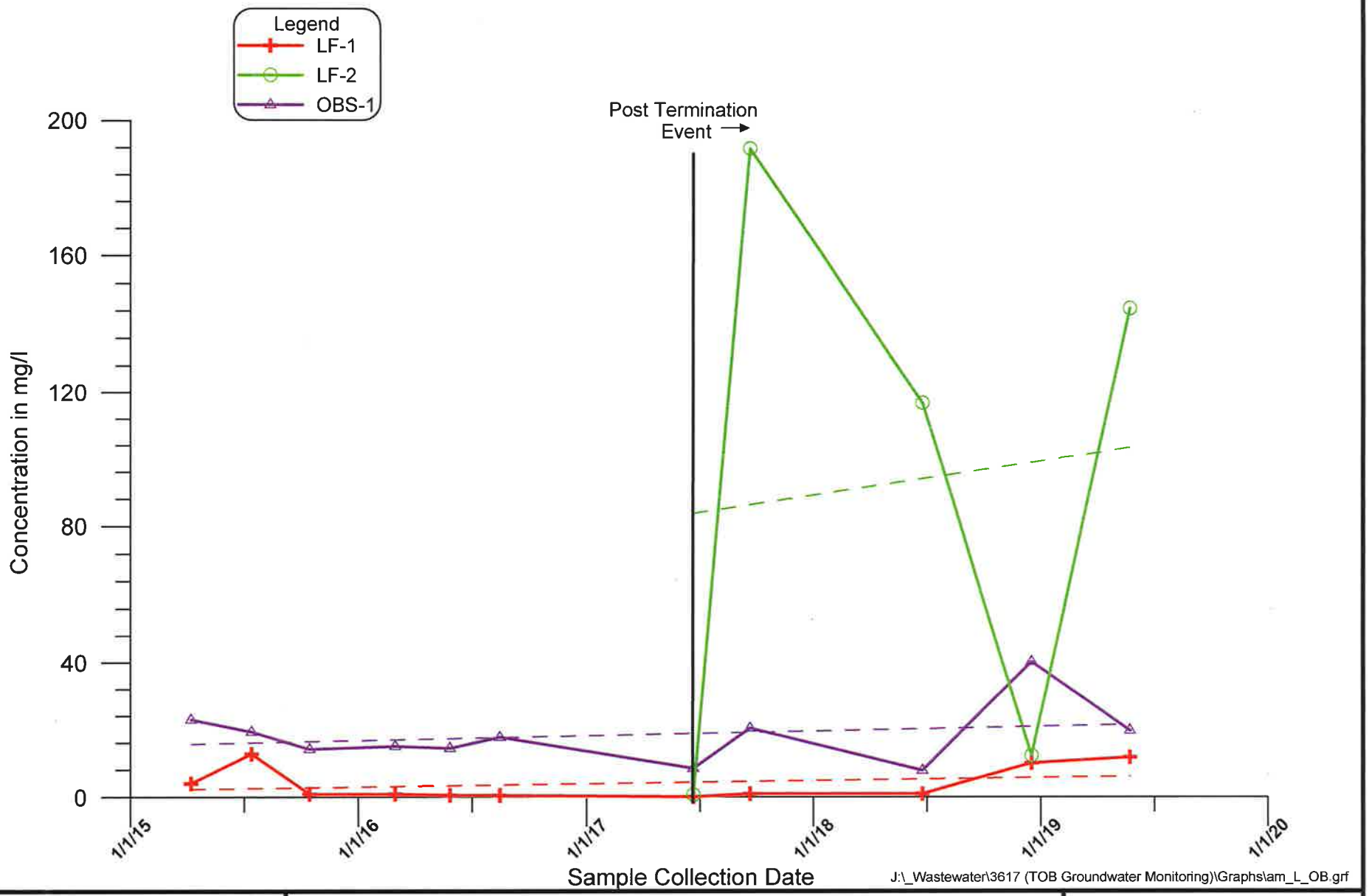
Figure
E



D&B Engineers and Architects, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Monitoring Well Cluster 6

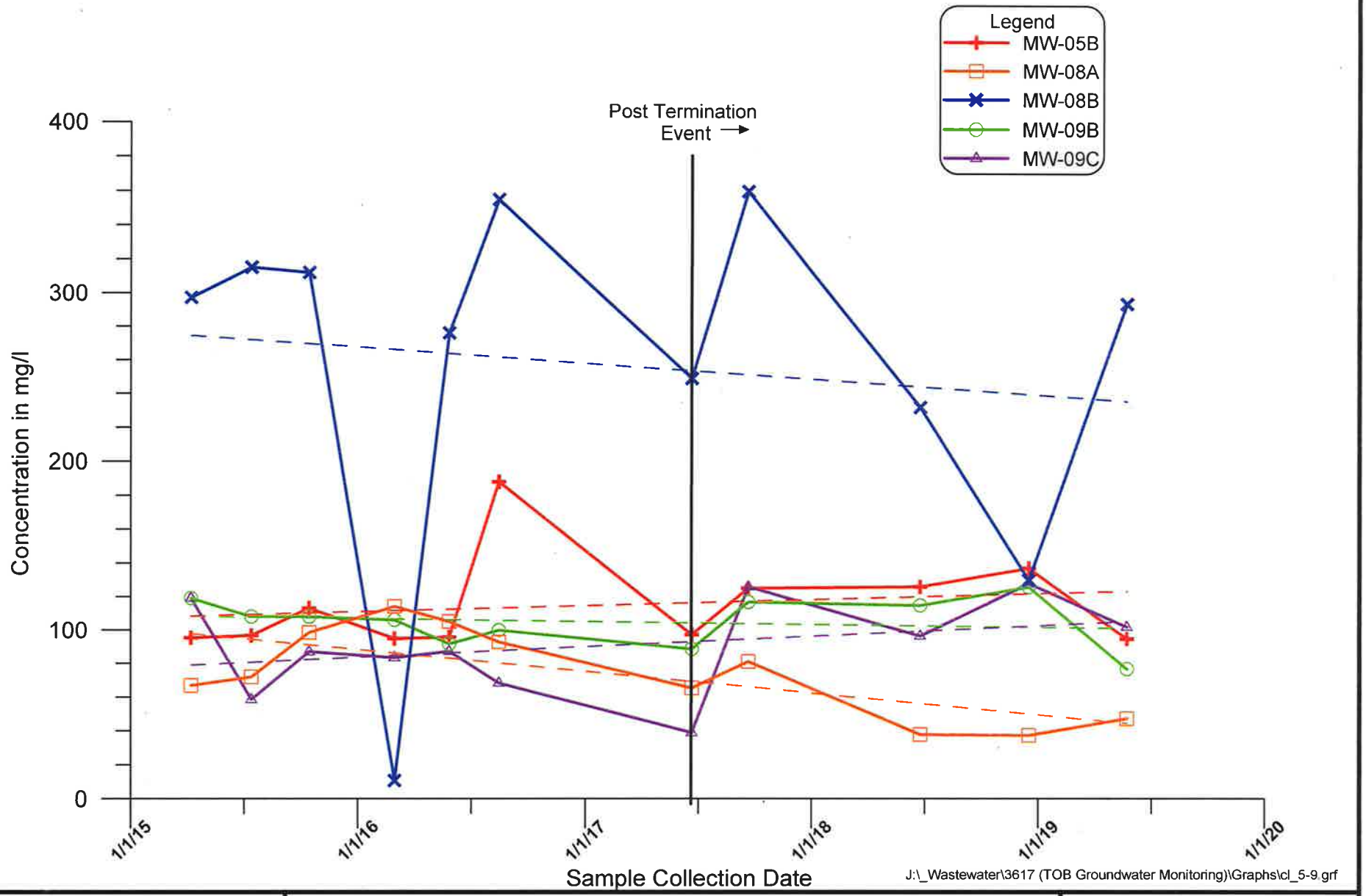
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Ammonia
Data for Wells LF-1, LF-2 & OBS-1

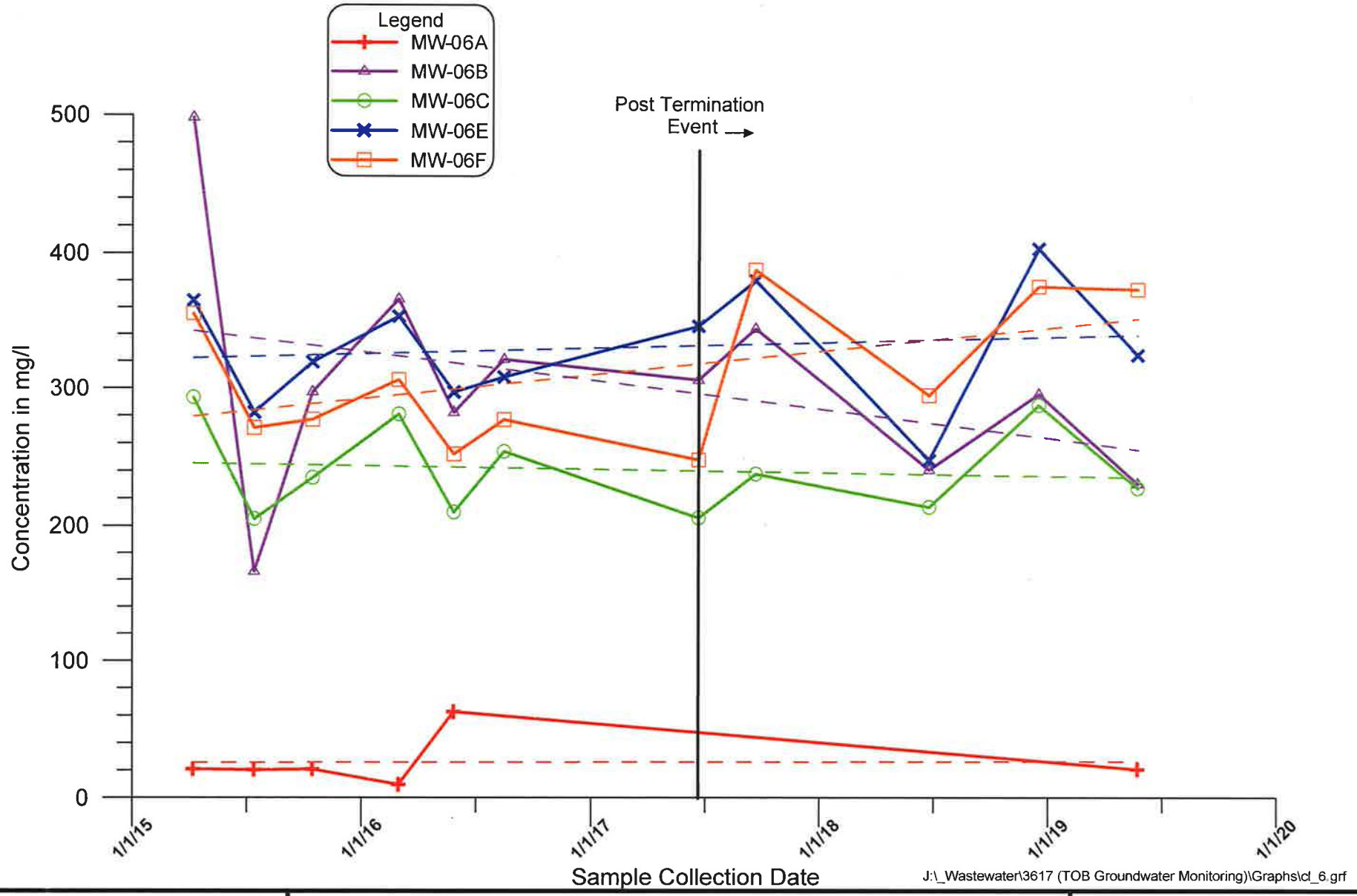
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Monitoring Wells 5, 8, & 9

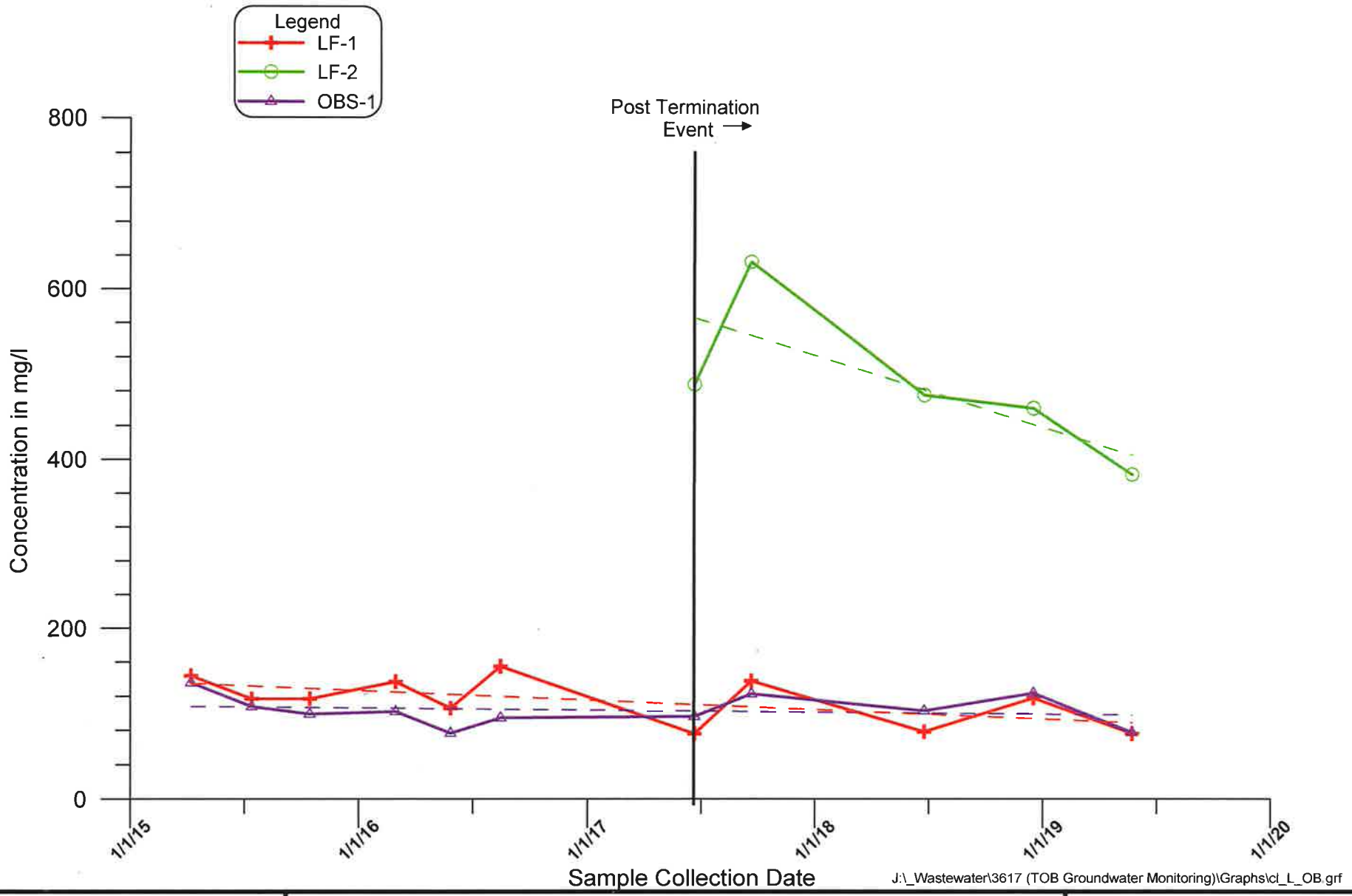
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Monitoring Well Cluster 6

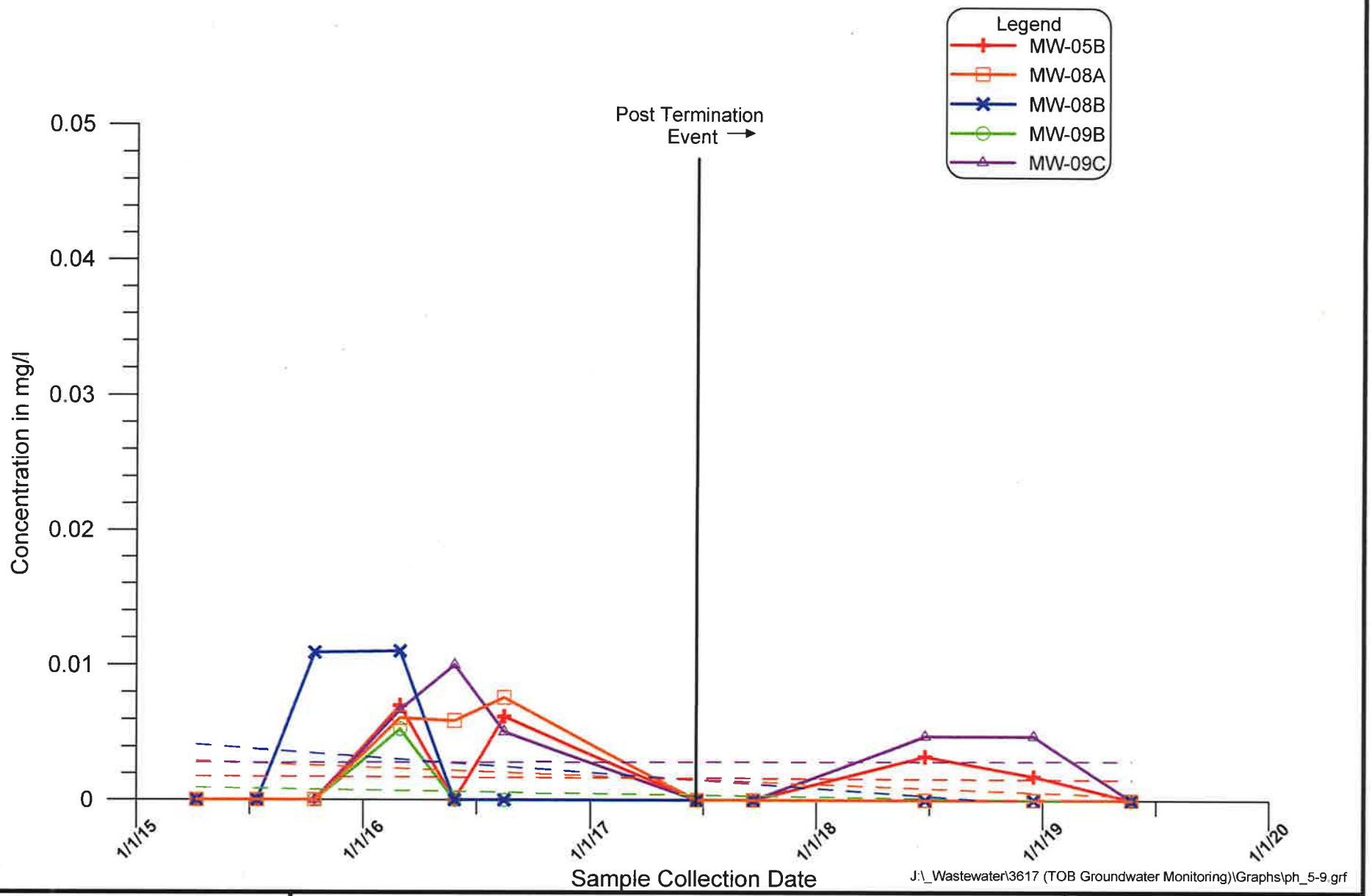
Figure E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Chloride
Data for Wells LF-1, LF-2 & OBS-1

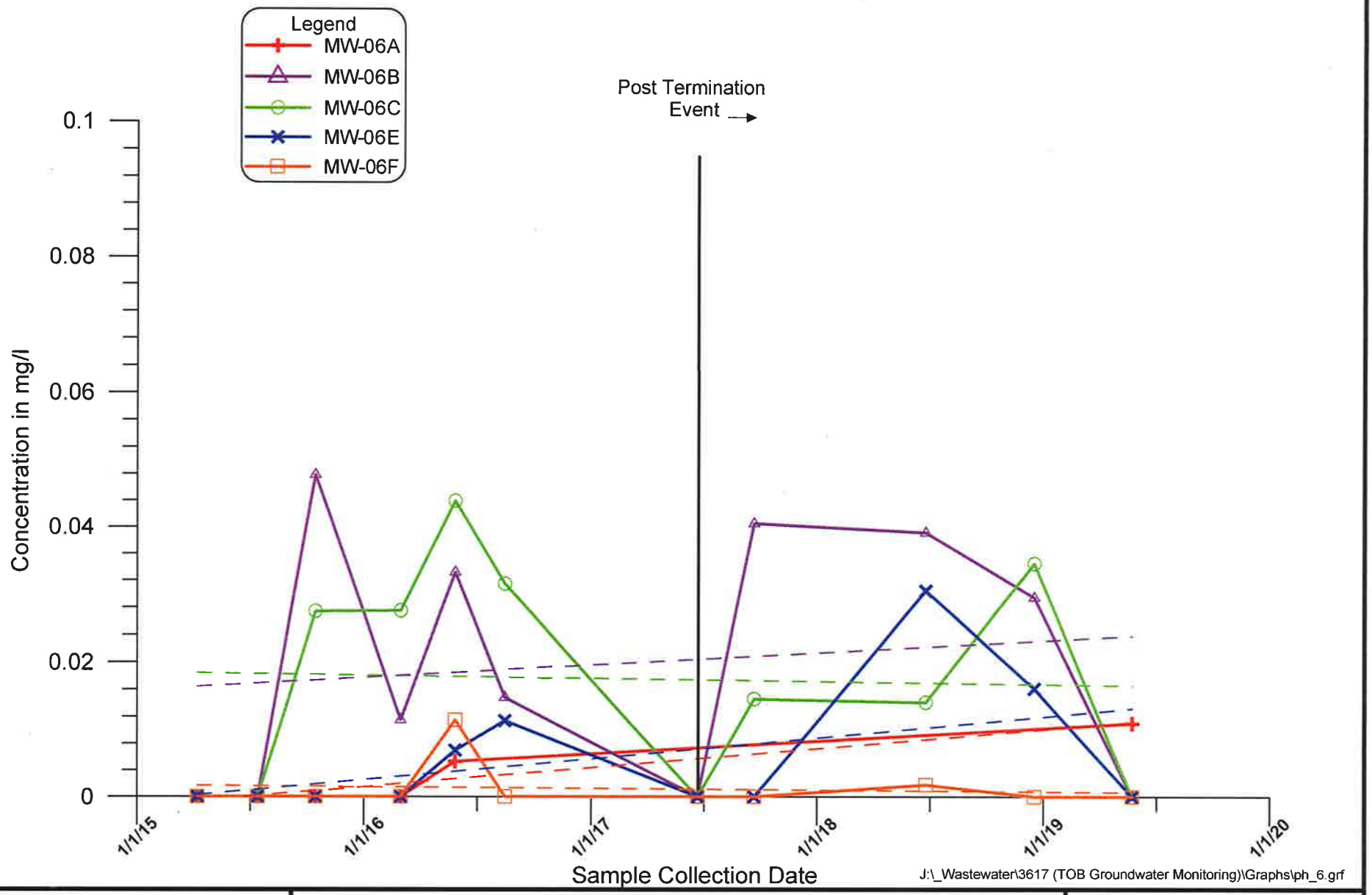
Figure
E



D&B ENGINEERS AND ARCHITECTS, P.C.

Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolics
Data for Monitoring Wells 5, 8, & 9

Figure
E



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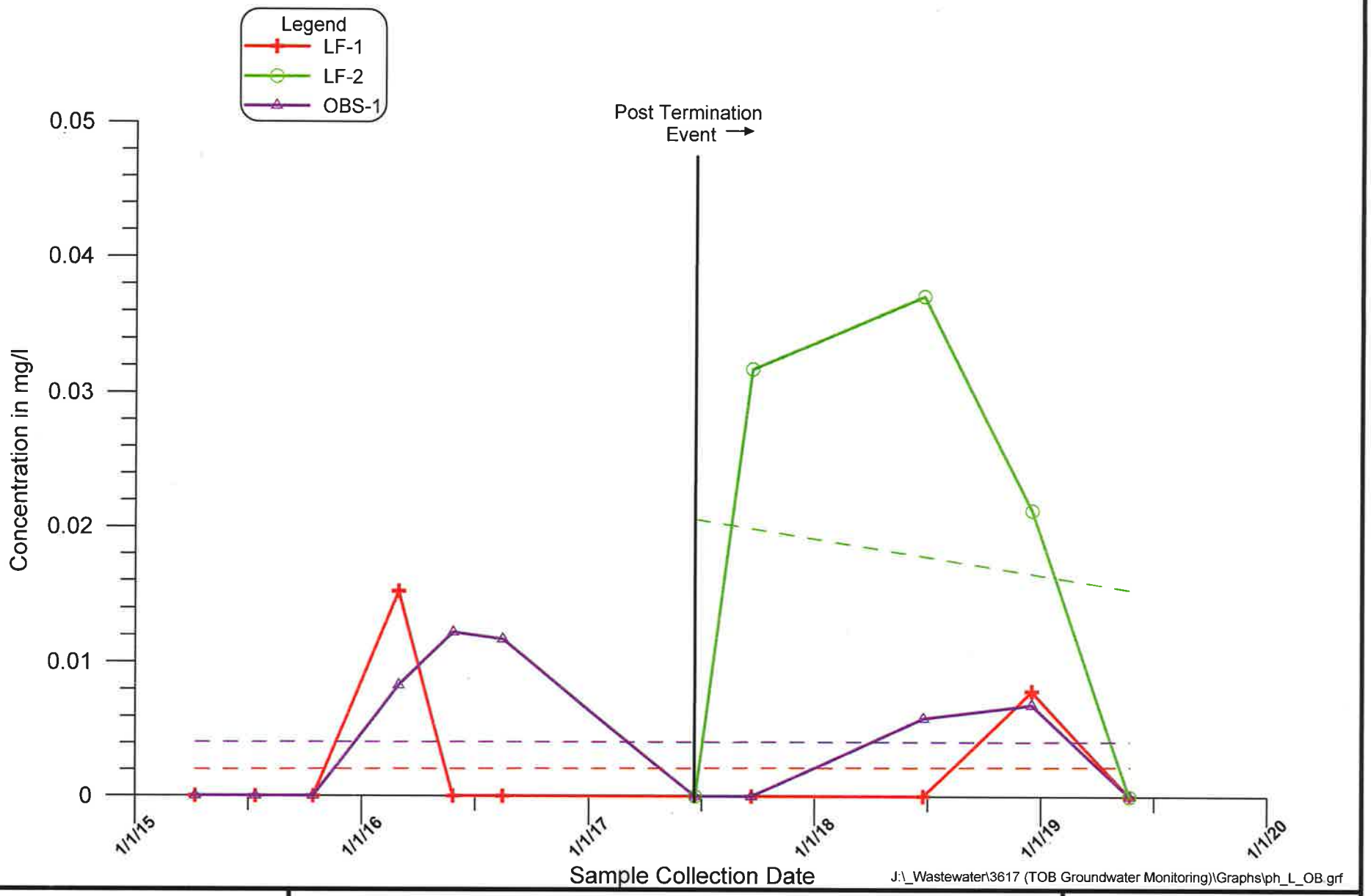
Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolis
Data for Monitoring Well Cluster 6

Figure
E



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Town of Oyster Bay
Old Bethpage Landfill
Historical Phenolic
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	LF-1	LF-1	LF-2	LF-2	MW-5B	MW-5B	MW-6B	MW-6B	MW-6C	MW-6C	MW-6E	MW-6E
	Sample Date	06/22/2017	06/22/2017	06/20/2017	06/20/2017	06/20/2017	06/20/2017	06/21/2017	06/21/2017	06/21/2017	06/21/2017	06/21/2017	06/21/2017
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	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 Sample Date Type:	MW-6F 06/21/2017 Total	MW-6F 06/21/2017 Dissolved	MW-8A 06/22/2017 Total	MW-8A 06/22/2017 Dissolved	MW-8B 06/22/2017 Total	MW-8B 06/22/2017 Dissolved	MW-9B 06/20/2017 Total	MW-9B 06/20/2017 Dissolved	MW-9C 06/20/2017 Total	MW-9C 06/20/2017 Dissolved	OBS-1 06/20/2017 Total	OBS-1 06/20/2017 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

Sample ID / Sample Date / Units in mg/l	NYSDEC Class GA Standard or Guidance Value	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													
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	LF-1	LF-1	LF-2	LF-2	MW-5B	MW-5B	MW-6B	MW-6B	MW-6C	MW-6C	MW-6E	MW-6E
	Sample Date	09/21/17	09/21/17	09/21/17	09/21/17	09/21/17	09/21/17	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	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

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	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	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17	09/21/17	09/21/17	09/21/17	09/21/17	09/21/17	09/21/17
	Type:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	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

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		LF-1	LF-2	MW-5B	MW-6B	MW-6C	MW-6E	MW-6F	MW-8A	MW-8B	MW-9B	MW-9C	OBS-1
Sample Date		09/21/17	09/21/17	09/21/17	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17	09/22/17	09/21/17	09/21/17	09/21/17
Units in mg/l													
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.