

**Annual Groundwater Monitoring Report
Former Eastgate Landfill
Bellevue, Washington**

July 28, 2017

Prepared for

The Boeing Company
Seattle, Washington



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**Draft Annual Groundwater Monitoring Report
Former Eastgate Landfill
Bellevue, Washington**

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LIST OF ABBREVIATIONS AND ACRONYMS

Advanta	Advanta Office Holdings
BGS.....	below ground surface
Boeing	The Boeing Company
City.....	City of Bellevue
COC	chain of custody
Ecology.....	Washington State Department of Ecology
EPA.....	US Environmental Protection Agency
ft.....	feet
LAI	Landau Associates, Inc.
LLI.....	Eurofins Lancaster Laboratories Environmental
µg/L.....	micrograms per liter
mg/L.....	milligrams per liter
NFA	no further action
PVC.....	polyvinylchloride
Schnitzer	Schnitzer Northwest LLC
VOCs.....	volatile organic compounds

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1.0 INTRODUCTION

This report summarizes the results of the interim groundwater monitoring performed in 2017 at the former Eastgate Landfill for The Boeing Company (Boeing). The former Eastgate Landfill is located within and adjacent to the I-90 Business Park in Bellevue, Washington. Phantom Lake is located about 2,000 feet (ft) north of and about 83 ft lower in elevation than the former landfill (KCM 1987). The location of the site is shown on Figure 1. The approximate area of the former landfill is shown on Figure 2. This monitoring report includes an evaluation of the data and recommendations for continued interim groundwater monitoring.

1.1 Background

The former Eastgate Landfill was operated by King County from about 1951 until 1964, and current ownership of the landfill is split between three owners: Boeing, the City of Bellevue (City), and Advanta Office Holdings (Advanta). After closure of the landfill, Cabot, Cabot, & Forbes developed a portion of the property to the east of the former landfill as the I-90 Business Park. In about 1980, Boeing purchased developed and undeveloped property at the I-90 Business Park, as well as most of the 9.6-acre former landfill. In April 2003, the City purchased approximately 16 acres of the undeveloped portion of the business park property from Boeing, as well as a majority of the former landfill. In December 2005, Schnitzer Northwest LLC (Schnitzer) purchased approximately 13.3 acres of the undeveloped portion of the business park property, as well as a small portion of the southern edge of the landfill. Schnitzer constructed three office buildings in 2007-2008 to the south of the former landfill; the property was sold to Advanta in 2010.

Closure activities were performed at the landfill by King County, the City, and Boeing and included placement of a cover, groundwater monitoring, leachate collection, and landfill gas collection and combustion. Under the 2003 purchase and sale agreement for the property between Boeing and the City, the City agreed to assume operation of the landfill gas extraction system, and Boeing agreed to retain responsibility for continued groundwater monitoring activities at the site, including groundwater monitoring wells located on property that is now owned by Advanta.

Groundwater monitoring activities at the former landfill began in 2000 and included installation of monitoring wells and collection and analysis of groundwater samples on a quarterly, semiannual, or annual groundwater monitoring schedule. In 2000, Boeing requested a no-further-action (NFA) determination from the Washington State Department of Ecology (Ecology) for the Boeing-owned portion of the landfill. Based on requests from Ecology in a response to the NFA request, six monitoring wells (EL-101 through EL-106) were installed around the perimeter of the landfill in July 2000, and four quarterly groundwater monitoring events were conducted in 2000-2001. Results for the four quarterly groundwater monitoring events were submitted to Ecology [Landau Associates, Inc. (LAI) 2001]. Based on those results, Ecology agreed to the initiation of a groundwater compliance monitoring program and a work plan for the groundwater compliance monitoring program was prepared and submitted to Ecology in March 2002 (LAI 2002b). The monitoring program outlined in

the Ecology-approved work plan included one year of semiannual monitoring (completed in 2002) followed by annual groundwater monitoring (ongoing). Monitoring will continue until groundwater cleanup levels are met for four consecutive sampling events or a change in frequency is agreed to by Ecology. The work plan also allows for reduction in the number of wells sampled, and lists of constituents analyzed for, if a constituent or group of constituents is not detected or is detected at concentrations less than or equal to the groundwater cleanup levels for four consecutive sampling events at a particular well.

In 2003, Ecology issued a NFA determination for soil and groundwater at the former landfill site (Ecology 2003), but required continued annual performance groundwater compliance monitoring, in accordance with the work plan (LAI 2002b). A requirement was also included for confirmational groundwater compliance monitoring, which is to be performed after the conclusion of performance groundwater compliance monitoring.

In 2006, Ecology determined that further action was required to refine the conceptual model of groundwater flow beneath the site and to monitor the impacts on groundwater, if any, due to the development of the office complex by Schnitzer (Ecology 2006). Boeing prepared a work plan (LAI 2006a) to address the further action requirements. The work plan included installation of a piezometer north of the landfill and modification to the frequency and locations of groundwater elevation monitoring. Also, due to construction activities related to development of the Schnitzer-owned portion of the landfill, the work plan included decommissioning and replacement of wells EL-101 and EL-106. Boeing implemented the replacement of two monitoring wells, installation of the new piezometer (EL-107), and adjustments to groundwater compliance monitoring in 2007.

This report describes performance groundwater compliance monitoring performed in 2017. For clarity, this stage of monitoring is defined as interim groundwater monitoring in this report. The results for the interim groundwater monitoring conducted since 2002 are documented in reports previously submitted to Ecology (LAI 2002a, 2003, 2004, 2005, 2006b, 2008, 2009, 2010, 2011a, b, 2012, 2013, 2014, 2015, 2016).

1.2 Site Description

The former Eastgate Landfill consists of an approximately 9.6-acre area located adjacent to the I-90 Business Park in Bellevue, Washington. A number of office buildings are located in the surrounding business park; however, no buildings have been constructed on the former landfill. In 2008, an office building complex (including three buildings, designated buildings A, B, and C) was constructed by Schnitzer adjacent to the southern end of the landfill, which included low-permeability surfaces (asphalt roadways and parking areas) over a small portion of the south end of the landfill.

The landfill is capped with soil and has leachate and active landfill gas collection systems in place, along with landfill gas and groundwater monitoring networks. Leachate is collected on the north side of the landfill in the French Drain (located on City-owned property) and is discharged to the sanitary

sewer. Six monitoring wells (EL-101R, EL-102, EL-103, EL-104, EL-105, and EL-106R), ranging in depth from 26.5 to 75 ft below ground surface (bgs), are located along the perimeter of the landfill. A piezometer, EL-107, is located approximately 450 ft north of the landfill on City-owned property. Monitoring well and piezometer locations are shown on Figure 2. Landfill gas extraction wells are also located within the limits of the solid waste landfill and landfill gas monitoring wells are located along the perimeter of the landfill, as shown on Figure 2.

Previous investigations at the site identified two aquifers below the site: a shallow perched aquifer and a deeper intermediate aquifer. The shallow perched aquifer is encountered in the solid waste and alluvial materials and, in some locations, the glacial till underlying the fill and alluvial materials. The deeper intermediate aquifer (advance outwash aquifer) is encountered in the advance outwash. The site monitoring wells and piezometer are screened in the advance outwash aquifer and, therefore, monitor groundwater in the advance outwash aquifer.

2.0 GROUNDWATER MONITORING ACTIVITIES

This section describes water level measurement, groundwater sampling, and groundwater analyses associated with the annual interim groundwater monitoring event conducted on May 4, 2017. The monitoring event was conducted by LAI under Boeing's regional groundwater monitoring contract.

2.1 Water Level Measurements

In accordance with the planned scope for interim groundwater monitoring presented in the 2016 annual report (LAI 2015), static water levels were measured prior to groundwater sampling at each of the six monitoring wells (EL-101R, EL-102, EL-103, EL-104, EL-105, and EL-106R); at piezometer EL-107; and at stormwater Pond A. The depth to groundwater was measured to the nearest 0.01 ft from the top of the north side of the polyvinylchloride (PVC) casing to groundwater using an electric water level indicator. Depth to water measurements at each well and the piezometer were converted to groundwater elevations using surveyed elevations for the top of the PVC casing. At Pond A, water level was measured utilizing the staff gauge installed in the pond. This measurement was converted to a surface water elevation using the surveyed elevation for the top of the staff gauge. Groundwater and surface water elevations are listed in Table 1. Groundwater and surface water elevations, and groundwater elevation contours, are shown on Figure 3.

2.2 Groundwater Sampling

Groundwater monitoring was conducted in accordance with the *Confirmational Groundwater Sampling Work Plan* (LAI 2002b), the *Further Action Groundwater Monitoring Work Plan* (LAI 2006a), and the subsequent scope reduction described in the 2010 Annual Groundwater Monitoring report (LAI 2011a). Groundwater samples were collected from wells EL-103, EL-105, and EL-106R, and a surface water sample was collected from the French Drain. Dedicated bladder pumps were used to purge and collect groundwater samples from EL-103 and EL-105; a disposable bailer was used to purge and collect a groundwater sample from EL-106R. The surface water sample collected from the French Drain was collected using a peristaltic pump.

The groundwater samples and the surface water sample were collected in appropriate containers, labeled, logged on a chain-of-custody (COC) document, and kept on ice until delivered to the laboratory. Sample containers, preservatives, and holding times were appropriate for the types of samples collected and the specified analytical methods. Sample custody and documentation in the field and during transportation to the laboratory was conducted in general conformance with the procedures described in the *Confirmational Groundwater Monitoring Work Plan* (LAI 2002b).

One blind field duplicate sample, EL-100, was collected at well EL-103. A field trip blank was provided by the analytical laboratory, stored with the collected samples, and analyzed for volatile organic compounds (VOCs).

2.3 Groundwater Analysis

In accordance with the current approved scope of interim groundwater monitoring (LAI 2006a) and the scope reductions described in the 2010 Annual Groundwater Monitoring Report (LAI 2011a), chemical analysis of the samples collected at the three monitoring wells consisted of the following:

- VOCs by US Environmental Protection Agency (EPA) Method 8260C at well EL-103.
- Dissolved metals (iron and manganese) by EPA Method 6010B at wells EL-103, EL-105, and EL-106R.
- Dissolved metals (arsenic) by EPA Method 200.8 at wells EL-103 and EL-105.

Samples for dissolved metals analysis (iron, manganese, and arsenic) were field-filtered using a 0.45 micron filter.

The surface water sample collected from the French Drain was analyzed for the following compounds:

- VOCs by EPA Method 8260C
- Dissolved metals (iron, manganese) by EPA Method 6010B
- Chloride by EPA Method 300.0
- N-Ammonia by Standard Method SM20 4500D
- N-Nitrate calculated
- N-Nitrite by EPA Method 353.2
- Nitrate + Nitrite by EPA Method 353.2
- Sulfate by EPA Method 300.0
- Total Organic Carbon (TOC) by Standard Method SM20 5310C
- Chemical Oxygen Demand (COD) by EPA Method 410.4.

3.0 GROUNDWATER MONITORING RESULTS

This section presents the results of the 2017 interim groundwater monitoring event, which consists of groundwater level data and groundwater quality data.

3.1 Groundwater Levels

Groundwater elevations calculated using water level measurements collected from each monitoring well and piezometer and a surface water level measurement at the staff gauge in Pond A in May 2017 were used to evaluate groundwater flow direction in the advance outwash aquifer. The calculated groundwater elevations are presented in Table 1. Groundwater elevation contours were plotted using the calculated groundwater elevations and are shown on Figure 3. The contours indicate the groundwater at the landfill has a generally easterly flow, which is consistent with flow directions previously observed at the landfill (LAI 2001, 2002a, 2003, 2004, 2005, 2006b, 2008, 2009, 2010, 2011a, b, 2012, 2013, 2014, 2015, 2016). Monitoring well EL-105 is located directly hydraulically downgradient of the former landfill; wells EL-103 and EL-106R are also hydraulically downgradient of the outer boundaries of the landfill.

3.2 Groundwater Quality

Eurofins Lancaster Laboratories Environmental (LLI) located in Lancaster, Pennsylvania, conducted the analyses of the groundwater samples using the analytical procedures referenced in Section 2.3. Following receipt of the analytical results, the data was validated as described in Section 4.2 of the *Confirmational Groundwater Monitoring Work Plan* (LAI 2002b). A summary of the analytical results (with data qualifiers added as appropriate) for the 2017 annual sampling event and historical events at each well is provided in Table 2. Concentrations of detected constituents in the groundwater and surface water samples for the last four sampling events (May 2014, May 2015, May 2016, and May 2017) at wells EL-103, EL-105, EL-106R, and the French Drain were tabulated and are presented in Table 3. The laboratory data reports for the 2017 sampling event are provided in Appendix A. A data quality evaluation for the 2017 sampling event is provided in Appendix B.

The groundwater analytical results for the 2017 annual sampling event are consistent with previous sampling events. Analytical results indicate the presence of dissolved iron (2.40 mg/L - 24.1 mg/L) and dissolved manganese (3.40 mg/L - 6.05 mg/L) at concentrations greater than the cleanup levels of 0.3 milligrams per liter (mg/L), and 0.05 mg/L, respectively, at downgradient well EL-103 and at wells EL-105 and EL-106R. Dissolved arsenic (0.0070 mg/L – 0.0320 mg/L) was detected at concentrations greater than the cleanup level of 0.004 mg/L at EL-103 and EL-105. The detected concentration of 1,4-dichlorobenzene (2.1 micrograms per liter [μ g/L]) at well EL-103 was also above the cleanup level (1.8 μ g/L).

At the French Drain, dissolved iron, dissolved manganese, and 1,4-dichlorobenzene were detected at concentrations above cleanup levels, which is also consistent with previous results. Concentrations of conventional analyses were all below the respective cleanup levels, and were also consistent with previous results.

4.0 SCOPE OF CONTINUED INTERIM GROUNDWATER MONITORING

Prior to initiating confirmational groundwater compliance monitoring sampling (which will include analysis for a larger list of constituents), interim groundwater monitoring is being conducted on an annual schedule. Analytical results from this interim monitoring event are used to evaluate the likelihood of achieving the confirmational groundwater cleanup levels and to adjust the scope of continued monitoring events, as needed.

As shown in Table 3, dissolved iron and manganese have been detected at concentrations above the cleanup level at each location (EL-103, EL-105, and EL-106R) where they have been monitored during the last four annual monitoring events. Dissolved arsenic has also been detected at concentrations above the cleanup level at EL-103 during the last four monitoring events and at EL-105 during three of the last four monitoring events. At well EL-103, 1,4-dichlorobenzene has also been detected above the cleanup level during the last four monitoring events. These results suggest that achieving confirmational groundwater cleanup levels is unlikely at this time. As a result, groundwater monitoring at the landfill will continue as an interim program for 2018 and no change to the analyte list is recommended for 2018.

The scope for the 2018 annual interim groundwater monitoring is summarized below and is presented in Table 4:

- Groundwater elevation measurement at monitoring wells EL-101R, EL-102, EL-103, EL-104, EL-105, and EL-106R, and at piezometer EL-107
- Surface water elevation measurement at Pond A
- Chemical analysis as follows:
 - EL-103 for VOCs and dissolved metals (arsenic, iron, and manganese)
 - EL-105 for dissolved metals (arsenic, iron, and manganese)
 - EL-106R for dissolved metals (iron and manganese)
 - French Drain for VOCs, dissolved metals (iron and manganese), and conventional parameters.

The scope of groundwater monitoring will be re-evaluated following the 2018 sampling event.

5.0 SCHEDULE AND REPORTING

The annual groundwater monitoring will be conducted in May 2018 and, in accordance with the *Further Action Groundwater Monitoring Work Plan*, annual groundwater monitoring activities and results will be documented in a report and submitted to Ecology.

6.0 USE OF THIS REPORT

This annual report has been prepared for the exclusive use of The Boeing Company and applicable regulatory agencies for specific application to the former Eastgate Landfill. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates, Inc. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, Inc., shall be at the user's sole risk. Landau Associates, Inc. warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

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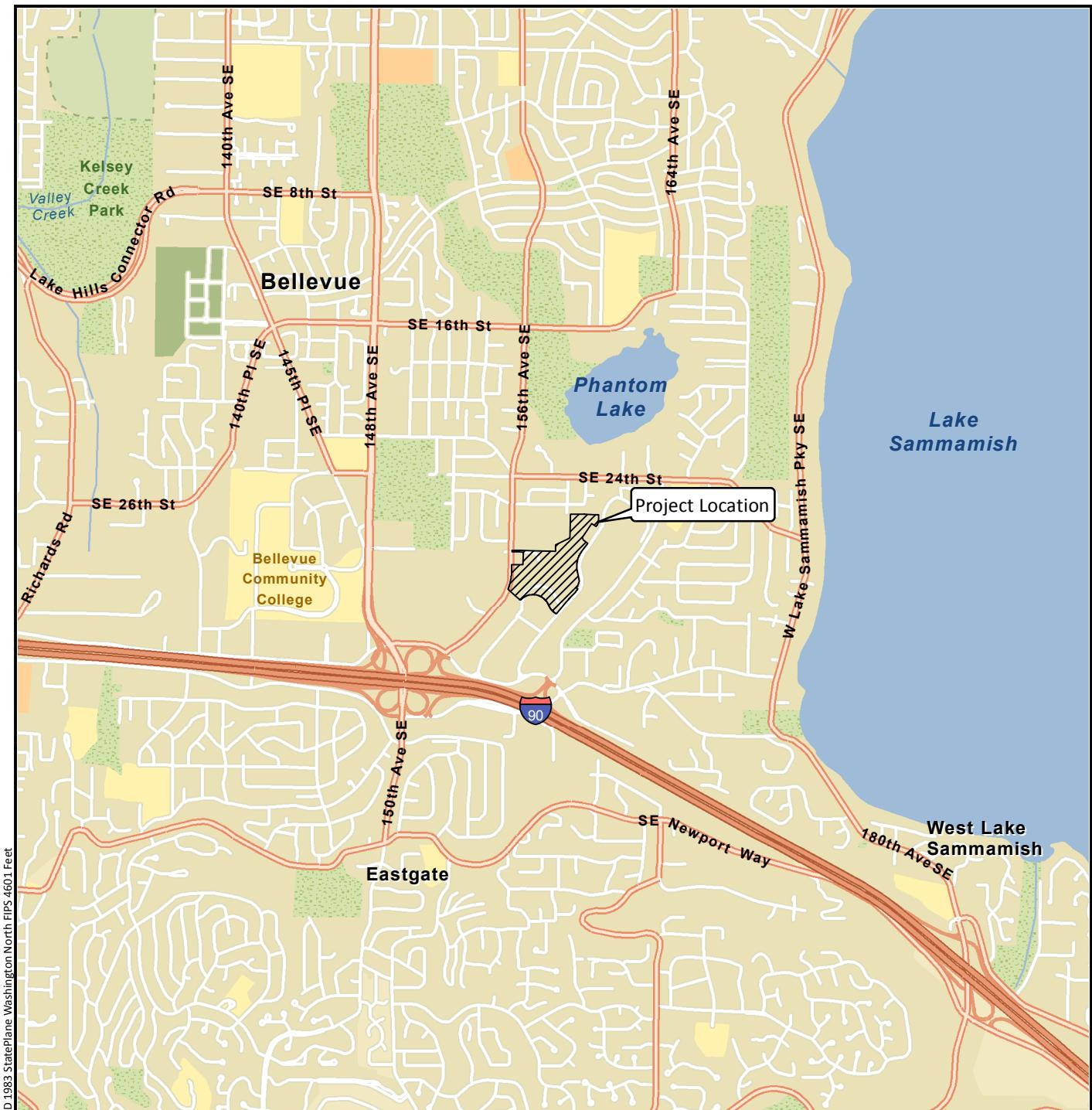
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Data Source: Esri 2012

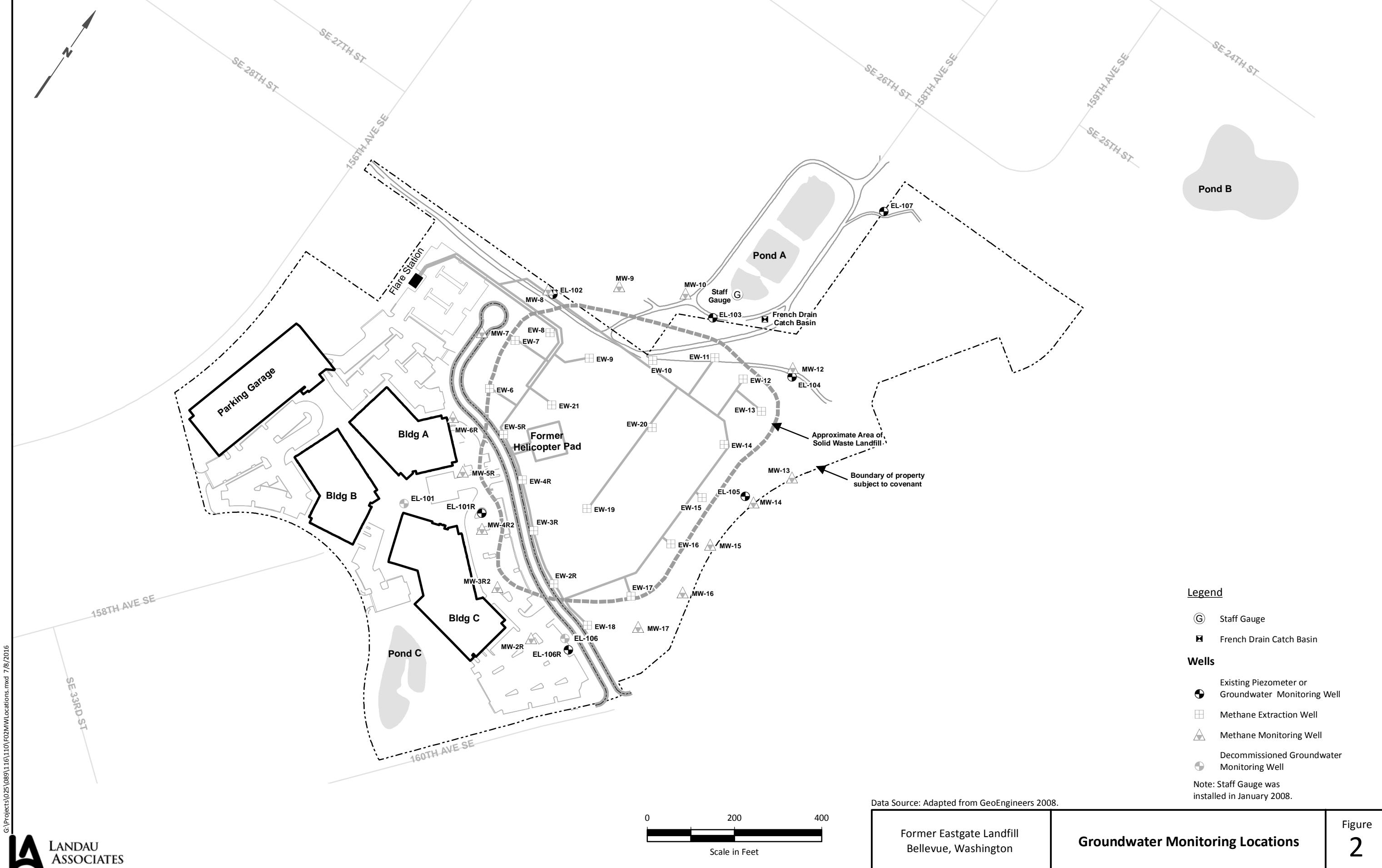
Former Eastgate Landfill
Bellevue, Washington

Vicinity Map

Figure
1



LANDAU
ASSOCIATES



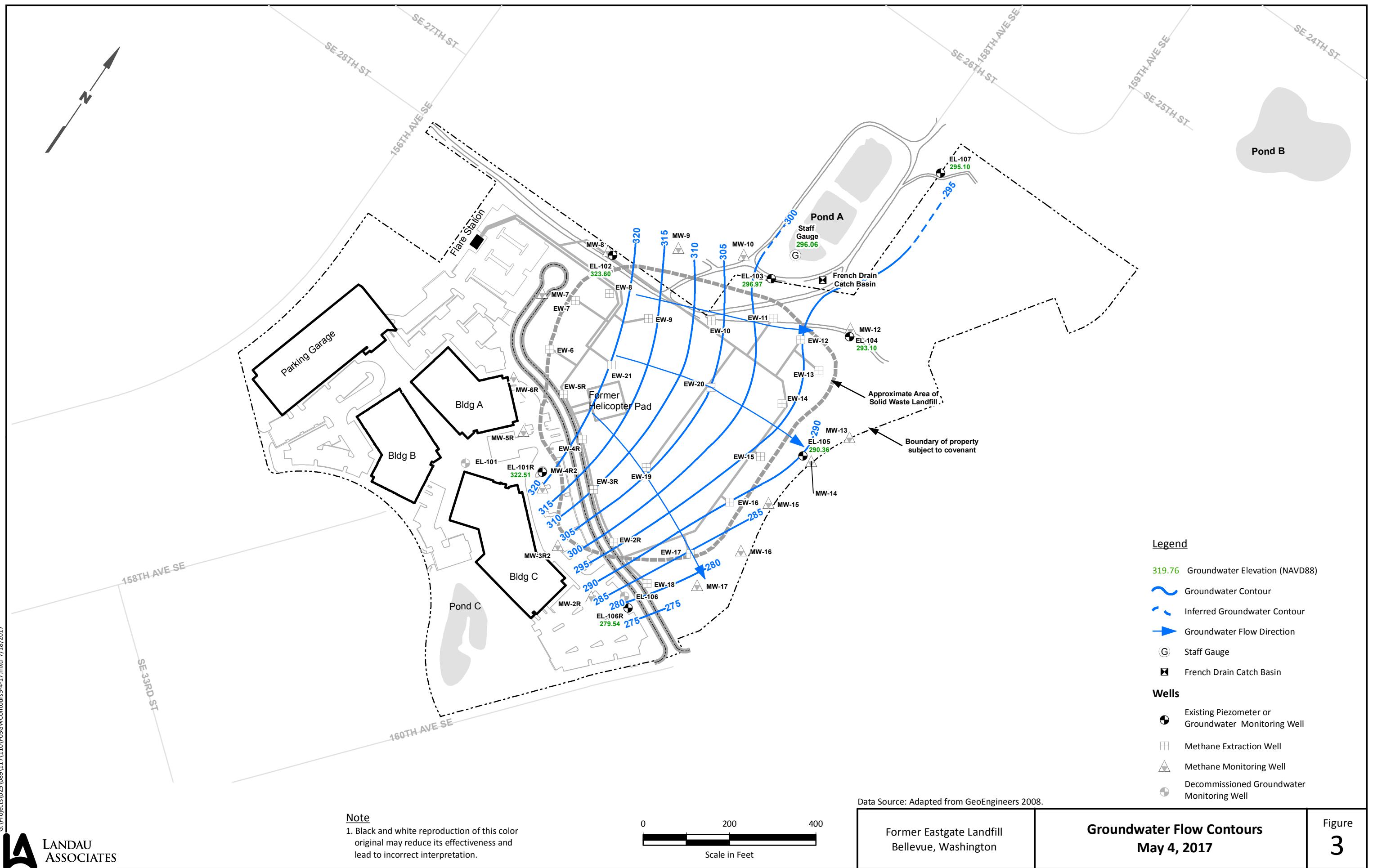


Table 1
Summary of Groundwater Elevations
Former Eastgate Landfill

Well Name	Top of Casing Elevation	Water Elevation																				Water Elevation			
		3/18/2002 Water Elevation	8/28/2002 Water Elevation	4/17/2003 Water Elevation	4/8/2004 Water Elevation	5/9/2005 Water Elevation	5/9/2006 Water Elevation	10/9/2007 Water Elevation	1/29/2008 Water Elevation	4/10/2008 Water Elevation	7/9/2008 Water Elevation	10/21/2008 Water Elevation	2/13/2009 Water Elevation	6/24/2009 Water Elevation	9/24/2009 Water Elevation	11/11/2009 Water Elevation	5/13/2010 Water Elevation	5/23/2011 Water Elevation	5/8/2012 Water Elevation	5/13/2013 Water Elevation	5/13/2014 Water Elevation	5/7/2015 Water Elevation	5/13/2016 Water Elevation	5/4/2017 Water Elevation	
EL-101	349.56	NM	322.42	317.05	326.06	323.81	326.21	--(a)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EL-101R	347.20	--	--	--	--	--	--	317.04	319.61	--	318.52	319.66	302.02	317.74	317.97	318.30	319.02	320.94	320.30	319.83	320.17	319.76	320.11	322.51	
EL-102	352.83	315.41	318.13	313.81	316.63	313.42	317.01	316.01	313.35	314.38	315.03	313.72	313.45	315.06	313.03	311.83	317.16	322.38	317.22	319.85	317.34	318.34	321.16	323.60	
EL-103	310.07	293.49	292.90	293.47	293.94	294.90	295.43	295.05	295.98	296.03	294.64	294.65	295.33	295.24	294.49	294.85	295.48	296.47	296.68	296.05	296.11	295.86	295.85	296.97	
EL-104	345.33	NM	289.50	288.55	289.33	288.60	289.68	289.51	289.26	289.45	289.42	288.52	288.69	288.95	288.42	288.11	289.32	291.13	290.66	290.53	289.95	290.29	290.83	293.10	
EL-105	343.69	287.25	287.39	286.91	287.48	286.65	287.87	287.47	287.21	287.45	287.19	286.59	286.79	287.05	286.49	286.14	287.47	289.27	288.56	288.59	288.14	288.44	289.02	290.36	
EL-106	345.55	288.93	278.77	278.89	279.15	277.99	279.68	--(a)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EL-106R	346.17	--	--	--	--	--	--	276.78	276.48	276.73	276.66	276.38	276.41	276.71	276.37	276.25	277.23	278.78	277.76	277.95	277.73	277.84	278.48	279.54	
EL-107	313.43	--	--	--	--	--	--	291.90	292.20	292.74	292.11	291.51	291.39	291.96	291.15	291.05	292.54	292.95	292.92	292.80	292.28	293.24	293.57	295.10	
Pond A/Staff Gauge (b)	301.52	--	--	--	--	--	--	NM	296.30	296.52	296.20	296.22	296.24	296.20	296.18	296.31	296.24	296.23	295.92	296.07	296.02	296.03	295.99	296.06	

Abbreviations and Acronyms:

NM = not measured.

-- = Not installed on sampling date.

Notes:

(a) Monitoring wells EL-101 and EL-106 were abandoned in 2007.

(b) Staff Gauge Top of Casing Elevation is the surveyed elevation of the top of the staff guage, which measures 6.4 feet in length.

Horizontal Datum: NAD 83(91)

Vertical Datum: NAVD 88

To convert elevation shown herein to NGVD 29 Datum subtract 3.48 feet.

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-103 BY07C BY07 7/28/2000	EL-103-Dup BY07G BY07 7/28/2000	EL-103 CO72D CO72 12/13/2000	EL-103-SDup BOL0365-02 BOL0365 12/13/2000	EL-103 CX61C CX61 3/29/2001	EL-103 DG04C DG04 6/14/2001	EL-103-SDup DG04G DG04 6/14/2001	EL-103 EE52C EE52 3/18/2002	EL-103 ER96C ER96 8/28/2002	EL-103 FK21D FK21 4/17/2003	EL-103 GN17B GN17 4/8/2004	EL-103-DUP GN17C GN17 4/8/2004	EL-103 IA68D IA68 5/9/2005	EL-103 J158D J158 5/9/2006	EL-103-DUP J158F J158 5/9/2006	EL-103 LT43D LT43 10/10/2007	EL-103-DUP LT43B LT43 10/10/2007
Volatiles (µg/L; Method SW8260B/C)																	
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0 U	2.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	5.0 U	5.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	3.0 U	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	1.0 U	1.0 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.4	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-chloropropane	5.0 U	5.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	4.0 U	2.0 U	2.0 U	2.0 U	0.5 U	0.5 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0	0.939	1.3	1.3	1.4	1.9	1.9	1.8	1.9	1.9	1.7	1.8	1.7	1.7	1.4
1,2-Dichloroethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	1.0 U	1.0 U	0.7	0.674	1.1	1.0	1.1	2.0	1.8	2.3	2.4	2.2	2.4	1.7	1.7	1.7	1.7
2,2-Dichloropropane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	5.0 U	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	R	R	0.5 U	NA	R	R	R	R	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chlorotoluene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone	5.0 U	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	3.0 U	3.0 U	3.0 U
4-Chlorotoluene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Isopropyltoluene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	5.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.7	2.1	3.6	4.4	3.7	1.8	2.9 U	3.5 U	3 U	3 U
Acrolein	50 U	50 U	50 U	NA	50 U	50 U	50 U	50 U	50 U	10 U	10 U	10 U	50 U	50 U	50 U	50 U	50 U
Acrylonitrile	5.0 U	5.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	6.1	6.5	4.7	4.98	4.9	4.4	4.7	5.8 J	5.3	5.3	5.5	5.1	5.6	6.4	6.2	6.3	6.3
Bromobenzene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoethane	2.0 U	2.0 U	0.2 U	NA	0.2 U	0.2 U											

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
	EL-103 BY07C BY07 7/28/2000	EL-103-Dup BY07G BY07 7/28/2000	EL-103 CO72D CO72 12/13/2000	EL-103-SDup B0L0365-02 B0L0365 12/13/2000	EL-103 CX61C CX61 3/29/2001	EL-103 DG04C DG04 6/14/2001	EL-103-SDup DG04G DG04 6/14/2001	EL-103 EE52C EE52 3/18/2002	EL-103 ER96C ER96 8/28/2002	EL-103 FK21D FK21 4/17/2003	EL-103 GN17B GN17 4/8/2004	EL-103-DUP GN17C GN17 4/8/2004	EL-103 IA68D IA68 5/9/2005	EL-103 J158D J158 5/9/2006	EL-103-DUP J158F J158 5/9/2006	EL-103 LT43D LT43 10/10/2007	EL-103 LT43B LT43 10/10/2007	
m,p-Xylene	1.0 U	1.0 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Methyl Iodide	1.0 U	1.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	2.0 U	2.0 U	0.3 U	5.0 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Naphthalene	5.0 U	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	1.0 U	1.0 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	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
n-Propylbenzene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3	0.3	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2
o-Xylene	1.0 U	1.0 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
sec-Butylbenzene	1.0 U	1.0 U	0.4	0.550	0.6	0.5	0.5	1.0	0.9	1.1	0.9	0.8	0.8	0.8	0.8	1	1	
Styrene	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
tert-Butylbenzene	1.0 U	1.0 U	0.2 U	0.5 U	0.2	0.2 U	0.2 U	0.3	0.2	0.4 U	0.4 U	0.4 U	0.3	0.3	0.3	0.3	0.3	0.3
Tetrachloroethene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	1.0 U	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	5.0 U	5.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Chloride	1.0 U	1.0 U	0.2 U	0.968	0.5	0.4	0.4	0.3	0.2 U	0.4 U	0.4 U	0.4 U	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Pesticides (µg/L; Method 8081A)																		
Dieldrin	0.10 U	0.10 U	0.10 U	0.07 U	0.10 U	0.10 U	0.10 U	0.0033 U	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																		
Arsenic (7060A/200.8)	0.044	0.044	0.039	0.0516	0.040	0.036	0.036	0.028	0.033	0.030	0.031	0.031	0.030	0.037	0.037	0.0152	0.0157	
Cadmium (6010)	0.002 U	0.002 U	0.002 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	
Chromium (6010)	0.005 U	0.005 U	0.005 U	0.00352	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	
Iron (6010B/200.8)	14.8	14.7	11.7	13.1	12.1	11.9	12.1	16.6	14.4	16.8	18.8	17.7	19.7	26.5	26.2	6.7	7.25	
Manganese (6010B/200.8)	3.97	3.91	2.81	0.520	2.84	2.53	2.51	3.36	2.72	3.01	3.16	3.00	3.03	4.66	4.69	3.40	3.54	
Conventionals																		
Chloride (mg/L) (325.2, 300.0)	23	24	13	16.0	18	16	17	30	22	26	23.3	23.0	NA	NA	NA	NA	NA	
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	100	98	87	85.4	67	62	65	76	81	72	82.6	74.6	NA	NA	NA	NA	NA	
N-Nitrate (mg-N/L) (calc.)	0.010 U	0.010 U	0.010 U	0.1 U	0.019	0.022	0.015	0.010 U	0.026	0.011	0.010 U	0.010 U	NA	NA	NA	NA	NA	
N-Nitrite (mg-N/L) (353.2)	0.010 U	0.012	0.011	0.1 U	0.010 U	0.010 U	0.010 U	0.045	0.010	0.010 U	0.049	0.038	NA	NA	NA	NA	NA	
Nitrate + Nitrite (mg-N/L) (353.2)	0.010 U	0.010 U	0.015	NA	0.019	0.022	0.015	0.032	0.036	0.011	0.032	0.023	NA	NA	NA	NA	NA	
Sulfate (mg/L) (375.2, 300.0)	19	18	11	2.37	9.2	8.8	9.2	6.1	9.5	6.3	8.6 J	7.8 J	NA	NA	NA	NA	NA	
Chemical Oxygen Demand (mg/L) (410.4)	64	70	50 UJ	22.5	37	47	47	55	53	NA	54	55	NA	NA	NA	NA	NA	
Total Organic Carbon (mg/L) (415.1, SM5310C)	24	22	22	20.0 U	20	16	18	19	18	NA	18.7	18.9	NA	NA	NA	NA	NA	
Un-ionized Ammonia (µg NH ₃ /L) (a																		

Table 2
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2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-103 NV83F NV83 10/21/2008	EL-108 EL-103-DUP NV83C NV83 10/21/2008	EL-103 PE53C PE53 6/24/2009	EL-108 EL-103-DUP PE53B PE53 6/24/2009	EL-103 QW57D QW57 5/13/2010	EL-100 EL-103-DUP QW57F SY24 5/13/2010	EL-103 SY24A SY24 05/23/2011	EL-100 EL-103-DUP SY24B SY24 05/23/2011	EL-103 6644943 1307589 5/8/2012	EL-100 EL-103-DUP 6644945 1307589 5/8/2012	EL-103 7055035 1389676 05/13/2012	EL-100 EL-103-DUP 7055037 1389676 05/13/2013	EL-103 7462651 1474176 5/13/2014	EL-100 EL-103-DUP 7462647 1474176 5/13/2014	EL-103 7879583 1559679 5/7/2015	EL-100 EL-103-DUP 7879581 1559679 5/7/2015	
Volatiles ($\mu\text{g/L}$; Method SW8260B/C)																	
1,1,1,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 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
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	1.3	1.2	1.4	1.4	1.3	1.3	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.4	1.5	1.4	1.3
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	1.5	1.5	2.1	2.0	1.9	1.7	1.8	1.9	2.3	2.2	2.3	2.2	2.2	1.9	2.0	2.2	2.1
2,2-Dichloropropane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloroethylvinylether	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Isopropyltoluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-Pentanone (MIBK)	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	3.0 U	3.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	16	15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Acrylonitrile	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5 U	5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	5.1	4.8	4.2	4.1	3.3	3.2	2.8	2.7	2.2	2.2	2.1	2.0	2.1	2.1	1.9	1.9	1.9
Bromobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromo(chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	23	23	22	22	21	20	19	20	24	23	24	24	23	23	24	24	23
Chloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.2 U	0.2 U	0.2	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylene Dibromide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	1.7	1.6	1.3	1.3	1.0	1.0	1.0	1.0	1.1	1.2	1.1	1.0	1.0	0.9	0.8	0.8	0.7

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date															
	EL-103 NV83F NV83 10/21/2008	EL-108 EL-103-DUP NV83C NV83 10/21/2008	EL-103 PE53C PE53 6/24/2009	EL-108 EL-103-DUP PE53B PE53 6/24/2009	EL-103 QW57D QW57 5/13/2010	EL-100 EL-103-DUP QW57F QW57 05/23/2011	EL-100 EL-103-DUP SY24A SY24 05/23/2011	EL-103 6644943 1307589 5/8/2012	EL-100 EL-103-DUP SY24B SY24 05/23/2011	EL-103 6644945 1307589 5/8/2012	EL-100 EL-103-DUP 7055035 1389676 05/13/2013	EL-100 EL-103-DUP 7055037 1389676 05/13/2013	EL-100 EL-103-DUP 7462651 1474176 05/13/2014	EL-100 EL-103-DUP 7462647 1474176 05/13/2014	EL-103 7879583 1559679 5/7/2015	EL-100 EL-103-DUP 7879581 1559679 5/7/2015
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Iodide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
n-Propylbenzene	0.2 U	0.2 U	0.2	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
sec-Butylbenzene	0.8	0.8	0.7	0.8	0.6	0.5	0.6	0.7	0.8	0.8	0.7	0.7	0.5	0.5	0.6	0.6
Styrene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Acetate	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Pesticides (µg/L; Method 8081A)																
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																
Arsenic (7060A/200.8)	0.038	0.037	0.035	0.0351	0.0337	0.0345	0.0349	0.0362	0.0338	0.0348	0.0289	0.0282	0.0332	0.0335	0.0352	0.0363
Cadmium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron (6010B/200.8)	18.5	18.2	22.3	23.1	21.8	21.9	22.9	22.2	20.2	20.5	20.8	20.4	23.2	20.9	22.6	21.1
Manganese (6010B/200.8)	3.04	3.02	3.18	3.21	2.95	3.04	3.3	3.19	2.93	3.26	3.64	3.68	3.78	3.41	2.97	2.83
Conventional																
Chloride (mg/L) (325.2, 300.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrate (mg-N/L) (calc.)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate + Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/L) (375.2, 300.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Oxygen Demand (mg/L) (410.4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/L) (415.1, SM5310C)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Un-ionized Ammonia (µg NH ₃ /L) (a)																
Minimum (b)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Maximum (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Field Parameters																
pH	7.26	7.26	6.93	6.93	7.59	7.59	6.51	6.51	5.99	5.99	6.01	6.01	7.59	7.59	6.36	6.36
Temperature (°C)	11.6	11.6	11.5	11.5	12.1	12.1	10.7	10.7	10.7	10.7	10.7	10.7	10.9	10.9	11.3	11.3
Specific Conductivity (µS)	1,172	1,172	225	225	2,402											

Table 2
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2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
	EL-103 8382537 1661845 5/13/2016	EL-100 EL-103-DUP 8382532 1661845 5/13/2016	EL-103 8977635 1797829 5/4/2017	EL-100 EL-103-DUP 8977628 1797829 5/4/2017	EL-105 BY07E BY07 7/28/2000	EL-105 CO72C CO72 12/13/2000	EL-105-SDup BOL0365-03 BOL0365 12/13/2000	EL-105 CX61E CX61 3/29/2001	EL-105-Dup CX61G CX61 3/29/2001	EL-105 DG04E DG04 6/14/2001	EL-105 EE52F EE52 3/18/2002	EL-105 ER96A ER96 8/28/2002	EL-105 FK21A FK21 4/17/2003	EL-105 GN17F GN17 4/8/2004	EL-105 IA68A IA68 5/9/2005	EL-105 J158A J158 5/9/2006	EL-105 LT43A LT43 10/10/2007	
Volatiles (µg/L; Method SW8260B/C)																		
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.5 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	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 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	NA	NA	NA
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 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	NA	NA	NA
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NA	NA
1,2-Dichlorobenzene	1.6	1.6	1.3	1.4	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2	0.2 U	0.2	0.2	0.2 U	NA	NA
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.0 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	NA	NA	NA
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.227	0.2 U	0.2 U	0.2	0.2	0.2	0.2	0.2	0.2	0.2 U	NA	NA
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA	NA
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
1,4-Dichlorobenzene	2.3	2.3	2.1	2.2	1.0 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	NA	NA	NA
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	2.0 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	NA	NA	NA
2-Chloroethylvinylether	NA	NA	NA	NA	R	0.5 U	NA	R	R	R	R	R	R	R	0.5 U	0.5 U	NA	NA
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA	NA
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	2.0 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	NA	NA	NA
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA	NA
4-Isopropyltoluene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	2.0 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	NA	NA	NA
Acetone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Acrolein	25 U	25 U	25 U	25 U	50 U	50 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	NA	NA
Acrylonitrile	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	NA
Benzene	2.0	2.0	1.6	1.6	1.0 U	0.3	0.304	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2 U	NA	NA
Bromobenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA	NA
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA	NA
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U	1.													

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-103 8382537 1661845 5/13/2016	EL-100 EL-103-DUP 8382532 1661845 5/13/2016	EL-103 8977635 1797829 5/4/2017	EL-100 EL-103-DUP 8977628 1797829 5/4/2017	EL-105 BY07E BY07 7/28/2000	EL-105 CO72C CO72 12/13/2000	EL-105-SDup B0L0365-03 B0L0365 12/13/2000	EL-105 CX61E CX61 3/29/2001	EL-105-Dup CX61G CX61 3/29/2001	EL-105 DG04E DG04 6/14/2001	EL-105 EE52F EE52 3/18/2002	EL-105 ER96A ER96 8/28/2002	EL-105 FK21A FK21 4/17/2003	EL-105 GN17F GN17 4/8/2004	EL-105 IA68A IA68 5/9/2005	EL-105 J158A J158 5/9/2006	EL-105 LT43A LT43 10/10/2007
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	NA	NA
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	2.0 U	0.3 U	5.0 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	NA	NA
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA
n-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 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	NA	NA
n-Propylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.25 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	NA	NA
sec-Butylbenzene	0.6	0.6	0.6	0.6	1.0 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	NA	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.230	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	NA	NA
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 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	NA	NA
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2 U	0.201	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 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	NA	NA
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA
Trichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2	0.323	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	NA	NA
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	0.2 U	0.5 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	NA	NA
Vinyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	5.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	1.0 U	0.2	0.2 U	0.2 U	0.2 U	0.2	0.8	0.5	0.3	0.2	NA	NA	NA
Pesticides (µg/L; Method 8081A)																	
Dieldrin	NA	NA	NA	NA	0.10 U	0.10 U	0.07 U	0.10 U	0.10 U	0.10 U	0.0033 U	0.010 U	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																	
Arsenic (7060A/200.8)	0.0329	0.0353	0.0320	0.0306	0.008	0.009	0.00994	0.010	0.011	0.010	0.005	0.005	0.007	0.005	0.008	0.006	0.004
Cadmium (6010)	NA	NA	NA	NA	0.002 U	0.002 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA
Chromium (6010)	NA	NA	NA	NA	0.005 U	0.005 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA
Iron (6010B/200.8)	22.9	24.2	24.1	23.7	5.61	6.34	6.91	7.63	7.77	7.08	3.78	3.25	6.23	3.44	6.30	4.27	2.92
Manganese (6010B/200.8)	3.69	3.83	3.82	3.81	6.04	5.64	5.27	5.75	5.80	5.11	4.17	3.56	4.66	3.66	4.19	3.92	3.76
Conventional																	
Chloride (mg/L) (325.2, 300.0)	NA	NA	NA	NA	4.9	3.7	3.82	4.9	4.5	4.1	5.4	4.7	4.0	3.7	NA	NA	NA
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	NA	NA	NA	NA	2.9	3.8	6.35	2.7	2.7	2.4	1.8	1.6	2.0	1.47	NA	NA	NA
N-Nitrate (mg-N/L) (calc.)	NA	NA	NA	NA	0.010 U	0.010 U	0.1 U	0.013	0.014	0.13	0.22	0.040	0.026	0.112	NA	NA	NA
N-Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	0.010 U	0.010 U	0.1 U	0.010 U	0.010 U	0.010 U	0.026	0.010 U	0.010 U	0.013	NA	NA	NA
Nitrate + Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	0.010 U	0.010 U	NA	0.013	0.014	0.13	0.25	0.040	0.026	0.125	NA	NA	NA
Sulfate (mg/L) (375.2, 300.0)	NA	NA	NA	NA	26	28	28.1	24	24	27	23	31	23	24.8 J	NA	NA	NA
Chemical Oxygen Demand (mg/L) (410.4)	NA	NA	NA	NA	13	7.6 UJ	10.0 U	10	7.2	16	14	10	NA	9.80	NA	NA	NA
Total Organic Carbon (mg/L) (415.1, SM5310C)	NA	NA	NA	NA	4.1	3.7	8.61	5.5	5.2	3.7	3.9	1.6	NA	4.42	NA	NA	NA
Un-ionized Ammonia (µg NH ₃ /L) (a)																	
Minimum (b)	NC	NC	NC	NC	1.1	1.5	2.5	1.1	1.1	0.95	0.71	0.63	0.79	0.6	NC	NC	NC
Maximum (c)	NC	NC	NC	NC	1,100	1,400	2,300	979	979	870	653	580	725	533	NC		

Table 2
Summary of Groundwater and Surface Water Analytical Results
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Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-105 NV83B 10/21/2008	EL-105 PE53G 6/25/2009	EL-105 QW57A 5/13/2010	EL-105 SY24C 05/23/2011	EL-105 6644947 1307589 5/8/2012	EL-105 7055039 1389676 05/13/2013	EL-105 7462650 1474176 5/13/2014	EL-105 7879588 1559679 5/7/2015	EL-105 8382536 1661845 5/13/2016	EL-105 8977632 1797829 5/4/2017	EL-106 BY07F BY07 7/28/2000	EL-106 CO72B CO72 12/13/2000	EL-106-SDup BOL0318-03 BOL0365 12/13/2000	EL-106 CX61F CX61 3/29/2001	EL-106 DG04F DG04 6/14/2001	EL-106 EE52E EE52 3/18/2002	EL-106 ER96B ER96 8/28/2002
Volatiles (µg/L; Method SW8260B/C)																	
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloroethylvinylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	R	0.5 U	NA	R	R	R	0.5 U
2-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acrolein	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	5.0 U	NA	5.0	5.0 U	5.0 U	5.0 U
Acrylonitrile	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.5 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	1.0 U	0.2 U	0.2 U	0	

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Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-105 NV83B 10/21/2008	EL-105 PE53G 6/25/2009	EL-105 QW57A 5/13/2010	EL-105 SY24C 05/23/2011	EL-105 6644947 1307589 5/8/2012	EL-105 7055039 1389676 05/13/2013	EL-105 7462650 1474176 5/13/2014	EL-105 7879588 1559679 5/7/2015	EL-105 8382536 1661845 5/13/2016	EL-105 8977632 1797829 5/4/2017	EL-106 BY07F BY07 7/28/2000	EL-106 CO72B CO72 12/13/2000	EL-106-SDup BOL0318-03 BOL0365 12/13/2000	EL-106 CX61F CX61 3/29/2001	EL-106 DG04F DG04 6/14/2001	EL-106 EE52E EE52 3/18/2002	EL-106 ER96B ER96 8/28/2002
m,p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Methyl Iodide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 U	0.3 U	5.0 U	0.3 U	0.3 U	0.3 U	0.3 U
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.2 U
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Pesticides (µg/L; Method 8081A)																	
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.10 U	0.10 U	0.07 U	0.10 UJ	0.10 U	0.0033 U	0.010 U
Dissolved Metals (mg/L)																	
Arsenic (7060A/200.8)	0.0071	0.0098	0.0086	0.0048	0.0088	0.0072	0.009	0.0076	0.0020 U	0.0070	0.006	0.008	0.00912	0.007	0.008	0.001	0.002
Cadmium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.002 U	0.002 U	0.001 U	0.002 U	0.002 U	0.002 U	0.002 U
Chromium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	0.00169	0.005 U	0.005 U	0.005 U	0.005 U
Iron (6010B/200.8)	7.10	7.92	6.93	3.20	6.9	6.12	6.42	5.47	2.01	5.49	1.52	8.71	8.88	7.15	6.97	0.46	3.47
Manganese (6010B/200.8)	4.7	4.70	4.03	3.06	4.26	4.60	4.49	4.11	3.07	3.40	5.56	11.3	9.77	10.4	8.00	0.621	4.55
Conventional																	
Chloride (mg/L) (325.2, 300.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0	18	18.5	8.7	4.5	3.4	8.9
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7	4.1	5.83	4.3	4.1	0.20	0.46
N-Nitrate (mg-N/L) (calc.)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2	0.20	0.393	0.072	0.073	3.0	1.3
N-Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.022	0.021	0.1 U	0.021	0.010 U	0.012	0.010 U
Nitrate + Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	0.22	NA	0.093	0.073	3.0	1.3
Sulfate (mg/L) (375.2, 300.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22	30	25.7	18	17	24	23
Chemical Oxygen Demand (mg/L) (410.4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18	32 UJ	56.5	34	25	9.8	13
Total Organic Carbon (mg/L) (415.1, SM5310C)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6	12	14	12	9.3	4.4	3.7
Un-ionized Ammonia (µg NH ₃ /L) (a)																	
Minimum (b)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	1.1	1.6	2.3	1.7	1.6	0.08	0.18
Maximum (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	979	1,500	2,100	1,600	1,500	73	167
Field Parameters																	
pH	6.16	6.88	6.63	6.08	5.22	5.54	6.43	6.17	6.21	6.16	5.95	6.5	6.5	6.27	6.81	6.37	6.44
Temperature (°C)	13.6	13.9	15.4	13.9	13.5	13.5	13.3	14.0	15.4	14.1	18.8	15.1	15.1	15.4	19.1	12.4	13.6
Specific Conductivity (µS)	347	66	8	303	339	273	274	251	248	332	379	764	764	734	624	207	270

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date															
	EL-106 FK21B 4/17/2003	EL-106 GN17E 4/8/2004	EL-106 IA68B 5/9/2005	EL-106-DUP IA68F 5/9/2005	EL-106 JIS8B 5/9/2006	EL-106R LT21B 10/10/2007	EL-106R NV83A 10/21/2008	EL-106R PE53E 6/24/2009	EL-106R QW57B 5/13/2010	EL-106R SY24D 5/23/2011	EL-106R 6644940 1307589 5/8/2012	EL-106R 7055032 1389676 5/13/2013	EL-106R 7462649 1474176 5/13/2014	EL-106R 7879585 1559679 5/7/2015	EL-106R 8382534 1661845 5/13/2016	EL-106R 8977630 1797829 5/4/2017
Volatiles (µg/L; Method SW8260B/C)																
1,1,1,2-Tetrachloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloropropene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	2.0 U	2.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	1.2	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	5.0 U	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromobenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromochloromethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Tetrachloride	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	0.2 UJ	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	0.4	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylene Dibromide	0.2 U	0.2 U	NA	NA	NA											

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2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date															
	EL-106 FK21B 4/17/2003	EL-106 GN17E 4/8/2004	EL-106 IA68B 5/9/2005	EL-106-DUP IA68F 5/9/2005	EL-106 JIS8B 5/9/2006	EL-106R LT21B 10/10/2007	EL-106R NV83A 10/21/2008	EL-106R PE53E 6/24/2009	EL-106R QW57B 5/13/2010	EL-106R SY24D 5/23/2011	EL-106R 6644940 1307589 5/8/2012	EL-106R 7055032 1389676 05/13/2013	EL-106R 7462649 1474176 5/13/2014	EL-106R 7879585 1559679 5/7/2015	EL-106R 8382534 1661845 5/13/2016	EL-106R 8977630 1797829 5/4/2017
m,p-Xylene	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl Iodide	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	0.3 U	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Acetate	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides (µg/L; Method 8081A)																
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																
Arsenic (7060A/200.8)	0.002	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (6010)	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (6010)	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron (6010B/200.8)	3.41	0.12	1.13	1.37	1.29	0.25	2.12	2.13	2.54	2.69	3.39	2.49	2.75	2.04	2.01	2.40
Manganese (6010B/200.8)	4.08	0.550	2.18	2.15	0.079	6.43	8.3	8.59	6.48	7.39	8.28	7.85	6.74	6.36	6.52	6.05
Conventional																
Chloride (mg/L) (325.2, 300.0)	7.4	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	1.7	0.277	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrate (mg-N/L) (calc.)	1.1	1.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrite (mg-N/L) (353.2)	0.010 U	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate + Nitrite (mg-N/L) (353.2)	1.1	2.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/L) (375.2, 300.0)	19	22.5 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Oxygen Demand (mg/L) (410.4)	NA	15.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/L) (415.1, SM5310C)	NA	6.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Un-ionized Ammonia (µg NH ₃ /L) (a)																
Minimum (b)	0.67	0.1	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Maximum (c)	617	100	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Field Parameters																
pH	6.31	6.23	6.57	NM	6.21	6.84	6.94	7.02	6.78	6.36	6.56	5.76	6.00	6.23	6.52	NA
Temperature (°C)	12.7	12.9	13.0	NM	12.7	13.6	12.6	13.6	14.0	13.8	16.9	13.8	12.7	12.7	13.7	NA
Specific Conductivity (µS)	359	247	330	NM	252	469	645	121	19	500	564	515	476	405	349	NA

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	Sample Location
	French Drain CB90 9/1/2000	French Drain C072E 12/13/2000	French Drain CX61H CX61 3/29/2001	French Drain DG04H DG04 6/14/2001	French Drain EE52B EE52 3/18/2002	French Drain EE52A EE52 3/18/2002	French Drain ER96D ER96 8/28/2002	French Drain FK21E FK21 4/17/2003	French Drain GN17D GN17 4/08/2004	French Drain IA68E IA68 5/9/2005	French Drain JI58E JI58 5/9/2006	French Drain LT21A LT21 10/10/2007	French Drain NV83E NV83 10/21/2008	French Drain PE53A PE53 6/24/2009	French Drain QW57E QW57 5/14/2010	French Drain SY24E SY24 05/23/2011	French Drain 6644941 1307589 5/8/2012	French Drain 7055033 1389676 05/13/2013
Volatiles (µg/L; Method SW8260B/C)																		
1,1,1,2-Tetrachloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,1-Trichloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
1,1-Dichloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1-Dichloroethene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
1,1-Dichloropropene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	1.0 U	0.2	0.2 U	0.3	0.3	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2	0.2 U	8.2	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	4.0 U	2.0 U	2.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	1.0 J	1.8	0.9	1.9	1.6	0.2 U	1.7	1.3	1.7	1.8	1.3	0.5	1.0	1.6	1.4	0.9	0.9	1.2
1,2-Dichloroethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
1,2-Dichloropropane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	3.1	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,3-Dichlorobenzene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,3-Dichloropropane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3.8	7.0	5.6	8.8	7.0	0.2 U	6.6	6.3	8.3	8.6	6.0	1.9	4.1	5.9	5.1	3.8	3.7	4.5
2,2-Dichloropropane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
2-Butanone	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloroethylvinylether	5.0 U	0.5 U	R	R	R	R	0.5 U	1.0 U	1.0 U	0.5 U	0.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA
2-Chlorotoluene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
2-Hexanone	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
4-Isopropyltoluene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	10	1.0 U	1.0 U	1.0 U	1.0 U	2.4	3.1	4.5	4.3	4.4	3.3	2.7 U	4.3	3.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	25 U
Acrylonitrile	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Benzene	2.2	6.0	3.3	6.6	4.0	0.2 U	4.3	3.5	5.2	5.2	3.8	0.8	2.3	3.2	2.4	1.5	1.5	1.5
Bromobenzene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromochloromethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromodichloromethane																		

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	Sample Location
	French Drain CB90 9/1/2000	French Drain C072E 12/13/2000	French Drain CX61H CX61 3/29/2001	French Drain DG04H DG04 6/14/2001	French Drain EE52B EE52 3/18/2002	French Drain EE52A EE52 3/18/2002	French Drain ER96D ER96 8/28/2002	French Drain FK21E FK21 4/17/2003	French Drain GN17D GN17 4/087/2004	French Drain IA68E IA68 5/9/2005	French Drain JI58E JI58 5/9/2006	French Drain LT21A LT21 10/10/2007	French Drain NV83E NV83 10/21/2008	French Drain PE53A PE53 6/24/2009	French Drain QW57E QW57 5/14/2010	French Drain SY24E SY24 05/23/2011	French Drain 6644941 1307589 5/8/2012	French Drain 7055033 1389676 05/13/2013
m,p-Xylene	1.0 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.4 U	0.4 U	0.4 U	1.1	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U
Methyl Iodide	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U
Methylene Chloride	2.0 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	4.7 J	18	5.1	17	17	0.5 U	12	9.9	12	15	11	0.5	1.6 J	11	7.5	3.6	3.3	4.1
n-Butylbenzene	1.0 U	0.8	0.4	1.1	1.2	0.2 U	0.7	0.6 M	0.9	1.0	0.8	0.2 U	0.7	0.9	0.9	0.6	0.6	0.8
n-Propylbenzene	1.0 U	2.4	1.1	3.0	3.6	0.2 U	1.8	2.3	2.6	2.9	2.8	0.2	1.1	2.7	2.8	1.9	1.8	2.3
o-Xylene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	1.0	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
sec-Butylbenzene	1.0 U	1.1	0.7	1.3	1.4	0.2 U	0.9	1.0	1.2	1.3	1.1	0.2 U	0.4	1.3	1.2	0.9	0.9	1.2
Styrene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	1.0 U	0.2	0.2 U	0.3	0.2	0.2 U	0.2 U	0.4 U	0.4 U	0.3	0.2	0.2 U	0.2 U	0.3	0.2	0.2	0.5 U	0.5 U
Tetrachloroethene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
Toluene	1.0 U	0.2 U	0.2 U	0.2	0.2	0.2 U	0.2 U	0.4 U	0.4 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
trans-1,2-Dichloroethene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
trans-1,3-Dichloropropene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
trans-1,4-Dichloro-2-butene	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U
Trichloroethene	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 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
Trichlorofluoromethane	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Vinyl Acetate	5.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	1.0 U	1.0 U	1.0 U	1.0 U	0.5 U	0.5 U
Vinyl Chloride	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U	0.4 U	0.4 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
Pesticides (µg/L; Method 8081A)																		
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U	0.0033 U	0.0033 U	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																		
Arsenic (7060A/200.8)	0.001 U	0.001	0.002	0.001 U	0.001 U	0.0007	0.001	0.001 U	0.002	0.001 U	0.001 U	0.001	0.0006	0.0016	0.0017	NA	NA	NA
Cadmium (6010)	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (6010)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron (6010B/200.8)	2.76	35.1	35.9	42.8	45.8	0.76	15.8	38.9	62.9	66.7	54.3	2.0	3.86	60.6	62.5	54.1	48.6	65.1
Manganese (6010B/200.8)	0.361	0.645	0.767	0.575	0.719	1.35	0.385	0.700	0.777	0.812	0.741	0.352	0.373	0.629	0.748	0.835	0.668	0.747
Conventional																		
Chloride (mg/L) (325.2, 300.0)	76	22	12	25	8.8	1.7	61	8.7	12.4	11.6	11.1	21.7	28.1	12.0	8.5	5.2	5.9	8.0
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	100	61	33	60	28	0.67	100	38	46.3	46.4	44.5	40.8	70.9	45.7	34.1	24.9	25.4	30.2
N-Nitrate (mg-N/L) (calc.)	0.72	0.021	0.010 U	0.010	0.010 U	0.34	0.031	0.012	0.010 U	0.050 U	0.020 UJ	0.225	0.177	0.500 U	0.500 U	0.500 U	0.100 U	0.060
N-Nitrite (mg-N/L) (353.2)	0.05	0.035	0.038	0.043	0.070	0.010 U	0.052	0.032	0.075	0.092	0.024 J	0.012	0.111	0.500 U	0.500 U	0.100 U	0.073	0.070
Nitrate + Nitrite (mg-N/L) (353.2)	0.77	0.056	0.046	0.042	0.035	0.34	0.083	0.044	0.010 U	0.050 U	0.020 U	0.237 J	0.288	0.500 U	0.500 U	0.500 UJ	0.10 U	0.13
Sulfate (mg/L) (375.2, 300.0)	23	19	18	12	11	8.5	8.5	12	29.0 J	7.6	3.8 U	537	24.5	9.5	14.1	0.6	2.1	1.0 U
Chemical Oxygen Demand (mg/L) (410.4)	88	54 UJ	39	66	40	16	83	NA	48.8	45.8	44.8	NA	57.1	48.3	40.1	43.5	55.5	59.4
Total Organic Carbon (mg/L) (415.1, SM5310C)	28	18	14	20	12	6.4	30	NA	16.0	16.3	13.5	14.9	19.2	16.1	13.0	13.7	24.4	17.9
Un																		

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Location, Lab ID, Lab Data Package ID, and Sample Date			
	French Drain 7462653 1474176 5/13/2014	French Drain 7879586 1559679 5/7/2015	French Drain 8382539 1661845 5/13/2016	French Drain 8977633 1797829 5/4/2017
Volatiles (µg/L; Method SW8260B/C)				
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	0.9	1.2	1.3	0.9
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3.6	4.5	4.4	3.1
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U
2-Chloroethylvinylether	NA	NA	NA	NA
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U
4-Isopropyltoluene	0.5 U	0.5 U	0.5 U	0.5 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	5.0 U	5.0 U	5.0 U	5.0 U
Acrolein	25 UJ	25 U	25 U	25 U
Acrylonitrile	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	1.1	1.2	1.2	0.9
Bromobenzene	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Bromoethane	NA	NA	NA	NA
Bromoform	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Disulfide	0.5 UJ	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	18	21	23	16
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.4	0.2 U	0.2 U	0.4
cis-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	NA	NA	NA	NA
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Ethylene Dibromide	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	2.2	2.2	2.0	1.6

Table 2
Summary of Groundwater and Surface Water Analytical Results
2017 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Location, Lab ID, Lab Data Package ID, and Sample Date			
	French Drain 7462653 1474176 5/13/2014	French Drain 7879586 1559679 5/7/2015	French Drain 8382539 1661845 5/13/2016	French Drain 8977633 1797829 5/4/2017
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	2.9	2.5	1.3	0.8
n-Butylbenzene	0.7	0.7	0.5 U	0.5 U
n-Propylbenzene	1.9	1.9	1.5	1.4
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	1	1.1	0.9	0.8
Styrene	0.5 U	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	0.2 U	0.2 U	0.2	0.2
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	0.3	0.2 U	0.2 U	0.5
Pesticides (µg/L; Method 8081A)				
Dieldrin	NA	NA	NA	NA
Dissolved Metals (mg/L)				
Arsenic (7060A/200.8)	NA	NA	NA	NA
Cadmium (6010)	NA	NA	NA	NA
Chromium (6010)	NA	NA	NA	NA
Iron (6010B/200.8)	53.1	60.9	62.7	55.2
Manganese (6010B/200.8)	0.778	0.657	0.600	0.777
Conventional				
Chloride (mg/L) (325.2, 300.0)	5.7	6.5	12.6	6.7
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	24.9	43.8	47.8	25.3
N-Nitrate (mg-N/L) (calc.)	0.10 U	0.10 U	0.10 U	0.10 U
N-Nitrite (mg-N/L) (353.2)	0.065	0.18	0.089	0.10
Nitrate + Nitrite (mg-N/L) (353.2)	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L) (375.2, 300.0)	3.0	1.8	1.2	1.8
Chemical Oxygen Demand (mg/L) (410.4)	50.0 U	50.0 U	64.7	50.0 U
Total Organic Carbon (mg/L) (415.1, SM5310C)	12.8	14.0	14.2	10.6
Un-ionized Ammonia (µg NH ₃ /L) (a)				
Minimum (b)	NC	NC	NC	NC
Maximum (c)	NC	NC	NC	NC
Field Parameters				
pH	7.32	6.35	6.43	6.43
Temperature (°C)	10.8	11.2	13.0	12.0
Specific Conductivity (µS)	637	775	923	859

Abbreviations and Acronyms:

Calc = calculated

°C = degrees celcius

ID = identification

µg/L = micrograms per liter

µg/S = micrograms per siemen

µg NH₃/L = micrograms ammonia per liter

mg/L = milligrams per liter

mg-N/L = milligrams nitrate per liter

NA = not analyzed.

NC = not calculated.

NM = not measured.

SDup = Split sample collected by Dalton, Olmsted & Fuglevand, Inc. for Spieker Properties, prospective purchaser of property and analyzed by North Creek Analytical, Inc.

Notes:

U = Indicates compound was analyzed for, but was not detected at the given reporting limit.

UJ = Indicates the analyte was not detected in the sample; the sample reporting limit is an estimate.

M = Indicates an estimated value of analyte found and confirmed by analyst, but with low spectral match.

J = Indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

(a) Un-ionized ammonia concentrations calculated for T = 5 - 25 °C, and pH = 6.5 - 9 in Lake Sammamish.

(b) Minimum un-ionized ammonia concentrations calculated based on a temperature of 5 °C and a pH of 6.5.

(c) Maximum un-ionized ammonia concentrations calculated based on a temperature of 25 °C and a pH of 9.

Table 3
Summary of Groundwater and Surface Water Analytical Results
for Detected Constituents for Last Four Consecutive Sampling Events
Former Eastgate Landfill

Analyte	Screening Levels (a)	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
		EL-103 7462651 1474176 5/13/2014	EL-100 EL-103-DUP 7462647 1474176 5/13/2014	EL-103 7879583 1559679 5/7/2015	EL-100 EL-103-DUP 8382537 1661845 5/13/2016	EL-100 EL-103-DUP 8382532 1661845 5/13/2016	EL-100 EL-103-DUP 8977635 1797829 5/4/2017	EL-100 EL-103-DUP 8977628 1797829 5/4/2017	EL-105 7462650 1474176 5/13/2014	EL-105 7879588 1559679 5/7/2015	EL-105 8382536 1661845 5/13/2016	EL-105 8977632 1797829 5/4/2017	EL-106R 7462649 1474176 5/13/2014	EL-106R 7879585 1559679 5/7/2015	EL-106R 8382534 1661845 5/13/2016	EL-106R 8977630 1797829 5/4/2017	EL-106R 8977630 1797829 5/4/2017		
Volatiles (µg/L; Method SW8260B/C)																			
1,2-Dichlorobenzene	600	1.5	1.5	1.4	1.3	1.6	1.6	1.3	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	1.8	1.9	2.0	2.2	2.1	2.3	2.3	2.1	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	5	2.1	2.1	1.9	1.9	2.0	2.0	1.6	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	100	23	23	24	23	24	21	23	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	1600	0.9	0.8	0.8	0.7	0.9	0.9	0.9	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	320	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	--	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	0.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dissolved Metals (mg/L)																			
Arsenic (7060A/200.8)	0.004	0.0332	0.0335	0.0352	0.0363	0.0329	0.0353	0.0320	0.0306	0.009	0.0076	0.0020 U	0.0070	NA	NA	NA	NA	NA	NA
Iron (6010B/200.8)	0.3	23.2	20.9	22.6	21.1	22.9	24.2	24.1	23.7	6.42	5.47	2.01	5.49	2.75	2.04	2.01	2.40		
Manganese (6010B/200.8)	0.05	3.78	3.41	2.97	2.83	3.69	3.83	3.82	3.81	4.49	4.11	3.07	3.40	6.74	6.36	6.52	6.05		
Conventionals																			
Chloride (mg/L) (325.2, 300.0)	230	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ammonia (mg-N/L) (350.1M, SM4500NH3D)	-(b)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrate (mg-N/L) (calc.)	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrite (mg-N/L) (353.2)	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate + Nitrite (mg-N/L) (353.2)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/L) (375.2, 300.0)	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chemical Oxygen Demand (mg/L) (410.4)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (mg/L) (415.1, SM5310C)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Field Parameters																			
pH		7.59	7.59	6.36	6.36	6.4	6.4	6.43	6.43	6.43	6.17	6.21	6.16	6.00	6.23	6.52	NA		
Temperature (°C)		10.9	10.9	11.3	11.3	12.1	12.1	12.4	12.4	13.3	14.0	15.4	14.1	12.7	12.7	13.7	NA		
Specific Conductivity (µS)		996	996	1054	1054	1,120	1,119	1,430	1,433	274	251	248	332	476	405	349	NA		

Table 3
Summary of Groundwater and Surface Water Analytical Results
for Detected Constituents for Last Four Consecutive Sampling Events
Former Eastgate Landfill

Analyte	Screening Levels (a)	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date			
		French Drain 7462653 1474176 5/13/2014	French Drain 7879586 1559679 5/7/2015	French Drain 8382539 1661845 5/13/2016	French Drain 8977633 1797829 5/4/2017
Volatiles (µg/L; Method SW8260B/C)					
1,2-Dichlorobenzene	600	0.9	1.2	1.3	0.9
1,4-Dichlorobenzene	1.8	3.6	4.5	4.4	3.1
Benzene	5	1.1	1.2	1.2	0.9
Chlorobenzene	100	18	21	23	16
cis-1,2-Dichloroethene		0.4	0.2 U	0.2 U	0.4
Isopropylbenzene	1600	2.2	2.2	2.0	1.6
Naphthalene	320	2.9	2.5	1.3	0.8
n-Butylbenzene	--	0.7	0.7	0.5 U	0.5 U
n-Propylbenzene	--	1.9	1.9	1.5	1.4
sec-Butylbenzene	--	1	1.1	0.9	0.8
Toluene	1000	0.2 U	0.2 U	0.2	0.2
Vinyl Chloride	0.8	0.3	0.2 U	0.2 U	0.5
Dissolved Metals (mg/L)					
Arsenic (7060A/200.8)	0.004	NA	NA	NA	NA
Iron (6010B/200.8)	0.3	53.1	60.9	62.7	55.2
Manganese (6010B/200.8)	0.05	0.778	0.657	0.600	0.777
Conventionals					
Chloride (mg/L) (325.2, 300.0)	230	5.7	6.5	12.6	6.7
N-Ammonia (mg-N/L) (350.1M, SM4500NH3D)	-(b)	24.9	43.8	47.8	25.3
N-Nitrate (mg-N/L) (calc.)	10	0.10 U	0.10 U	0.10 U	0.10 U
N-Nitrite (mg-N/L) (353.2)	1	0.065	0.18	0.089	0.10
Nitrate + Nitrite (mg-N/L) (353.2)	--	0.10 U	0.10 U	0.10 U	0.10 U
Sulfate (mg/L) (375.2, 300.0)	250	3.0	1.8	1.2	1.8
Chemical Oxygen Demand (mg/L) (410.4)	--	50.0 U	50.0 U	64.7	50.0 U
Total Organic Carbon (mg/L) (415.1, SM5310C)	--	12.8	14.0	14.2	10.6
Field Parameters					
pH		7.32	6.35	6.43	6.43
Temperature (°C)		10.8	11.2	13.0	12.0
Specific Conductivity (µS)		637	775	923	859

Abbreviations and Acronyms:

°C = degrees celcius
ID = identification
µg/L = micrograms per liter
µg/S = micrograms per siemen
mg/L = milligrams per liter
mg-N/L = milligrams nitrate per liter
NA = not analyzed.

Notes:

U = Indicates compound was analyzed for, but was not detected at the given reporting limit.
Bold = Exceedance of screening level.

- (a) Screening levels were developed based on federal criteria for drinking water and fresh surface water and practical quantitation limits.
(b) Cleanup level is based on un-ionized ammonia, which is calculated based on total ammonia, pH, and temperature.

Table 4
Groundwater Monitoring Scope
Former Eastgate Landfill

Groundwater Monitoring Event and Activity	Location and Planned Scope of Groundwater Monitoring								
	EL-101R	EL-102	EL-103	EL-104	EL-105	EL-106R	EL-107	French Drain	Pond A
Groundwater Sampling	--	--	VOCs (a), Dissolved Metals (b)	--	Dissolved Metals (b)	Dissolved Metals (c)	--	VOCs (a), Dissolved Metals (c), and Conventional Parameters (d)	--
Water Level Measurements	X	X	X	X	X	X	X		X

VOCs = volatile organic compounds

(a) US Environmental Protection Agency (EPA) Method 8260C, Boeing 69.

(b) Dissolved metals include arsenic, iron, and manganese. Dissolved metals will be filtered in the field.

(c) Dissolved metals include only iron and manganese. Dissolved metals will be filtered in the field.

(d) Convenctionals include chloride, N-ammonia, N-nitrate, N-nitrite, nitrate + nitrite, sulfate, total organic carbon, and chemical oxygen demand.

APPENDIX A

Laboratory Data Reports



ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
PO Box 3707
MC 1W-12
Seattle WA 98124

Report Date: May 18, 2017

Project: Boeing Eastgate Landfill

Submittal Date: 05/05/2017
Group Number: 1797829
State of Sample Origin: WA

Client Sample Description

EL-100-170504 Water
EL-100-170504 Dissolved Metals Water
EL-106R-170504 Dissolved Metals Water
EL-105-170504 Dissolved Metals Water
French Drain Water
French Drain Dissolved Metals Water
EL-103-170504 Water
EL-103-170504 Dissolved Metals Water
Trip BlankS Water

Lancaster Labs

(LL) #
8977628
8977629
8977630
8977632
8977633
8977634
8977635
8977636
8977637

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To The Boeing Company
Electronic Copy To Landau

Attn: Lindsey Mahrt
Attn: Chris Kimmel



Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Respectfully Submitted,

Kay Hower

(717) 556-7364

Project Name: Boeing Eastgate Landfill
LL Group #: 1797829

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:**SW-846 6010B, Metals Dissolved**

Batch #: 171300184810 (Sample number(s): 8977629-8977630, 8977632, 8977634,
8977636 UNSPK: 8977630 BKG: 8977630)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Manganese

EPA 353.2, wet chemistry

Batch #: 17135106104A (Sample number(s): 8977633 UNSPK: P987462 BKG: P987462)

The recovery(ies) for the following analyte(s) in the MS were below the acceptance window: Nitrate Nitrogen

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Sample Description: EL-100-170504 Water
Boeing Eastgate Landfill

LL Sample # WW 8977628
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 08:00 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BE100

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Acetone	67-64-1	5.0 U	5.0	1
11996	Acrolein	107-02-8	25 U	25	1
11996	Acrylonitrile	107-13-1	5.0 U	5.0	1
11996	Benzene	71-43-2	1.6	0.2	1
11996	Bromobenzene	108-86-1	0.5 U	0.5	1
11996	Bromochloromethane	74-97-5	0.5 U	0.5	1
11996	Bromodichloromethane	75-27-4	0.5 U	0.5	1
11996	Bromoform	75-25-2	0.5 U	0.5	1
11996	Bromomethane	74-83-9	0.5 U	0.5	1
11996	2-Butanone	78-93-3	5.0 U	5.0	1
11996	n-Butylbenzene	104-51-8	0.5 U	0.5	1
11996	sec-Butylbenzene	135-98-8	0.6	0.5	1
11996	tert-Butylbenzene	98-06-6	0.5 U	0.5	1
11996	Carbon Disulfide	75-15-0	0.5 U	0.5	1
11996	Carbon Tetrachloride	56-23-5	0.2 U	0.2	1
11996	Chlorobenzene	108-90-7	23	0.5	1
11996	Chloroethane	75-00-3	0.5 U	0.5	1
11996	Chloroform	67-66-3	0.2 U	0.2	1
11996	Chloromethane	74-87-3	0.5 U	0.5	1
11996	2-Chlorotoluene	95-49-8	0.5 U	0.5	1
11996	4-Chlorotoluene	106-43-4	0.5 U	0.5	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	0.5 U	0.5	1
11996	Dibromochloromethane	124-48-1	0.5 U	0.5	1
11996	Dibromomethane	74-95-3	0.5 U	0.5	1
11996	trans-1,4-Dichloro-2-butene	110-57-6	5.0 U	5.0	1
11996	1,2-Dichlorobenzene	95-50-1	1.4	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	0.5 U	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	2.2	0.5	1
11996	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1
11996	1,2-Dichloroethane	107-06-2	0.2 U	0.2	1
11996	1,1-Dichloroethene	75-35-4	0.2 U	0.2	1
11996	cis-1,2-Dichloroethene	156-59-2	0.2 U	0.2	1
11996	trans-1,2-Dichloroethene	156-60-5	0.2 U	0.2	1
11996	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1
11996	1,3-Dichloropropane	142-28-9	0.5 U	0.5	1
11996	2,2-Dichloropropane	594-20-7	0.5 U	0.5	1
11996	1,1-Dichloropropene	563-58-6	0.5 U	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	0.2 U	0.2	1
11996	trans-1,3-Dichloropropene	10061-02-6	0.2 U	0.2	1
11996	Ethylbenzene	100-41-4	0.5 U	0.5	1
11996	Ethylene dibromide	106-93-4	0.5 U	0.5	1
11996	Hexachlorobutadiene	87-68-3	0.5 U	0.5	1
11996	2-Hexanone	591-78-6	5.0 U	5.0	1
11996	Isopropylbenzene	98-82-8	0.9	0.5	1
11996	4-Isopropyltoluene	99-87-6	0.5 U	0.5	1
11996	Methyl Iodide	74-88-4	0.5 U	0.5	1
11996	4-Methyl-2-pentanone	108-10-1	5.0 U	5.0	1
11996	Methylene Chloride	75-09-2	0.5 U	0.5	1
11996	Naphthalene	91-20-3	0.5 U	0.5	1



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Sample Description: EL-100-170504 Water
Boeing Eastgate Landfill

LL Sample # WW 8977628
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 08:00 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BE100

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	n-Propylbenzene	103-65-1	0.5	U	0.5
11996	Styrene	100-42-5	0.5	U	0.5
11996	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5
11996	1,1,2,2-Tetrachloroethane	79-34-5	0.2	U	0.2
11996	Tetrachloroethene	127-18-4	0.2	U	0.2
11996	Toluene	108-88-3	0.2	U	0.2
11996	112Trichloro122Trifluoroethane	76-13-1	0.5	U	0.5
11996	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5
11996	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5
11996	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5
11996	1,1,2-Trichloroethane	79-00-5	0.2	U	0.2
11996	Trichloroethene	79-01-6	0.2	U	0.2
11996	Trichlorofluoromethane	75-69-4	0.5	U	0.5
11996	1,2,3-Trichloropropane	96-18-4	1.0	U	1.0
11996	1,2,4-Trimethylbenzene	95-63-6	0.5	U	0.5
11996	1,3,5-Trimethylbenzene	108-67-8	0.5	U	0.5
11996	Vinyl Acetate	108-05-4	0.5	U	0.5
11996	Vinyl Chloride	75-01-4	0.2	U	0.2
11996	m,p-Xylene	179601-23-1	0.5	U	0.5
11996	o-Xylene	95-47-6	0.5	U	0.5

Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	8260C Boeing 69	SW-846 8260C	1	H171302AA	05/11/2017 02:17	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H171302AA	05/11/2017 02:17	Don V Viray	1



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Sample Description: EL-100-170504 Dissolved Metals Water
Boeing Eastgate LandfillLL Sample # WW 8977629
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 08:00 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved 06025	EPA 200.8 rev 5.4 Arsenic	7440-38-2	mg/l 0.0306	mg/l 0.0020	1
01754	SW-846 6010B Iron	7439-89-6	mg/l 23.7	mg/l 0.200	1
07058	Manganese	7439-96-5	3.81	0.0050	1

Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06025	Arsenic	EPA 200.8 rev 5.4	1	171300705008A	05/12/2017 02:43	Sarah L Burt	1
01754	Iron	SW-846 6010B	1	171300184810	05/12/2017 00:26	Elaine F Stoltzfus	1
07058	Manganese	SW-846 6010B	1	171300184810	05/12/2017 00:26	Elaine F Stoltzfus	1
07050	ICP/MS EPA-600 Digest	EPA 200.8 rev 5.4	1	171300705008	05/11/2017 06:37	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	171300184810	05/11/2017 05:53	James L Mertz	1



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Sample Description: EL-106R-170504 Dissolved Metals Water
Boeing Eastgate LandfillLL Sample # WW 8977630
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 09:30 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved	SW-846 6010B		mg/l	mg/l	
01754 Iron		7439-89-6	2.40	0.200	1
07058 Manganese		7439-96-5	6.05	0.0050	1

Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754 Iron		SW-846 6010B	1	171300184810	05/12/2017 00:04	Elaine F Stoltzfus	1
07058 Manganese		SW-846 6010B	1	171300184810	05/12/2017 00:04	Elaine F Stoltzfus	1
01848 ICP-WW, 3005A (tot rec) - U3	SW-846 3005A		1	171300184810	05/11/2017 05:53	James L Mertz	1



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Sample Description: EL-105-170504 Dissolved Metals Water
Boeing Eastgate LandfillLL Sample # WW 8977632
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 11:00 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved 06025	EPA 200.8 rev 5.4 Arsenic	7440-38-2	mg/l 0.0070	mg/l 0.0020	1
01754	SW-846 6010B Iron	7439-89-6	mg/l 5.49	mg/l 0.200	1
07058	Manganese	7439-96-5	3.40	0.0050	1

Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06025	Arsenic	EPA 200.8 rev 5.4	1	171300705008A	05/12/2017 03:05	Sarah L Burt	1
01754	Iron	SW-846 6010B	1	171300184810	05/12/2017 00:30	Elaine F Stoltzfus	1
07058	Manganese	SW-846 6010B	1	171300184810	05/12/2017 00:30	Elaine F Stoltzfus	1
07050	ICP/MS EPA-600 Digest	EPA 200.8 rev 5.4	1	171300705008	05/11/2017 06:37	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	171300184810	05/11/2017 05:53	James L Mertz	1

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Sample Description: French Drain Water
Boeing Eastgate Landfill

LL Sample # WW 8977633
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 12:30 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BEFDR

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Acetone	67-64-1	5.0 U	5.0	1
11996	Acrolein	107-02-8	25 U	25	1
11996	Acrylonitrile	107-13-1	5.0 U	5.0	1
11996	Benzene	71-43-2	0.9	0.2	1
11996	Bromobenzene	108-86-1	0.5 U	0.5	1
11996	Bromochloromethane	74-97-5	0.5 U	0.5	1
11996	Bromodichloromethane	75-27-4	0.5 U	0.5	1
11996	Bromoform	75-25-2	0.5 U	0.5	1
11996	Bromomethane	74-83-9	0.5 U	0.5	1
11996	2-Butanone	78-93-3	5.0 U	5.0	1
11996	n-Butylbenzene	104-51-8	0.5 U	0.5	1
11996	sec-Butylbenzene	135-98-8	0.8	0.5	1
11996	tert-Butylbenzene	98-06-6	0.5 U	0.5	1
11996	Carbon Disulfide	75-15-0	0.5 U	0.5	1
11996	Carbon Tetrachloride	56-23-5	0.2 U	0.2	1
11996	Chlorobenzene	108-90-7	16	0.5	1
11996	Chloroethane	75-00-3	0.5 U	0.5	1
11996	Chloroform	67-66-3	0.2 U	0.2	1
11996	Chloromethane	74-87-3	0.5 U	0.5	1
11996	2-Chlorotoluene	95-49-8	0.5 U	0.5	1
11996	4-Chlorotoluene	106-43-4	0.5 U	0.5	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	0.5 U	0.5	1
11996	Dibromochloromethane	124-48-1	0.5 U	0.5	1
11996	Dibromomethane	74-95-3	0.5 U	0.5	1
11996	trans-1,4-Dichloro-2-butene	110-57-6	5.0 U	5.0	1
11996	1,2-Dichlorobenzene	95-50-1	0.9	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	0.5 U	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	3.1	0.5	1
11996	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1
11996	1,2-Dichloroethane	107-06-2	0.2 U	0.2	1
11996	1,1-Dichloroethene	75-35-4	0.2 U	0.2	1
11996	cis-1,2-Dichloroethene	156-59-2	0.4	0.2	1
11996	trans-1,2-Dichloroethene	156-60-5	0.2 U	0.2	1
11996	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1
11996	1,3-Dichloropropane	142-28-9	0.5 U	0.5	1
11996	2,2-Dichloropropane	594-20-7	0.5 U	0.5	1
11996	1,1-Dichloropropene	563-58-6	0.5 U	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	0.2 U	0.2	1
11996	trans-1,3-Dichloropropene	10061-02-6	0.2 U	0.2	1
11996	Ethylbenzene	100-41-4	0.5 U	0.5	1
11996	Ethylene dibromide	106-93-4	0.5 U	0.5	1
11996	Hexachlorobutadiene	87-68-3	0.5 U	0.5	1
11996	2-Hexanone	591-78-6	5.0 U	5.0	1
11996	Isopropylbenzene	98-82-8	1.6	0.5	1
11996	4-Isopropyltoluene	99-87-6	0.5 U	0.5	1
11996	Methyl Iodide	74-88-4	0.5 U	0.5	1
11996	4-Methyl-2-pentanone	108-10-1	5.0 U	5.0	1
11996	Methylene Chloride	75-09-2	0.5 U	0.5	1

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Sample Description: French Drain Water
Boeing Eastgate Landfill

LL Sample # WW 8977633
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 12:30 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BEFDR

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Naphthalene	91-20-3	0.8	0.5	1
11996	n-Propylbenzene	103-65-1	1.4	0.5	1
11996	Styrene	100-42-5	0.5	0.5	1
11996	1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.5	1
11996	1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.2	1
11996	Tetrachloroethene	127-18-4	0.2	0.2	1
11996	Toluene	108-88-3	0.2	0.2	1
11996	112Trichloro122Trifluoroethane	76-13-1	0.5	0.5	1
11996	1,2,3-Trichlorobenzene	87-61-6	0.5	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	0.5	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	0.5	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	0.2	0.2	1
11996	Trichloroethene	79-01-6	0.2	0.2	1
11996	Trichlorofluoromethane	75-69-4	0.5	0.5	1
11996	1,2,3-Trichloropropane	96-18-4	1.0	1.0	1
11996	1,2,4-Trimethylbenzene	95-63-6	0.5	0.5	1
11996	1,3,5-Trimethylbenzene	108-67-8	0.5	0.5	1
11996	Vinyl Acetate	108-05-4	0.5	0.5	1
11996	Vinyl Chloride	75-01-4	0.5	0.2	1
11996	m,p-Xylene	179601-23-1	0.5	0.5	1
11996	o-Xylene	95-47-6	0.5	0.5	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00224	Chloride	16887-00-6	6.7	2.0	5
00228	Sulfate	14808-79-8	1.8	1.0	1
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	0.10	U	0.10
00219	Nitrite Nitrogen	14797-65-0	0.10		0.050
07882	Total Nitrite/Nitrate Nitrogen	n.a.	0.10	U	0.10
	SM 5310 C-2000		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	10.6	1.0	1
	EPA 410.4		mg/l	mg/l	
04001	Chemical Oxygen Demand	n.a.	50.0	U	50.0
	SM 4500-NH3 D-1997		mg/l	mg/l	
12677	Ammonia-Nitrogen	7664-41-7	25.3	1.0	5

Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.



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Sample Description: French Drain Water
Boeing Eastgate LandfillLL Sample # WW 8977633
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 12:30 by DG

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MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

BEFDR

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	8260C Boeing 69	SW-846 8260C	1	H171302AA	05/11/2017 01:36	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H171302AA	05/11/2017 01:36	Don V Viray	1
00224	Chloride	EPA 300.0	1	17135972215A	05/16/2017 00:59	Alexandria M Lanager	5
00228	Sulfate	EPA 300.0	2	17135972215A	05/16/2017 20:39	Alexandria M Lanager	1
00220	Nitrate Nitrogen	EPA 353.2	1	17135106104A	05/16/2017 03:58	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	17125105106A	05/05/2017 20:33	Samuel J Weaver	1
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	17135118102A	05/16/2017 04:17	Joseph E McKenzie	1
00273	Total Organic Carbon	SM 5310 C-2000	1	17130667602B	05/11/2017 04:37	Drew M Gerhart	1
04001	Chemical Oxygen Demand	EPA 410.4	1	17129400101B	05/09/2017 06:13	Susan A Engle	1
12677	Ammonia-Nitrogen	SM 4500-NH3 D-1997	1	17137003201A	05/17/2017 09:48	Michelle L Lalli	5



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Sample Description: French Drain Dissolved Metals Water
Boeing Eastgate LandfillLL Sample # WW 8977634
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 12:30 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved	SW-846 6010B		mg/l	mg/l	
01754 Iron		7439-89-6	55.2	0.200	1
07058 Manganese		7439-96-5	0.777	0.0050	1

Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754 Iron		SW-846 6010B	1	171300184810	05/12/2017 00:40	Elaine F Stoltzfus	1
07058 Manganese		SW-846 6010B	1	171300184810	05/12/2017 00:40	Elaine F Stoltzfus	1
01848 ICP-WW, 3005A (tot rec) - U3	SW-846 3005A		1	171300184810	05/11/2017 05:53	James L Mertz	1

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Sample Description: EL-103-170504 Water
 Boeing Eastgate Landfill

 LL Sample # WW 8977635
 LL Group # 1797829
 Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 11:45 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

 Submitted: 05/05/2017 09:45
 Reported: 05/18/2017 09:44

BE103

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Acetone	67-64-1	5.0 U	5.0	1
11996	Acrolein	107-02-8	25 U	25	1
11996	Acrylonitrile	107-13-1	5.0 U	5.0	1
11996	Benzene	71-43-2	1.6	0.2	1
11996	Bromobenzene	108-86-1	0.5 U	0.5	1
11996	Bromochloromethane	74-97-5	0.5 U	0.5	1
11996	Bromodichloromethane	75-27-4	0.5 U	0.5	1
11996	Bromoform	75-25-2	0.5 U	0.5	1
11996	Bromomethane	74-83-9	0.5 U	0.5	1
11996	2-Butanone	78-93-3	5.0 U	5.0	1
11996	n-Butylbenzene	104-51-8	0.5 U	0.5	1
11996	sec-Butylbenzene	135-98-8	0.6	0.5	1
11996	tert-Butylbenzene	98-06-6	0.5 U	0.5	1
11996	Carbon Disulfide	75-15-0	0.5 U	0.5	1
11996	Carbon Tetrachloride	56-23-5	0.2 U	0.2	1
11996	Chlorobenzene	108-90-7	23	0.5	1
11996	Chloroethane	75-00-3	0.5 U	0.5	1
11996	Chloroform	67-66-3	0.2 U	0.2	1
11996	Chloromethane	74-87-3	0.5 U	0.5	1
11996	2-Chlorotoluene	95-49-8	0.5 U	0.5	1
11996	4-Chlorotoluene	106-43-4	0.5 U	0.5	1
11996	1,2-Dibromo-3-chloropropane	96-12-8	0.5 U	0.5	1
11996	Dibromochloromethane	124-48-1	0.5 U	0.5	1
11996	Dibromomethane	74-95-3	0.5 U	0.5	1
11996	trans-1,4-Dichloro-2-butene	110-57-6	5.0 U	5.0	1
11996	1,2-Dichlorobenzene	95-50-1	1.3	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	0.5 U	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	2.1	0.5	1
11996	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1
11996	1,2-Dichloroethane	107-06-2	0.2 U	0.2	1
11996	1,1-Dichloroethene	75-35-4	0.2 U	0.2	1
11996	cis-1,2-Dichloroethene	156-59-2	0.2 U	0.2	1
11996	trans-1,2-Dichloroethene	156-60-5	0.2 U	0.2	1
11996	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1
11996	1,3-Dichloropropane	142-28-9	0.5 U	0.5	1
11996	2,2-Dichloropropane	594-20-7	0.5 U	0.5	1
11996	1,1-Dichloropropene	563-58-6	0.5 U	0.5	1
11996	cis-1,3-Dichloropropene	10061-01-5	0.2 U	0.2	1
11996	trans-1,3-Dichloropropene	10061-02-6	0.2 U	0.2	1
11996	Ethylbenzene	100-41-4	0.5 U	0.5	1
11996	Ethylene dibromide	106-93-4	0.5 U	0.5	1
11996	Hexachlorobutadiene	87-68-3	0.5 U	0.5	1
11996	2-Hexanone	591-78-6	5.0 U	5.0	1
11996	Isopropylbenzene	98-82-8	0.9	0.5	1
11996	4-Isopropyltoluene	99-87-6	0.5 U	0.5	1
11996	Methyl Iodide	74-88-4	0.5 U	0.5	1
11996	4-Methyl-2-pentanone	108-10-1	5.0 U	5.0	1
11996	Methylene Chloride	75-09-2	0.5 U	0.5	1
11996	Naphthalene	91-20-3	0.5 U	0.5	1



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Sample Description: EL-103-170504 Water
Boeing Eastgate Landfill

LL Sample # WW 8977635
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017 11:45 by DG

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PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BE103

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	n-Propylbenzene	103-65-1	0.5	U	0.5
11996	Styrene	100-42-5	0.5	U	0.5
11996	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5
11996	1,1,2,2-Tetrachloroethane	79-34-5	0.2	U	0.2
11996	Tetrachloroethene	127-18-4	0.2	U	0.2
11996	Toluene	108-88-3	0.2	U	0.2
11996	112Trichloro122Trifluoroethane	76-13-1	0.5	U	0.5
11996	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5
11996	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5
11996	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5
11996	1,1,2-Trichloroethane	79-00-5	0.2	U	0.2
11996	Trichloroethene	79-01-6	0.2	U	0.2
11996	Trichlorofluoromethane	75-69-4	0.5	U	0.5
11996	1,2,3-Trichloropropane	96-18-4	1.0	U	1.0
11996	1,2,4-Trimethylbenzene	95-63-6	0.5	U	0.5
11996	1,3,5-Trimethylbenzene	108-67-8	0.5	U	0.5
11996	Vinyl Acetate	108-05-4	0.5	U	0.5
11996	Vinyl Chloride	75-01-4	0.2	U	0.2
11996	m,p-Xylene	179601-23-1	0.5	U	0.5
11996	o-Xylene	95-47-6	0.5	U	0.5

Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	8260C Boeing 69	SW-846 8260C	1	H171302AA	05/11/2017 01:57	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H171302AA	05/11/2017 01:57	Don V Viray	1



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Sample Description: EL-103-170504 Dissolved Metals Water
Boeing Eastgate LandfillLL Sample # WW 8977636
LL Group # 1797829
Account # 13419**Project Name:** Boeing Eastgate Landfill

Collected: 05/04/2017 11:45 by DG

The Boeing Company

PO Box 3707

MC 1W-12

Submitted: 05/05/2017 09:45

Seattle WA 98124

Reported: 05/18/2017 09:44

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved 06025	EPA 200.8 rev 5.4 Arsenic	7440-38-2	mg/l 0.0320	mg/l 0.0020	1
01754	SW-846 6010B Iron	7439-89-6	mg/l 24.1	mg/l 0.200	1
07058	Manganese	7439-96-5	3.82	0.0050	1

Sample Comments

State of Washington Lab Certification No. C457

This sample was field filtered for dissolved metals.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06025	Arsenic	EPA 200.8 rev 5.4	1	171300705008A	05/12/2017 03:06	Sarah L Burt	1
01754	Iron	SW-846 6010B	1	171300184810	05/12/2017 00:44	Elaine F Stoltzfus	1
07058	Manganese	SW-846 6010B	1	171300184810	05/12/2017 00:44	Elaine F Stoltzfus	1
07050	ICP/MS EPA-600 Digest	EPA 200.8 rev 5.4	1	171300705008	05/11/2017 06:37	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	171300184810	05/11/2017 05:53	James L Mertz	1

Sample Description: Trip Blanks Water
 Boeing Eastgate Landfill

LL Sample # WW 8977637
 LL Group # 1797829
 Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BETBK

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Acetone	67-64-1	5.0	U	5.0
11996	Acrolein	107-02-8	25	U	25
11996	Acrylonitrile	107-13-1	5.0	U	5.0
11996	Benzene	71-43-2	0.2	U	0.2
11996	Bromobenzene	108-86-1	0.5	U	0.5
11996	Bromochloromethane	74-97-5	0.5	U	0.5
11996	Bromodichloromethane	75-27-4	0.5	U	0.5
11996	Bromoform	75-25-2	0.5	U	0.5
11996	Bromomethane	74-83-9	0.5	U	0.5
11996	2-Butanone	78-93-3	5.0	U	5.0
11996	n-Butylbenzene	104-51-8	0.5	U	0.5
11996	sec-Butylbenzene	135-98-8	0.5	U	0.5
11996	tert-Butylbenzene	98-06-6	0.5	U	0.5
11996	Carbon Disulfide	75-15-0	0.5	U	0.5
11996	Carbon Tetrachloride	56-23-5	0.2	U	0.2
11996	Chlorobenzene	108-90-7	0.5	U	0.5
11996	Chloroethane	75-00-3	0.5	U	0.5
11996	Chloroform	67-66-3	0.2	U	0.2
11996	Chloromethane	74-87-3	0.5	U	0.5
11996	2-Chlorotoluene	95-49-8	0.5	U	0.5
11996	4-Chlorotoluene	106-43-4	0.5	U	0.5
11996	1,2-Dibromo-3-chloropropane	96-12-8	0.5	U	0.5
11996	Dibromochloromethane	124-48-1	0.5	U	0.5
11996	Dibromomethane	74-95-3	0.5	U	0.5
11996	trans-1,4-Dichloro-2-butene	110-57-6	5.0	U	5.0
11996	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5
11996	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5
11996	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5
11996	1,1-Dichloroethane	75-34-3	0.5	U	0.5
11996	1,2-Dichloroethane	107-06-2	0.2	U	0.2
11996	1,1-Dichloroethene	75-35-4	0.2	U	0.2
11996	cis-1,2-Dichloroethene	156-59-2	0.2	U	0.2
11996	trans-1,2-Dichloroethene	156-60-5	0.4		1
11996	1,2-Dichloropropane	78-87-5	0.5	U	0.5
11996	1,3-Dichloropropane	142-28-9	0.5	U	0.5
11996	2,2-Dichloropropane	594-20-7	0.5	U	0.5
11996	1,1-Dichloropropene	563-58-6	0.5	U	0.5
11996	cis-1,3-Dichloropropene	10061-01-5	0.2	U	0.2
11996	trans-1,3-Dichloropropene	10061-02-6	0.2	U	0.2
11996	Ethylbenzene	100-41-4	0.5	U	0.5
11996	Ethylene dibromide	106-93-4	0.5	U	0.5
11996	Hexachlorobutadiene	87-68-3	0.5	U	0.5
11996	2-Hexanone	591-78-6	5.0	U	5.0
11996	Isopropylbenzene	98-82-8	0.5	U	0.5
11996	4-Isopropyltoluene	99-87-6	0.5	U	0.5
11996	Methyl Iodide	74-88-4	0.5	U	0.5
11996	4-Methyl-2-pentanone	108-10-1	5.0	U	5.0
11996	Methylene Chloride	75-09-2	0.5	U	0.5
11996	Naphthalene	91-20-3	0.5	U	0.5
11996	n-Propylbenzene	103-65-1	0.5	U	0.5



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Sample Description: Trip Blanks Water
Boeing Eastgate Landfill

LL Sample # WW 8977637
LL Group # 1797829
Account # 13419

Project Name: Boeing Eastgate Landfill

Collected: 05/04/2017

The Boeing Company

PO Box 3707

MC 1W-12

Seattle WA 98124

Submitted: 05/05/2017 09:45

Reported: 05/18/2017 09:44

BETBK

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260C	ug/l	ug/l	
11996	Styrene	100-42-5	0.5 U	0.5	1
11996	1,1,1,2-Tetrachloroethane	630-20-6	0.5 U	0.5	1
11996	1,1,2,2-Tetrachloroethane	79-34-5	0.2 U	0.2	1
11996	Tetrachloroethene	127-18-4	0.2 U	0.2	1
11996	Toluene	108-88-3	0.2 U	0.2	1
11996	112Trichloro122Trifluoroethane	76-13-1	0.5 U	0.5	1
11996	1,2,3-Trichlorobenzene	87-61-6	0.5 U	0.5	1
11996	1,2,4-Trichlorobenzene	120-82-1	0.5 U	0.5	1
11996	1,1,1-Trichloroethane	71-55-6	0.5 U	0.5	1
11996	1,1,2-Trichloroethane	79-00-5	0.2 U	0.2	1
11996	Trichloroethene	79-01-6	0.2 U	0.2	1
11996	Trichlorofluoromethane	75-69-4	0.5 U	0.5	1
11996	1,2,3-Trichloropropane	96-18-4	1.0 U	1.0	1
11996	1,2,4-Trimethylbenzene	95-63-6	0.5 U	0.5	1
11996	1,3,5-Trimethylbenzene	108-67-8	0.5 U	0.5	1
11996	Vinyl Acetate	108-05-4	0.5 U	0.5	1
11996	Vinyl Chloride	75-01-4	0.2 U	0.2	1
11996	m,p-Xylene	179601-23-1	0.5 U	0.5	1
11996	o-Xylene	95-47-6	0.5 U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	8260C Boeing 69	SW-846 8260C	1	H171302AA	05/11/2017 00:15	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H171302AA	05/11/2017 00:15	Don V Viray	1

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ
	ug/l	ug/l
Batch number: H171302AA		
Acetone	5.0	U 5.0
Acrolein	25	U 25
Acrylonitrile	5.0	U 5.0
Benzene	0.2	U 0.2
Bromobenzene	0.5	U 0.5
Bromochloromethane	0.5	U 0.5
Bromodichloromethane	0.5	U 0.5
Bromoform	0.5	U 0.5
Bromomethane	0.5	U 0.5
2-Butanone	5.0	U 5.0
n-Butylbenzene	0.5	U 0.5
sec-Butylbenzene	0.5	U 0.5
tert-Butylbenzene	0.5	U 0.5
Carbon Disulfide	0.5	U 0.5
Carbon Tetrachloride	0.2	U 0.2
Chlorobenzene	0.5	U 0.5
Chloroethane	0.5	U 0.5
Chloroform	0.2	U 0.2
Chloromethane	0.5	U 0.5
2-Chlorotoluene	0.5	U 0.5
4-Chlorotoluene	0.5	U 0.5
1,2-Dibromo-3-chloropropane	0.5	U 0.5
Dibromochloromethane	0.5	U 0.5
Dibromomethane	0.5	U 0.5
trans-1,4-Dichloro-2-butene	5.0	U 5.0
1,2-Dichlorobenzene	0.5	U 0.5
1,3-Dichlorobenzene	0.5	U 0.5
1,4-Dichlorobenzene	0.5	U 0.5
1,1-Dichloroethane	0.5	U 0.5
1,2-Dichloroethane	0.2	U 0.2
1,1-Dichloroethene	0.2	U 0.2
cis-1,2-Dichloroethene	0.2	U 0.2
trans-1,2-Dichloroethene	0.2	U 0.2
1,2-Dichloropropane	0.5	U 0.5
1,3-Dichloropropane	0.5	U 0.5
2,2-Dichloropropane	0.5	U 0.5
1,1-Dichloropropene	0.5	U 0.5
cis-1,3-Dichloropropene	0.2	U 0.2
trans-1,3-Dichloropropene	0.2	U 0.2
Ethylbenzene	0.5	U 0.5

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

Method Blank (continued)

Analysis Name	Result	LOQ
	ug/l	ug/l
Ethylene dibromide	0.5	U 0.5
Hexachlorobutadiene	0.5	U 0.5
2-Hexanone	5.0	U 5.0
Isopropylbenzene	0.5	U 0.5
4-Isopropyltoluene	0.5	U 0.5
Methyl Iodide	0.5	U 0.5
4-Methyl-2-pentanone	5.0	U 5.0
Methylene Chloride	0.5	U 0.5
Naphthalene	0.5	U 0.5
n-Propylbenzene	0.5	U 0.5
Styrene	0.5	U 0.5
1,1,1,2-Tetrachloroethane	0.5	U 0.5
1,1,2,2-Tetrachloroethane	0.2	U 0.2
Tetrachloroethene	0.2	U 0.2
Toluene	0.2	U 0.2
112Trichloro122Trifluoroethane	0.5	U 0.5
1,2,3-Trichlorobenzene	0.5	U 0.5
1,2,4-Trichlorobenzene	0.5	U 0.5
1,1,1-Trichloroethane	0.5	U 0.5
1,1,2-Trichloroethane	0.2	U 0.2
Trichloroethene	0.2	U 0.2
Trichlorofluoromethane	0.5	U 0.5
1,2,3-Trichloropropane	1.0	U 1.0
1,2,4-Trimethylbenzene	0.5	U 0.5
1,3,5-Trimethylbenzene	0.5	U 0.5
Vinyl Acetate	0.5	U 0.5
Vinyl Chloride	0.2	U 0.2
m,p-Xylene	0.5	U 0.5
o-Xylene	0.5	U 0.5
	mg/l	mg/l
Batch number: 171300184810	Sample number(s): 8977629-8977630, 8977632, 8977634, 8977636	
Iron	0.200	U 0.200
Manganese	0.0070	U 0.0050
Batch number: 171300705008A	Sample number(s): 8977629, 8977632, 8977636	
Arsenic	0.0020	U 0.0020
Batch number: 17125105106A	Sample number(s): 8977633	
Nitrite Nitrogen	0.050	U 0.050
Batch number: 17130667602B	Sample number(s): 8977633	
Total Organic Carbon	1.0	U 1.0
Batch number: 17135106104A	Sample number(s): 8977633	
Nitrate Nitrogen	0.10	U 0.10
Batch number: 17135118102A	Sample number(s): 8977633	
Total Nitrite/Nitrate Nitrogen	0.10	U 0.10

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

Method Blank (continued)

Analysis Name	Result mg/l	LOQ mg/l	
		Sample number(s): 8977633	
Batch number: 17135972215A		0.40	U 0.40
Chloride	1.0	U	1.0
Sulfate			
Batch number: 17129400101B		Sample number(s): 8977633	
Chemical Oxygen Demand	50.0	U	50.0
Batch number: 17137003201A		Sample number(s): 8977633	
Ammonia-Nitrogen	0.20	U	0.20

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: H171302AA		Sample number(s): 8977628, 8977633, 8977635, 8977637							
Acetone	37.5	29.35	37.5	34.01	78	91	60-133	15	30
Acrolein	37.5	22.33	37.5	27.75	60	74	39-141	22	30
Acrylonitrile	25	23.93	25	24.58	96	98	63-141	3	30
Benzene	5.00	5.15	5.00	5.09	103	102	80-120	1	30
Bromobenzene	5.00	5.10	5.00	5.16	102	103	80-120	1	30
Bromo(chloromethane	5.00	5.11	5.00	4.91	102	98	80-125	4	30
Bromodichloromethane	5.00	5.32	5.00	5.29	106	106	80-125	1	30
Bromoform	5.00	5.46	5.00	5.85	109	117	62-128	7	30
Bromomethane	5.00	4.81	5.00	5.22	96	104	64-125	8	30
2-Butanone	37.5	30.63	37.5	33.08	82	88	57-144	8	30
n-Butylbenzene	5.00	5.60	5.00	5.78	112	116	80-120	3	30
sec-Butylbenzene	5.00	5.52	5.00	5.59	110	112	80-120	1	30
tert-Butylbenzene	5.00	5.31	5.00	5.33	106	107	74-124	0	30
Carbon Disulfide	5.00	5.22	5.00	5.21	104	104	62-127	0	30
Carbon Tetrachloride	5.00	5.14	5.00	5.22	103	104	76-129	2	30
Chlorobenzene	5.00	5.12	5.00	5.34	102	107	80-120	4	30
Chloroethane	5.00	4.71	5.00	4.98	94	100	63-125	6	30
Chloroform	5.00	5.00	5.00	4.96	100	99	80-120	1	30
Chloromethane	5.00	4.28	5.00	4.29	86	86	55-126	0	30
2-Chlorotoluene	5.00	5.43	5.00	5.51	109	110	80-120	1	30
4-Chlorotoluene	5.00	5.34	5.00	5.49	107	110	80-120	3	30
1,2-Dibromo-3-chloropropane	5.00	4.28	5.00	4.40	86	88	47-153	3	30
Dibromochloromethane	5.00	5.42	5.00	5.57	108	111	78-127	3	30
Dibromomethane	5.00	5.26	5.00	5.20	105	104	80-122	1	30
trans-1,4-Dichloro-2-butene	25	18.43	25	19.88	74	80	10-176	8	30
1,2-Dichlorobenzene	5.00	4.99	5.00	5.19	100	104	80-120	4	30
1,3-Dichlorobenzene	5.00	5.10	5.00	5.27	102	105	80-120	3	30
1,4-Dichlorobenzene	5.00	4.90	5.00	5.02	98	100	80-120	2	30
1,1-Dichloroethane	5.00	5.07	5.00	5.06	101	101	80-120	0	30
1,2-Dichloroethane	5.00	5.08	5.00	5.23	102	105	72-127	3	30

* Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloroethene	5.00	4.35	5.00	5.10	87	102	76-120	16	30
cis-1,2-Dichloroethene	5.00	5.29	5.00	5.10	106	102	80-120	4	30
trans-1,2-Dichloroethene	5.00	5.23	5.00	5.07	105	101	80-120	3	30
1,2-Dichloropropane	5.00	5.14	5.00	5.13	103	103	80-120	0	30
1,3-Dichloropropane	5.00	5.22	5.00	5.32	104	106	80-120	2	30
2,2-Dichloropropane	5.00	5.37	5.00	5.33	107	107	72-126	1	30
1,1-Dichloropropene	5.00	5.12	5.00	5.12	102	102	77-120	0	30
cis-1,3-Dichloropropene	5.00	5.46	5.00	5.51	109	110	80-120	1	30
trans-1,3-Dichloropropene	5.00	5.50	5.00	5.55	110	111	77-121	1	30
Ethylbenzene	5.00	5.27	5.00	5.41	105	108	80-120	3	30
Ethylene dibromide	5.00	5.17	5.00	5.36	103	107	80-120	4	30
Hexachlorobutadiene	5.00	4.27	5.00	4.10	85	82	74-120	4	30
2-Hexanone	25	19.79	25	20.59	79	82	61-138	4	30
Isopropylbenzene	5.00	5.48	5.00	5.58	110	112	80-120	2	30
4-Isopropyltoluene	5.00	5.59	5.00	5.66	112	113	80-120	1	30
Methyl Iodide	5.00	5.02	5.00	4.96	100	99	70-120	1	30
4-Methyl-2-pentanone	25	20.32	25	21.5	81	86	65-135	6	30
Methylene Chloride	5.00	5.00	5.00	5.06	100	101	80-120	1	30
Naphthalene	5.00	4.53	5.00	4.81	91	96	65-131	6	30
n-Propylbenzene	5.00	5.35	5.00	5.52	107	110	79-120	3	30
Styrene	5.00	5.51	5.00	5.63	110	113	80-120	2	30
1,1,1,2-Tetrachloroethane	5.00	5.19	5.00	5.31	104	106	80-120	2	30
1,1,2,2-Tetrachloroethane	5.00	5.28	5.00	5.22	106	104	75-123	1	30
Tetrachloroethene	5.00	5.18	5.00	5.24	104	105	80-120	1	30
Toluene	5.00	5.31	5.00	5.37	106	107	80-120	1	30
112Trichloro122Trifluoroethane	5.00	4.67	5.00	5.18	93	104	75-120	10	30
1,2,3-Trichlorobenzene	5.00	4.07	5.00	4.37	81	87	66-120	7	30
1,2,4-Trichlorobenzene	5.00	4.53	5.00	4.73	91	95	67-120	4	30
1,1,1-Trichloroethane	5.00	5.03	5.00	4.95	101	99	79-120	2	30
1,1,2-Trichloroethane	5.00	5.36	5.00	5.71	107	114	80-120	6	30
Trichloroethene	5.00	5.06	5.00	4.95	101	99	80-120	2	30
Trichlorofluoromethane	5.00	4.43	5.00	4.83	89	97	65-134	9	30
1,2,3-Trichloropropane	5.00	5.02	5.00	5.38	100	108	80-125	7	30
1,2,4-Trimethylbenzene	5.00	5.47	5.00	5.52	109	110	80-120	1	30
1,3,5-Trimethylbenzene	5.00	5.44	5.00	5.57	109	111	80-120	2	30
Vinyl Acetate	12.5	13.37	12.5	13.51	107	108	55-129	1	30
Vinyl Chloride	5.00	4.42	5.00	4.87	88	97	62-128	10	30
m,p-Xylene	10	10.71	10	11	107	110	80-120	3	30
o-Xylene	5.00	5.25	5.00	5.32	105	106	80-120	1	30
	mg/l	mg/l	mg/l	mg/l					

Batch number: 171300184810

Sample number(s): 8977629-8977630, 8977632, 8977634, 8977636

Iron 1.00 1.01 101 80-120

Manganese 0.500 0.520 104 80-120

Batch number: 171300705008A

Sample number(s): 8977629, 8977632, 8977636

Arsenic 0.0100 0.00959 96 85-115

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17125105106A Nitrite Nitrogen	Sample number(s): 8977633 0.700	0.717			102		90-110		
Batch number: 17130667602B Total Organic Carbon	Sample number(s): 8977633 25	25.86			103		91-113		
Batch number: 17135106104A Nitrate Nitrogen	Sample number(s): 8977633 2.50	2.52			101		90-110		
Batch number: 17135118102A Total Nitrite/Nitrate Nitrogen	Sample number(s): 8977633 2.50	2.65			106		90-110		
Batch number: 17135972215A Chloride	Sample number(s): 8977633 3.00	2.94			98		90-110		
Sulfate	7.50	7.84			104		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17129400101B Chemical Oxygen Demand	Sample number(s): 8977633 500	509.6			102		94-110		
Batch number: 17137003201A Ammonia-Nitrogen	Sample number(s): 8977633 5.00	5.05			101		78-121		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 171300184810 Iron	Sample number(s): 8977629-8977630, 8977632, 8977634, 8977636 UNSPK: 8977630 2.40	1.00	3.44	1.00	3.50	104	110	75-125	2	20
Manganese	6.05	0.500	6.41	0.500	6.53	73 (2)	96 (2)	75-125	2	20
Batch number: 171300705008A Arsenic	Sample number(s): 8977629, 8977632, 8977636 UNSPK: 8977629 0.0306	0.0100	0.0424	0.0100	0.0405	118	99	70-130	5	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17125105106A Nitrite Nitrogen	Sample number(s): 8977633 UNSPK: P977708 0.050	U	0.200	0.200			100		90-110	
Batch number: 17130667602B Total Organic Carbon	Sample number(s): 8977633 UNSPK: P982404 1.0	U	10	10.77			108		64-148	

* Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 17135106104A Nitrate Nitrogen	Sample number(s): 8977633 UNSPK: P987462 2.44 1.00 3.28					85*		90-110		
Batch number: 17135118102A Total Nitrite/Nitrate Nitrogen	Sample number(s): 8977633 UNSPK: P988555 3.99 5.00 9.06					101		90-110		
Batch number: 17135972215A Chloride Sulfate	Sample number(s): 8977633 UNSPK: P977981 54.32 100 161.26 5.0 U 25 25.33					107	101	90-110 90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17129400101B Chemical Oxygen Demand	Sample number(s): 8977633 UNSPK: P978337 23.24 400 402.79					95		82-108		
Batch number: 17137003201A Ammonia-Nitrogen	Sample number(s): 8977633 UNSPK: P978471 0.120 5.00 4.58 5.00				5.15	89	101	78-121	12	15

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 171300184810 Iron	Sample number(s): 8977629-8977630, 8977632, 8977634, 8977636 BKG: 8977630 2.40 2.42 1 20			
Manganese	6.05 5.92	2	20	
Batch number: 171300705008A Arsenic	Sample number(s): 8977629, 8977632, 8977636 BKG: 8977629 0.0306 0.0325 6 20			
	mg/l	mg/l		
Batch number: 17125105106A Nitrite Nitrogen	Sample number(s): 8977633 BKG: P977708 0.050 U 0.050 U 0 (1) 20			
Batch number: 17130667602B Total Organic Carbon	Sample number(s): 8977633 BKG: P982404 1.0 U 1.0 U 0 (1) 9			
Batch number: 17135106104A Nitrate Nitrogen	Sample number(s): 8977633 BKG: P987462 2.44 2.44 0 10			
Batch number: 17135118102A	Sample number(s): 8977633 BKG: P988555			

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/18/2017 09:44

Group Number: 1797829

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Total Nitrite/Nitrate Nitrogen	3.99	3.98	0	10
Batch number: 17135972215A	Sample number(s): 8977633 BKG: P977981			
Chloride	54.32	54.4	0 (1)	15
Sulfate	5.0 U	5.0 U	0 (1)	15
	mg/l	mg/l		
Batch number: 17129400101B	Sample number(s): 8977633 BKG: P978337			
Chemical Oxygen Demand	23.24	23.24	0 (1)	9
Batch number: 17137003201A	Sample number(s): 8977633 BKG: P978471			
Ammonia-Nitrogen	0.120	0.130	8 (1)	11

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260C Boeing 69

Batch number: H171302AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8977628	100	99	102	99
8977633	99	103	102	101
8977635	100	100	101	100
8977637	98	102	107	97
Blank	105	102	101	99
LCS	101	103	101	103
LCSD	99	99	103	102
Limits:	77-114	74-113	77-110	78-110

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Boeing Chain of Custody



Lancaster
Laboratories

Acct. # 1349

For Eurofins Lancaster Laboratories use only
Group # 179829 Sample # 8977628-37
Please print. Instructions on reverse side correspond.

1 Client Information					4 Analyses Requested					5 Remarks/Comments				
Site Location:	Belleue, Washington				Dissolved Metals (45) (200.8)	Dissolved Metals (Fe/Mn) (6010B)	VOCs (Boeing 69) (8260C)	Chloride/Sulfate (300.0)	Nitrate Nitrogen (353.2)	Total Nitrate/Nitrite Nitrogen (353.2)	COD (410.4)	Ammonia Nitrogen (SN-4500-NH3)	TOC (SN-5310-C-2000)	
Site Project:	Eastgate Landfill				X	X	X	X	X	X	X	X		
Site Program/#:	025217.099.049				X	X	X	X	X	X	X	X		
Boeing PM:	Lindsey Markt				X	X	X	X	X	X	X	X		
Consultant Contact:	Chris Kimmel				X	X	X	X	X	X	X	X		
Report To:	Lindsey Markt & Chris Kimmel				X	X	X	X	X	X	X	X		
Invoice To:	<input checked="" type="checkbox"/> Boeing EHS		<input type="checkbox"/> Other (specify): _____		X	X	X	X	X	X	X	X		
Sampler:	Devan Brandt		# of Coolers: 1		X	X	X	X	X	X	X	X		
2 Sample Identification		Collected		3 Matrix	No. of Containers									
		Date	Time			X	X	X	X	X	X	X	X	X
EL-100-170504	5-4-17 0800		AQ	4	X	X	X	X	X	X	X	X		
EL-106R-170504	5-4-17 0930		AQ	1	X	X	X	X	X	X	X	X		
EL-105-170504	5-4-17 1100		AQ	1	X	X	X	X	X	X	X	X		
FrenchDrain - 100ft	5-4-17 1230		AQ	12	X	X	X	X	X	X	X	X		
EL-103-170504	5-4-17 1145		AQ	4	X	X	X	X	X	X	X	X		
TripBlanks	---		AQ	2	X	X	X	X	X	X	X	X		
6 Turnaround Time Requested (please circle)														
Standard	5 day	4 day	Relinquished by: <i>Glanhart</i>		Date/Time: <i>5-4-17 1315</i>	Received by: <i>/</i>	Date/Time: <i>/</i>							
72 hour	48 hour	24 hour	Relinquished by: <i>/</i>		Date/Time: <i>/</i>	Received by: <i>/</i>	Date/Time: <i>/</i>							
Date needed: _____			Relinquished by commercial carrier (circle): UPS <input checked="" type="radio"/> FedEx <input type="radio"/> Other: <i>/</i>		Temperature upon Receipt: <i>2-7 °C</i>									
					Custody Seals Intact?: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									

Sample Administration
Receipt Documentation Log

Doc Log ID: 182862

Group Number(s): 1798515/17(3)
1797829

Client: Boeing

Delivery and Receipt Information

Delivery Method:	<u>Fed Ex</u>	Arrival Timestamp:	<u>05/05/2017 9:45</u>
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Timothy Cubberley (6520) at 13:55 on 05/05/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.7	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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APPENDIX B

Laboratory Data Quality Evaluation

Technical Memorandum

TO: Project File
FROM: Kristi Schultz
DATE: June 1, 2017
RE: **Boeing Former Eastgate Landfill**
May 4, 2017 Interim Groundwater Monitoring Sample Results
Laboratory Data Quality Evaluation

This technical memorandum provides the results of a data quality evaluation for five groundwater samples and one trip blank collected at the former Eastgate Landfill on May 4, 2017. A data quality evaluation was performed for the following analyses:

- Volatile organic compounds (VOCs; US Environmental Protection Agency [EPA] Method SW8260C)
- Dissolved metals (EPA Method 200.8 Rev 5.4 [arsenic] and Method SW6010B [iron and manganese])
- Ammonia as nitrogen (EPA Method SM 4500-NH3 D-1997)
- Total Organic Carbon (TOC; Method SM 5310 C-2000)
- Chemical Oxygen Demand (COD; EPA Method 410.4)
- Chloride and sulfate (EPA Method 300.0)
- Nitrate as nitrogen, Nitrite as nitrogen, and total Nitrite/Nitrate as Nitrogen (EPA Method 353.2).

All of the above analyses were performed by Eurofins Lancaster Laboratories Environmental, LLC (LLI) located in Lancaster, Pennsylvania. This data quality evaluation covers LLI data package 1797829.

The Stage 2A verification and validation check was conducted in accordance with the Confirmational Groundwater Monitoring Former Eastgate Landfill Work Plan (LAI 2002), and with guidance from applicable portions of the EPA Contract Laboratory Program National Functional Guidelines for Organic (EPA 2016b) and Inorganic Data Review (EPA 2016a).

The Stage 2A verification and validation check for each laboratory data package included the following:

- Verification that the laboratory data package contained all necessary documentation (including chain-of-custody records; identification of samples received by the laboratory; date and time of receipt of the samples at the laboratory; sample conditions upon receipt at the laboratory; date and time of sample analysis; and, if applicable, date of extraction, definition of laboratory data qualifiers, all sample-related quality control data, and quality control acceptance criteria).

- Verification that all requested analyses, special cleanups, and special handling methods were performed.
- Verification that quality control samples were performed as specified in the project Work Plan.
- Evaluation of sample holding times.
- Evaluation of quality control data compared to acceptance criteria, including method blanks, field trip blanks, surrogate recoveries, laboratory control sample results, and blind field duplicate pair relative percent differences (RPD).
- Evaluation of reporting limits compared to target reporting limits specified in the project Work Plan.

Data validation qualifiers are added to sample results based on the evaluation of data quality. The absence of a data qualifier indicates that the data is acceptable without qualification. All sample results are acceptable without qualification. The data quality evaluation is summarized below.

Laboratory Data Package Completeness

Each laboratory data package contained a signed chain-of-custody, a cooler receipt form documenting the condition of the samples upon receipt at the laboratory, a cooler temperature compliance form, sample analytical results, and quality control results (method blanks, field trip blanks, surrogate recoveries, and laboratory control sample results). A case narrative identifying any complications was also provided with each laboratory data package. Definitions of laboratory qualifiers and quality control acceptance criteria were provided, as appropriate.

Sample Conditions and Analysis

The laboratory received the samples in good condition and all analyses were performed as requested. Upon receipt by LLI, the sample container information was compared to the associated chain-of-custody and the cooler temperatures were recorded. One cooler was received with a temperature of 2.7°C, which is within the EPA-recommended limit of ≤6°C.

Holding Times

For all analyses and all samples, the time between sample collection, extraction (if applicable), and analysis was determined to be within EPA- and project-specified holding times. No qualification of the data was necessary.

Blank Results

Method Blanks

At least one method blank was analyzed with each batch of samples. Target analytes were not detected at concentrations greater than reporting limits in the associated method blanks, with the following exception:

- trans-1,2-Dichloroethene was detected in the method blank associated with the VOC analysis. trans-1,2-Dichloroethene was not detected in the associated samples; therefore, no qualification of the data was necessary.

Field Trip Blanks

At least one field (trip) blank was analyzed with each batch of samples submitted to the laboratory. Target analytes were not detected at concentrations greater than the reporting limits in the associated field blanks. No qualification of the data was necessary.

Surrogate Spike Recoveries

Appropriate compounds were used as surrogate spikes. Recovery values for the surrogate spikes were within the current laboratory-specified control limits for all project samples. No qualification of the data was necessary.

Matrix Spike/Matrix Spike Duplicate/Laboratory Duplicate Results

Project-specific sample matrix spikes/matrix spike duplicates (MS/MSD) and laboratory duplicates samples were analyzed with the total metals analysis. Recoveries and relative percent differences (RPDs) for the MS/MSDs and laboratory duplicates were within the current laboratory-specified control limits. No qualification of the data was necessary.

Laboratory Control Sample (Blank Spike) Results

At least one laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) was analyzed with this batch of samples for each analysis. Recoveries and relative percent differences (RPDs) for the laboratory control samples and associated duplicates were within the current laboratory-specified control limits. No qualification of the data was necessary.

Field Duplicate Results

One blind field duplicate sample pair (EL-100/EL-103) was collected with the groundwater samples meeting the requirement specified in the work plan of one duplicate per 20 samples, but no less than one blank per sampling round. RPDs between the blind field duplicate sample and parent results were within the project-specified control limit of 20 percent. No qualification of the data was necessary.

Reporting Limits

Method and/or project-specified reporting limits were met for each sample for each analysis.

Overall Data Quality and Completeness

The completeness for this data set is 100 percent, which meets the project-specified goal of 95 percent minimum.

Data precision was evaluated through laboratory control duplicate samples, matrix spike duplicate samples, and blind field duplicate samples. Data accuracy was evaluated through laboratory control samples, matrix spikes, and surrogate spikes. Based on this Stage 2A data quality verification and validation, all of the data were determined to be acceptable. No data were rejected.

LANDAU ASSOCIATES, INC.



Kristi Schultz
Data Specialist

KES/DRJ/tam
[P:\025\089\FILERM\T\DATA\DV MEMOS\2017 MAY DV_TM.DOCX]

References

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- EPA. 2016b. National Functional Guidelines for Superfund Organic Methods Data Review. edited by Office of Superfund Remediation and Technology Innovation (OSRTI). Washington, DC: US Environmental Protection Agency.
- LAI. 2002. Work Plan, Confirmational Groundwater Monitoring, Former Eastgate Landfill, Bellevue, Washington. Edmonds, Washington: Landau Associates.