

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

August 26, 2020

Prepared for

The Boeing Company
Seattle, Washington



130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

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

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by:



Devan Brandt, LG

Senior Staff Geologist

Document reviewed by:



Dylan Frazer, LG

Project Manager

Date: August 26, 2020
Project No.: 0025089.120.110
File path: P:\025\089\FileRm\R\Annuals\2020 Annual\2020 Eastgate Annual GW Rpt_082620.docx
Project Coordinator: LL

This page intentionally left blank.

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION.....	1-1
1.1 Background.....	1-1
1.2 Site Description	1-2
2.0 GROUNDWATER MONITORING ACTIVITIES.....	2-1
2.1 Water Level Measurements	2-1
2.2 Groundwater Sampling	2-1
2.3 Groundwater Analysis	2-2
3.0 GROUNDWATER MONITORING RESULTS	3-1
3.1 Groundwater Levels	3-1
3.2 Groundwater Quality.....	3-1
4.0 SCOPE OF CONTINUED INTERIM GROUNDWATER MONITORING.....	4-1
5.0 SCHEDULE AND REPORTING	5-1
6.0 USE OF THIS REPORT.....	6-1
7.0 REFERENCES.....	7-1

FIGURES

<u>Figure</u>	<u>Title</u>
1	Vicinity Map
2	Groundwater Monitoring Locations
3	Groundwater Elevations Contours April 28, 2020

TABLES

<u>Table</u>	<u>Title</u>
1	Summary of Groundwater Elevations
2	Summary of Groundwater and Surface Water Analytical Results—2020 Annual and Historical Sampling Events
3	Summary of Groundwater and Surface Water Analytical Results for Detected Constituents for Last Four Consecutive Sampling Events
4	Groundwater Monitoring Scope

APPENDICES

<u>Appendix</u>	<u>Title</u>
A	Laboratory Data Reports
B	Laboratory Data Quality Evaluation

LIST OF ABBREVIATIONS AND ACRONYMS

µg/L.....	micrograms per liter
Advanta.....	Advanta Office Holdings
BCF.....	bioaccumulation factor
bgs.....	below ground surface
Boeing.....	The Boeing Company
City.....	City of Bellevue
COC.....	chain of custody
COD.....	chemical oxygen demand
CSF.....	cancer slope factor
Ecology.....	Washington State Department of Ecology
EPA.....	US Environmental Protection Agency
ft.....	feet
I-90.....	Interstate 90
LAI.....	Landau Associates, Inc.
LLI.....	Eurofins Lancaster Laboratories Environmental
MCL.....	maximum contaminant level
mg/L.....	milligrams per liter
NFA	no further action
PVC.....	polyvinylchloride
Schnitzer	Schnitzer Northwest LLC
SDWA	Safe Drinking Water Act
TOC	total organic carbon
VCP.....	Voluntary Cleanup Program
VOCs.....	volatile organic compounds

1.0 INTRODUCTION

This report summarizes the results of groundwater monitoring in 2020 at the former Eastgate Landfill for The Boeing Company (Boeing). The former Eastgate Landfill is located within and adjacent to the Interstate 90 (I-90) Business Park in Bellevue, Washington. 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. 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 of Bellevue (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 Office Holdings (Advanta) in 2010. Current ownership of the landfill is split between three owners: Boeing, the City, and Advanta.

Closure activities were performed at the landfill by King County, the City, and Boeing and included construction of a cover system, a groundwater monitoring network, a leachate collection system, and a landfill gas collection and control system. 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. These closure activities were conducted with oversight from the Washington State Department of Ecology (Ecology) under the Voluntary Cleanup Program (VCP; VCP Site No. NW0471) through October 2019. Ecology terminated the VCP agreement in October 2019 as activities at the site did not satisfy Ecology's VCP participation requirement of active cleanup; however, closure activities have continued in accordance with the applicable work plans since termination of the VCP agreement.

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 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 2002). The monitoring program outlined in the Ecology-approved work plan included 1 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 an NFA determination under Ecology's VCP 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 2002). 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 2006) 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, because of 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 2020. 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 previous annual reports.

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 feet (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 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 April 28, 2020.

Monitoring was conducted in accordance with the planned scope for interim groundwater monitoring presented in the 2019 annual report (LAI 2019); on-site monitoring activities were completed by LAI under Boeing's regional groundwater monitoring contract.

2.1 Water Level Measurements

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, the 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 2002), the *Further Action Groundwater Monitoring Work Plan* (LAI 2006), and the subsequent scope reduction described in the 2010 Annual Groundwater Monitoring report (LAI 2011). 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 2002).

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 2006) and the scope reductions described in the 2010 Annual Groundwater Monitoring Report (LAI 2011), 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 2020 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 April 2020 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. 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 2002). A summary of the analytical results (with data qualifiers added as appropriate) for the 2020 annual sampling event and historical events at each well are provided in Table 2. Concentrations of detected constituents in the groundwater and surface water samples for the last four sampling events (May 2017, April 2018, April 2019, and April 2020) 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 2020 sampling event are provided in Appendix A. A data quality evaluation for the 2020 sampling event is provided in Appendix B.

The groundwater analytical results for the 2020 annual sampling event are consistent with previous sampling events. At well EL-103, and at downgradient wells EL-105 and EL-106R, analytical results indicate the presence of dissolved iron and dissolved manganese at concentrations greater than the cleanup levels of 0.3 milligrams per liter (mg/L), and 0.05 mg/L, respectively. The dissolved iron concentration at well EL-103 was 25.3 mg/L, and the concentrations were 1.2 mg/L and 2.62 mg/L at downgradient wells EL-105 and EL-106R, respectively. Dissolved manganese concentrations at all three wells ranged between 2.22 mg/L and 7.97 mg/L. Dissolved arsenic was detected only at EL-103 (0.0314 mg/L); this detected concentration is greater than the cleanup level of 0.004 mg/L. Dissolved arsenic concentrations at EL-105 were below the cleanup level for the third year in a row. The detected concentration of 1,4-dichlorobenzene (2.0 micrograms per liter [$\mu\text{g}/\text{L}$]) at well EL-103 was also slightly above the cleanup level (1.8 $\mu\text{g}/\text{L}$).

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 one of the last four monitoring events. Although arsenic cleanup levels should be re-evaluated because detections may be representative of naturally occurring background concentrations, arsenic remains elevated at EL-103 above 10 µg/L.¹ 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 2020 and no change to the analyte list is recommended for 2021.

The scope for the 2021 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 2021 sampling event.

¹ The site-specific cleanup level for arsenic is 4.0 µg/L. Recently, Ecology reverted to a surface water criteria for arsenic of 10 µg/L, which is the Safe Drinking Water Act (SDWA) maximum contaminant level (MCL) for groundwater (Ecology 2016). This was done for three primary reasons: 1) there are elevated natural background concentrations of arsenic in groundwater in many areas of Washington State (Ecology 2016, page 70); 2) EPA has acknowledged that the cancer slope factor (CSF) for arsenic is unreliable (Ecology 2016, page 73); and 3) EPA's bioaccumulation factor (BCF) for arsenic should be based on inorganic arsenic (the toxic portion) rather than total arsenic (Ecology 2016, page 73).

5.0 SCHEDULE AND REPORTING

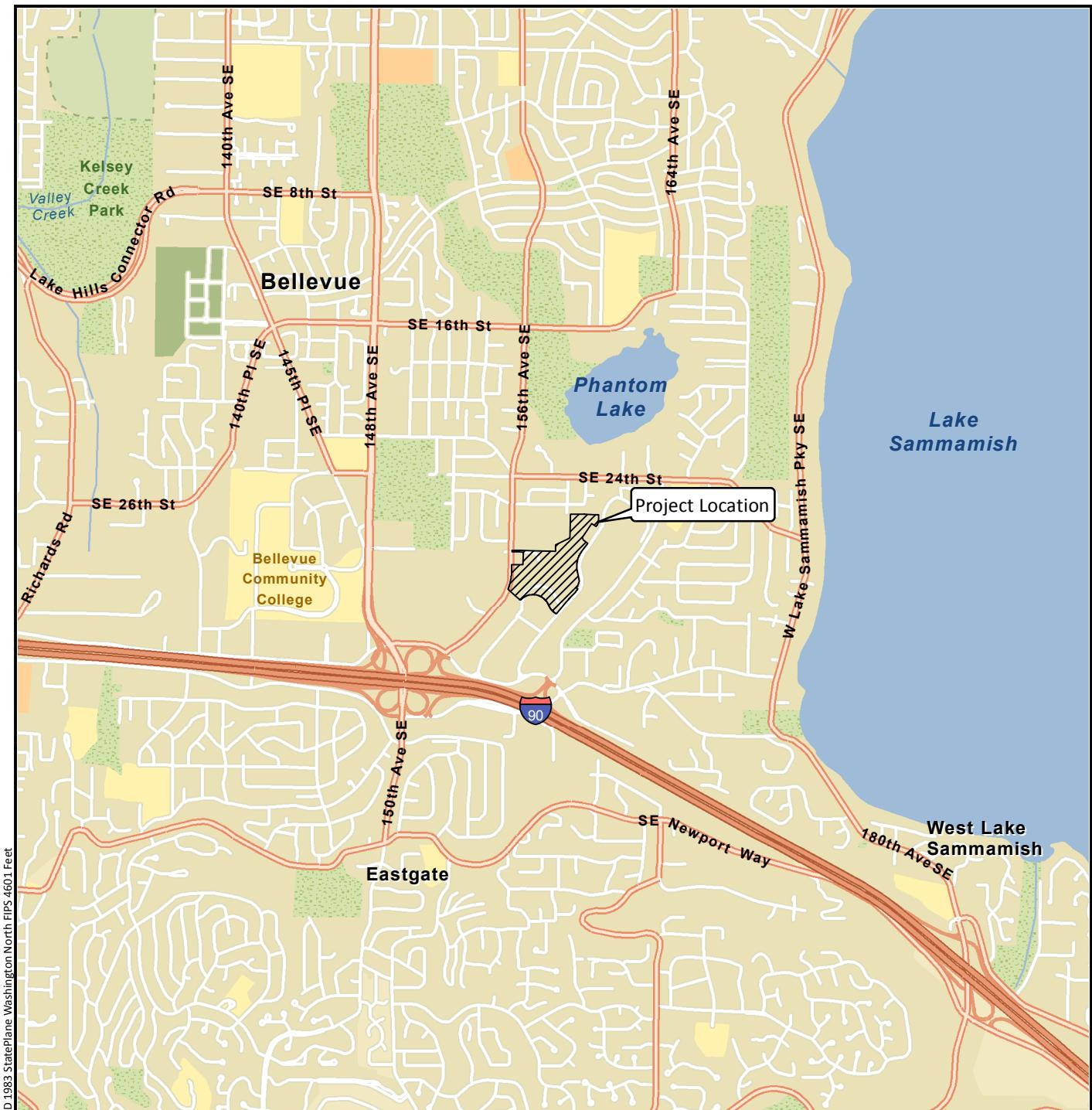
The annual groundwater monitoring will be conducted in May 2021 and, in accordance with the *Further Action Groundwater Monitoring Work Plan*, annual groundwater monitoring activities and results will be documented in a report to be retained by Boeing.

6.0 USE OF THIS REPORT

This annual report has been prepared for the exclusive use of The Boeing Company 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 LAI. 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 LAI, shall be at the user's sole risk. LAI 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.

7.0 REFERENCES

- Ecology. 2003. Letter: Re: Independent Remedial Action: Voluntary Cleanup Review, Former Eastgate Landfill, The Boeing Co., 2805 160th Ave. SE, Bellevue, WA. From Ronald W. Timm, to Remediation Manager, Energy & Environmental Affairs, The Boeing Company. January 10.
- Ecology. 2006. Letter: Re: Further Action Determination under WAC 173-340-515(5) for the following Hazardous Waste Site: Eastgate Landfill, 2805 160th Avenue SE, Bellevue, WA 98008. From Mark Adams, to The Boeing Company. August 16.
- Ecology. 2016. Draft: Natural Background Groundwater Arsenic Concentrations in Washington State. Publication No. 14-09-044. Washington State Department of Ecology.
- LAI. 2001. Report, Annual Groundwater Monitoring, Former Eastgate Landfill, Bellevue, Washington. Landau Associates, Inc. September 6.
- LAI. 2002. Work Plan, Confirmational Groundwater Monitoring, Former Eastgate Landfill, Bellevue, Washington. Landau Associates. March 13.
- LAI. 2006. Further Action Groundwater Monitoring Work Plan, Former Eastgate Landfill, Bellevue, Washington. Landau Associates, Inc. December 14.
- LAI. 2011. Annual Groundwater Monitoring Report Former Eastgate Landfill, Bellevue, Washington. Landau Associates, Inc. January 18.
- LAI. 2019. Annual Groundwater Monitoring Report, Former Eastgate Landfill, Bellevue, Washington. Landau Associates, Inc. September 5.



Data Source: Esri 2012

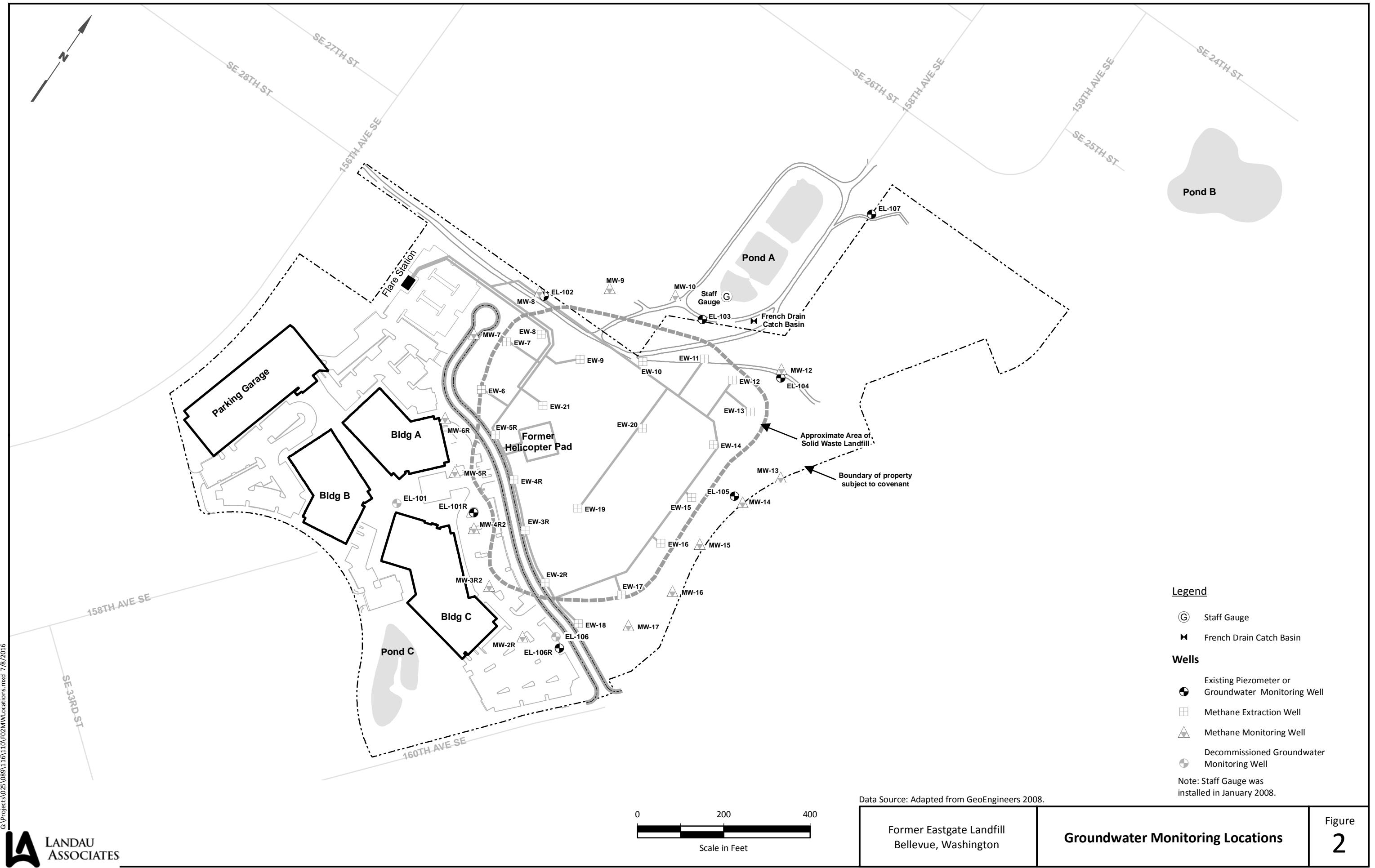
Former Eastgate Landfill
Bellevue, Washington

Vicinity Map

Figure
1



LANDAU
ASSOCIATES



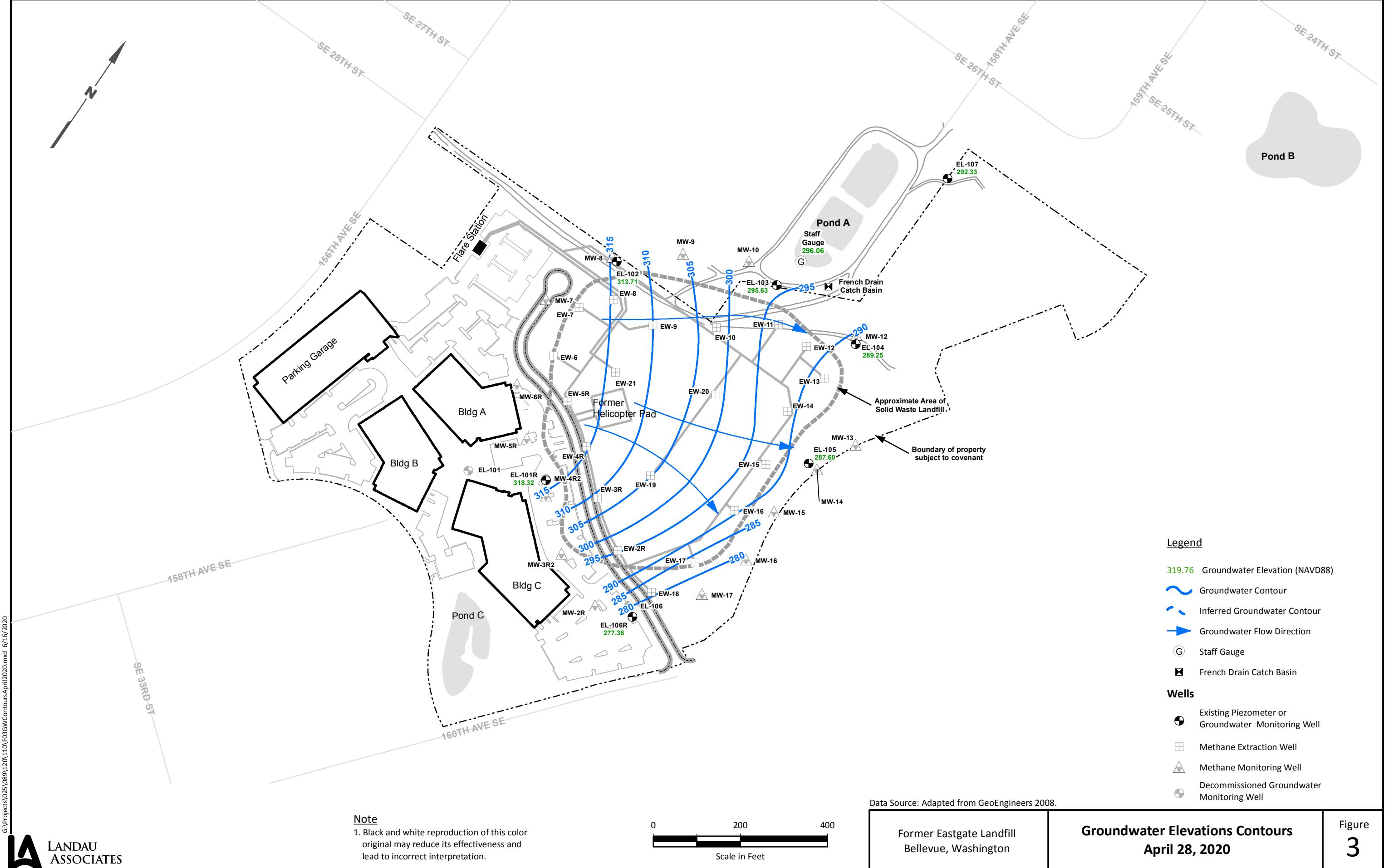


Table 1
Summary of Groundwater Elevations
Former Eastgate Landfill

Well Name	Top of Casing Elevation	Water Elevation																									
		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	5/7/2015 Water Elevation	5/13/2016 Water Elevation	5/4/2017 Water Elevation	4/26/2018 Water Elevation	4/24/2019 Water Elevation	4/28/2020 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	321.05	318.36	318.32
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	321.31	314.22	313.71
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	296.92	295.60	295.63
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	291.45	289.26	289.25
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	289.53	287.52	287.60
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	278.61	276.97	277.38
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	294.29	292.33	292.33
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	296.02	296.06	

Abbreviations and Acronyms:

NM = not measured.

-- = location does not exist on this 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
2020 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-DUP J158F J158 5/9/2006	EL-103 LT43D LT43 5/9/2006	EL-103 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
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
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
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
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
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
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
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
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	1.0 U	1.0 U	1.0 U	1.0 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
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	1.0 U	1.0 U	1.0 U	1.0 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
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	2.0 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	1.7	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
Acrolein	50 U	50 U	50 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	10 U	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 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
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
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
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
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
Bromoethane	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
Bromoform	1.0 U	1.0 U	0.5 U	0.2 U	0.5 U	0.5 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
Bromomethane	1.0 U	1.0 U	0.2 U	1.0 U	0.2 U											

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 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 5/9/2006	EL-103 LT43B LT43 10/10/2007
Dibromomethane	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	
Dichlorodifluoromethane	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Ethylbenzene	1.0 U	1.0 U	0.2 U	0.2 U	0.2	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	
Ethylene Dibromide	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	
Hexachlorobutadiene	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	
Isopropylbenzene	1.1	1.1	0.7	0.906	0.9	0.8	0.9	1.6	1.5	1.5	1.4	1.2	1.2	1.4	1.3	1.8	
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	
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	
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	
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	
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	0.4 U	0.4 U	0.4 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	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	0.4 U	0.4 U	0.4 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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	0.2	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	0.0033 U	0.010 U	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	
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	
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	
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	
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	
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	
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	
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	
N-Nitrite (mg-N/L) (353.2)	0.010 U	0.012	0.011	0.1 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															

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 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 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 5/8/2012	EL-100 EL-103-DUP 7055037 1389676 5/13/2013	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
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
Dichlorodifluoromethane	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
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
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
Isopropylbenzene	1.7	1.6	1.3	1.3	1.0	1.0	1.0	1.1	1.2	1.1	1.0	1.0	0.9	0.8	0.8	0.7
m,p-Xylene	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 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
Methyl Iodide	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	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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 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	0.2 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
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 U	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	5.0 U	5.0 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	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 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
Conventionals																
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</td											

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 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 8382532 1661845 5/13/2016	EL-103 8977635 1797829 5/4/2017	EL-100 8977628 1797829 5/4/2017	EL-103 9580974 1936930 4/26/2018	EL-100 9580972 1936930 4/26/2018	EL-103 2040573 1041948 4/24/2019	EL-100 2040573 1041950 4/24/2019	EL-103 1306499 2097790 4/28/2020	EL-100 1306501 2097790 4/28/2020	EL-105 BY07E BY07 7/28/2000	EL-105 C072C C072 12/13/2000	EL-105-SDup BOL0365-03 BOL0365 3/29/2001	EL-105 CX61E CX61 3/29/2001	EL-105-Dup CX61G CX61 3/29/2001	EL-105 DG04E EE52 6/14/2001	EL-105 EE52F ER96 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
Volatiles (µg/L; Method SW8260B/C)																					
1,1,1,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
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 UJ	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
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,1,2-Trichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,1-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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
1,1-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,2,3-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,2,3-Trichloropropane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	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
1,2,4-Trichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,2,4-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
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 UJ	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	1.0 U
1,2-Dichlorobenzene	1.6	1.6	1.3	1.4	1.2	1.2	1.4 J	1.4	1.4	1.4	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
1,2-Dichloroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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
1,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,3-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,3-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
1,4-Dichlorobenzene	2.3	2.3	2.1	2.2	2.0	2.0	2.0 J	2.0	2.0	2.1	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
2,2-Dichloropropane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
2-Butanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	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
2-Chloroethylvinylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	R	0.5 U	NA	R	R	R	R	R	0.5 U	0.5 U	NA
2-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
2-Hexanone	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	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
4-Chlorotoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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
4-Isopropyltoluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U</													

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 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 8382532 1661845 5/13/2016	EL-103 8977635 1797829 5/4/2017	EL-100 8977628 1797829 5/4/2017	EL-103 9580974 1936930 4/26/2018	EL-100 9580972 1936930 4/26/2018	EL-103 2040573 1041948 4/24/2019	EL-100 2040573 1041950 4/24/2019	EL-103-DUP 1306499 2097790 4/28/2020	EL-100 1306501 2097790 4/28/2020	EL-105 BY07E BY07 7/28/2000	EL-105 C072C C072 12/13/2000	EL-105-SDup B0L0365-03 B0L0365 3/29/2001	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
Dibromomethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Ethylene Dibromide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Hexachlorobutadiene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Isopropylbenzene	0.9	0.9	0.9	0.9	0.9	0.9	0.6 J	0.6	0.7	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
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Methyl Iodide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Methylene Chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Naphthalene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
n-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
n-Propylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
sec-Butylbenzene	0.6	0.6	0.6	0.6	0.6	0.6	0.5 UJ	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	NA
Styrene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
tert-Butylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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	NA
Toluene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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	NA
trans-1,2-Dichloroethene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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	NA
trans-1,3-Dichloropropene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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	NA
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	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	NA
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Vinyl Acetate	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	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	NA
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	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 U	0.2 U	0.2 U	0.2 U	0.2 U	NA
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 U	0.10 U	0.10 U	0.0033 U	0.010 U	NA	NA	NA
Dissolved Metals (mg/L)																					
Arsenic (7060A/200.8)	0.0329	0.0353	0.0320	0.0306	0.0362	0.0340	0.0365	0.0345	0.0314	0.0330	0.008	0.009	0.00994	0.010	0.011	0.010	0.005	0.005	0.007	0.005	0.008
Cadmium (6010)	NA	NA	NA																		

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																
	EL-105 JIS8A 5/9/2006	EL-105 LT43A 10/10/2007	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	EL-105 7055039 1389676	EL-105 7462650 1474176	EL-105 7879588 5/13/2014	EL-105 8382536 1559679	EL-105 8977632 1661845	EL-105 9580971 5/7/2015	EL-105 2040573 1797829	EL-105 2040573 5/4/2017	EL-105 1306498 4/26/2018	EL-105 1041947 4/24/2019
Volatiles (µg/L; Method SW8260B/C)																	
1,1,1,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1,2-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,3-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Chloroethylvinylether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chlorotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Methyl-2-Pentanone (MIBK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acrolein	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acrylonitrile	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromoethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date														
	EL-105 J158A 5/9/2006	EL-105 LT43A 10/10/2007	EL-105 NV83B 10/21/2008	EL-105 PE53G PE53 6/25/2009	EL-105 QW57A QW57 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-105 9580971 1936930 4/26/2018	EL-105 2040573 1041947 4/24/2019	EL-105 1306498 2097790 4/28/2020
Dibromomethane	NA	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
Ethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylene Dibromide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m,p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl Iodide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	NA	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
Dissolved Metals (mg/L)															
Arsenic (7060A/200.8)	0.006	0.004	0.0071	0.0098	0.0086	0.0048	0.0088	0.0072	0.009	0.0076	0.0020 U	0.0070	0.0023	0.0025	0.0021 U
Cadmium (6010)	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
Iron (6010B/200.8)	4.27	2.92	7.10	7.92	6.93	3.20	6.9	6.12	6.42	5.47	2.01	5.49	4.35	3.53	1.20
Manganese (6010B/200.8)	3.92	3.76	4.7	4.70	4.03	3.06	4.26	4.60	4.49	4.11	3.07	3.40	3.23	2.93	2.22
Conventionals															
Chloride (mg/L) (325.2, 300.0)	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
N-Nitrate (mg-N/L) (calc.)	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
Nitrate + Nitrite (mg-N/L) (353.2)	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
Chemical Oxygen Demand (mg/L) (410.4)	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
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
Maximum (c)	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Field Parameters															
pH	6.1	6.92	6.16	6.88	6.63	6.08	5.22	5.54	6.43	6.17	6.21	6.16	6.07	6.21	6.25
Temperature (°C)	13.7	14.3	13.6	13.9	15.4	13.9	13.5	13.5	13.3	14.0	15.4	14.1	13.9	14.8	14.3
Specific Conductivity (µS)	285	271	347	66	8	303	339	273	274	251	248	332	251	255	196

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
	EL-106 BY07F BY07 7/28/2000	EL-106 CO72B CO72 12/13/2000	EL-106-SDup B0L0318-03 B0L0365 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	EL-106 FK21B FK21 4/17/2003	EL-106 GN17E GN17 4/8/2004	EL-106 IA68B IA68 5/9/2005	EL-106-DUP IA68F IA68 5/9/2005	EL-106 JIS8B JIS8 5/9/2005	EL-106R LT21B LT21 10/10/2007	EL-106R NV83A NV83 10/21/2008	EL-106R PE53E PE53 6/24/2009	EL-106R QW57B QW57 5/13/2010	EL-106R SY24D SY24 5/23/2011	EL-106R 6644940 1307589 5/8/2012
Dibromomethane	1.0 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
Dichlorodifluoromethane	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	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
Ethylene Dibromide	1.0 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
Hexachlorobutadiene	5.0 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
Isopropylbenzene	1.0 U	0.2 U	0.5 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
m,p-Xylene	1.0 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl Iodide	1.0 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
Methylene Chloride	2.0 U	0.3 U	5.0 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	5.0 U	1.0	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	1.0 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
n-Propylbenzene	1.0 U	0.2 U	0.5 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
o-Xylene	1.0 U	0.2 U	0.25 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
sec-Butylbenzene	1.0 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
Styrene	1.0 U	0.2 U	0.5 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
tert-Butylbenzene	1.0 U	0.2 U	0.5 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
Tetrachloroethene	1.0 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
Toluene	1.0 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
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	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	5.0 U	1.0 U	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
Trichloroethene	1.0 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
Trichlorofluoromethane	1.0 U	0.2 U	0.5 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 Acetate	5.0 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
Vinyl Chloride	1.0 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
Pesticides (µg/L; Method 8081A)																		
Dieldrin	0.10 U	0.10 U	0.07 U	0.10 U	0.10 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)	0.006	0.008	0.00912	0.007	0.008	0.001	0.002	0.002	0.001	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (6010)	0.002 U	0.002 U	0.001 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	NA
Chromium (6010)	0.005 U	0.005 U	0.00169	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
Iron (6010B/200.8)	1.52	8.71	8.88	7.15	6.97	0.46	3.47	3.41	0.12	1.13	1.37	1.29	0.25	2.12	2.13	2.54	2.69	3.39
Manganese (6010B/200.8)	5.56	11.3	9.77	10.4	8.00	0.621	4.55	4.08	0.550	2.18	2.15	0.079	6.43	8.3	8.59	6.48	7.39	8.28
Conamentals																		
Chloride (mg/L) (325.2, 300.0)	8.0	18	18.5	8.7	4.5	3.4	8.9	7.4	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	2.7	4.1	5.83	4.3	4.1	0.20	0.46	1.7	0.277	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrate (mg-N/L) (calc.)	2.2	0.20	0.393	0.072	0.073	3.0	1.3	1.1	1.98	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrite (mg-N/L) (353.2)	0.022	0.021	0.1 U	0.021	0.010 U	0.012	0.010 U	0.010 U	0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate + Nitrite (mg-N/L) (353.2)	2.3	0.22	NA	0.093	0.073	3.0	1.3	1.1	2.00	NA	NA	NA						

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
	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 5/7/2016	EL-106R 8977630 1797829 5/4/2017	EL-106R 9580970 2040573 4/26/2018	EL-106R 1306497 1041946 4/24/2019	French Drain CB90 C90 9/1/2000	French Drain C072E C072 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 J158E J158 5/9/2006
Volatiles (µg/L; Method SW8260B/C)																		
1,1,1,2-Tetrachloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1,1-Trichloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA	NA	NA	NA	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
1,1,2-Trichloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1-Dichloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1-Dichloroethene	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	0.4 U	0.4 U	0.2 U	0.2 U
1,1-Dichloropropene	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	0.4 U	0.4 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	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
1,2,3-Trichloropropane	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	1.0 U	1.0 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	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
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	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
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	NA	NA	NA	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
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	1.0 J	1.8	0.9	1.9	1.6	0.2 U	1.7	1.3	1.7	1.8	1.3
1,2-Dichloroethane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,2-Dichloropropane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	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	0.4 U	0.4 U	0.2 U	0.2 U
1,3-Dichlorobenzene	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	0.4 U	0.4 U	0.2 U	0.2 U
1,3-Dichloropropane	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	0.4 U	0.4 U	0.2 U	0.2 U
1,4-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	3.8	7.0	5.6	8.8	7.0	0.2 U	6.6	6.3	8.3	8.6	6.0
2,2-Dichloropropane	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	0.4 U	0.4 U	0.2 U	0.2 U
2-Butanone	NA	NA	NA	NA	NA	NA	NA	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-Chloroethylvinylether	NA	NA	NA	NA	NA	NA	NA	5.0 U	0.5 U	R	R	R	R	R	0.5 U	1.0 U	1.0 U	0.5 U
2-Chlorotoluene	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	0.4 U	0.4 U	0.2 U	0.2 U
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	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
4-Chlorotoluene	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	0.4 U	0.4 U	0.2 U	0.2 U
4-Isopropyltoluene	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	0.4 U	0.4 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)	NA	NA	NA	NA	NA	NA	NA	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
Acetone	NA	NA	NA	NA	NA	NA	NA	10	1.0 U	1.0 U	1.0 U	2.4	3.1	4.5	4.3	4.4	3.3	2.7 U
Acrolein	NA	NA	NA	NA	NA	NA	NA	50 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
Acrylonitrile	NA	NA	NA	NA	NA	NA	NA	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
Benzene	NA	NA	NA	NA	NA	NA	NA	2.2	6.0	3.3	6.6	4.0	0.2 U	4.3	3.5	5.2	5.2	3.8
Bromobenzene	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	0.4 U	0.4 U	0.2 U	0.2 U
Bromochloromethane	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	0.4 U	0.4 U	0.2 U	0.2 U
Bromodichloromethane	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	0.4 U	0.4 U	0.2 U	0.2 U
Bromoethane	NA	NA	NA	NA	NA	NA	NA	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
Bromoform	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.4 U			

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Laboratory Sample ID, Lab Data Package ID, and Sample Date																	
	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	EL-106R 9580970 1041946 4/26/2018	EL-106R 2040573 1029790 4/24/2019	EL-106R 1306497 12/13/2000	French Drain CB90 3/29/2001	French Drain C072E C072 6/14/2001	French Drain CX61H CX61 3/18/2002	French Drain DG04H 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 J158E J158 5/9/2006
Dibromomethane	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	0.4 U	0.4 U	0.2 U	0.2 U
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	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	0.4 U	0.4 U	0.2 U	0.2 U
Ethylene Dibromide	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	0.4 U	0.4 U	0.2 U	0.2 U
Hexachlorobutadiene	NA	NA	NA	NA	NA	NA	NA	NA	5.0 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
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	3.1	1.4	3.3	3.3	0.2 U	2.1	2.3	2.8	3.0
m,p-Xylene	NA	NA	NA	NA	NA	NA	NA	NA	1.0 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
Methyl Iodide	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	0.4 U	0.4 U	0.2 U	0.2 U
Methylene Chloride	NA	NA	NA	NA	NA	NA	NA	NA	2.0 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
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	4.7 J	18	5.1	17	17	0.5 U	12	9.9	12	11
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.8	0.4	1.1	1.2	0.2 U	0.7	0.6 M	0.9	1.0
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	2.4	1.1	3.0	3.6	0.2 U	1.8	2.3	2.6	2.8
o-Xylene	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	0.4 U	0.4 U	0.2 U	0.2 U
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	1.1	0.7	1.3	1.4	0.2 U	0.9	1.0	1.2	1.3
Styrene	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	0.4 U	0.4 U	0.2 U	0.2 U
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA	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
Tetrachloroethene	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	0.4 U	0.4 U	0.2 U	0.2 U
Toluene	NA	NA	NA	NA	NA	NA	NA	NA	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
trans-1,2-Dichloroethene	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	0.4 U	0.4 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	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	0.4 U	0.4 U	0.2 U	0.2 U
trans-1,4-Dichloro-2-butene	NA	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U
Trichloroethene	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	0.4 U	0.4 U	0.2 U	0.2 U
Trichlorofluoromethane	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	0.4 U	0.4 U	0.2 U	0.2 U
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	5.0 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
Vinyl Chloride	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.2 U	0.2 U	0.2	0.2	0.2 U	0.4 U	0.4 U	0.2 U	0.2
Pesticides (µg/L; Method 8081A)																		
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	0.10 U	0.10 U	0.10 U	0.10 U	0.0033 U	0.0033 U	0.010 U	NA	NA	NA
Dissolved Metals (mg/L)																		
Arsenic (7060A/200.8)	NA	NA	NA	NA	NA	NA	NA	NA	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
Cadmium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	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
Chromium (6010)	NA	NA	NA	NA	NA	NA	NA	NA	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
Iron (6010B/200.8)	2.49	2.75	2.04	2.01	2.40	1.94	1.97	2.62	2.76	35.1	35.9	42.8	45.8	0.76	15.8	38.9	62.9	66.7
Manganese (6010B/200.8)	7.85	6.74	6.36	6.52	6.05	7.02	6.62	7.97	0.361	0.645	0.767	0.575	0.719	1.35	0.385	0.700	0.777	0.812
Conamentals																		
Chloride (mg/L) (325.2, 300.0)	NA	NA	NA	NA	NA	NA	NA	NA	76	22	12	25	8.8	1.7	61	8.7	12.4	11.6
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	NC	NC	NC	NC	NC	NC	NC	NC	100	61	33	60	28	0.67	100	38	46.3	46.4
N-Nitrate (mg-N/L) (calc.)	NA	NA	NA	NA	NA	NA	NA	NA	0.72	0.021	0.010 U	0.010	0.010 U	0.34	0.031	0.012	0.010 U	0.050 U
N-Nitrite (mg-N/L) (353.2)	NA	NA	NA	NA	NA	NA	NA	NA	0.05	0.035	0.038	0.043	0.070	0.010 U	0.052	0.032	0.075	

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Table 2
Summary of Groundwater and Surface Water Analytical Results
2020 Annual and Historical Sampling Events
Former Eastgate Landfill

Analyte	Sample Location, Lab ID, Lab Data Package ID, and Sample Date															
	French Drain LT21A 10/10/2007	French Drain NV83E 10/21/2008	French Drain PE53A 6/24/2009	French Drain QW57E 5/14/2010	French Drain SY24E 05/23/2011	French Drain 6644941 1307589	French Drain 7055033 1389676	French Drain 7462653 1474176	French Drain 7879586 5/8/2012	French Drain 8382539 5/13/2013	French Drain 8977633 5/7/2015	French Drain 9580976 1661845	French Drain 2040573 5/4/2017	French Drain 2040573 1936930	French Drain 1041952 4/26/2018	French Drain 1306503 4/24/2019
Dibromomethane	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	0.5 U	0.5 U	
Dichlorodifluoromethane	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	0.5 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	
Ethylene Dibromide	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	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	
Isopropylbenzene	0.2	0.6	3.0	2.6	1.9	1.9	2.5	2.2	2.2	2.0	1.6	1.5	1.2	1.3		
m,p-Xylene	0.4 U	1.1	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	0.5 U	0.5 U	
Methyl Iodide	0.2 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	0.5 U	0.5 U	
Methylene Chloride	0.3 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	1.6 J	11	7.5	3.6	3.3	4.1	2.9	2.5	1.3	0.8	0.8	0.5 U	0.5 U		
n-Butylbenzene	0.2 U	0.7	0.9	0.6	0.6	0.8	0.7	0.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
n-Propylbenzene	0.2	1.1	2.7	2.8	1.9	2.3	1.9	1.9	1.5	1.4	1.3	1.0	1.1			
o-Xylene	0.2 U	1.0	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	
sec-Butylbenzene	0.2 U	0.4	1.3	1.2	0.9	0.9	1.2	1	1.1	0.9	0.8	0.8	0.7	0.7		
Styrene	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	0.5 U	0.5 U	
tert-Butylbenzene	0.2 U	0.2 U	0.3	0.2	0.2	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	
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	
Toluene	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	0.2	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	
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	
trans-1,4-Dichloro-2-butene	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	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	
Trichlorofluoromethane	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	0.5 U	0.5 U	
Vinyl Acetate	0.2 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	0.5 U	0.5 U	
Vinyl Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.5	0.3	0.2 U	0.4	
Pesticides (µg/L; Method 8081A)																
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dissolved Metals (mg/L)																
Arsenic (7060A/200.8)	0.001	0.0006	0.0016	0.0017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium (6010)	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	
Iron (6010B/200.8)	2.0	3.86	60.6	62.5	54.1	48.6	65.1	53.1	60.9	62.7	55.2	59.3	55.4	55.1		
Manganese (6010B/200.8)	0.352	0.373	0.629	0.748	0.835	0.668	0.747	0.778	0.657	0.600	0.777	0.908	0.673	0.654		
Conamentals																
Chloride (mg/L) (325.2, 300.0)	21.7	28.1	12.0	8.5	5.2	5.9	8.0	5.7	6.5	12.6	6.7	6.6	4.3	8.2		
N-Ammonia (mg-N/L) (350.1M, SM4500-NH3D)	40.8	70.9	45.7	34.1	24.9	25.4	30.2	24.9	43.8	47.8	25.3	24.7	34.7	36.4		
N-Nitrate (mg-N/L) (calc.)	0.225	0.177	0.500 U	0.500 U	0.500 U	0.100 U	0.060	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U		
N-Nitrite (mg-N/L) (353.2)	0.012	0.111	0.500 U	0.500 U	0.100 U	0.073	0.070	0.065	0.18	0.089	0.10	0.050 U	0.050 U	0.050 U		
Nitrate + Nitrite (mg-N/L) (353.2)	0.237 J	0.288	0.500 U	0.500 U	0.500 UJ	0.10 U	0.13	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U		
Sulfate (mg/L) (375.2, 300.0)	537	24.5	9.5	14.1	0.6	2.1	1.0 U	3.0	1.8	1.2	1.8	4.2	10.3	5.8		
Chemical Oxygen Demand (mg/L) (410.4)	NA	57.1	48.3	40.1	43.5	55.5	59.4	50.0 U	50.0 U	64.7	50.0 U	50.0 U	50.0 U	75.0 U		
Total Organic Carbon (mg/L) (415.1, SM5310C)	14.9	19.2	16.1	13.0	13.7	24.4	17.9	12.8	14.0	14.2	10.6	9.8	10.6	11.6		
Un-ionized Ammonia (µg NH ₃ /L) (a)																
Minimum (b)	16.1	28.0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC		
Maximum (c)	14,800	25,700	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC		
Field Parameters																
pH	7.41	7.75	6.96	7.65	7.09	5.91	6.42	7.32	6.35							

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 8977635 1797829 5/4/2017	EL-100 EL-103-DUP 8977628 1797829 5/4/2017	EL-103 9580974 1936930 4/26/2018	EL-100 EL-103-DUP 9580972 1936930 4/26/2018	EL-103 2040573 1041948 4/24/2019	EL-100 EL-103-DUP 2040573 1041950 4/24/2019	EL-103 1306499 2097790 4/28/2020	EL-100 EL-103-DUP 1306501 2097790 4/28/2020	EL-105 8977632 1797829 5/4/2017	EL-105 9580971 1936930 4/26/2018	EL-105 2040573 1041947 4/24/2019	EL-105 1306498 2097790 4/28/2020	EL-106R 8977630 1797829 5/4/2017	EL-106R 9580970 1936930 4/26/2018	EL-106R 2040573 1041946 4/24/2019	EL-106R 1306497 2097790 4/28/2020		
Volatiles (µg/L; Method SW8260B/C)																			
1,2-Dichlorobenzene	600	1.3	1.4	1.2	1.2	1.4 J	1.4	1.4	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	1.8	2.1	2.2	2.0	2.0	2.0 J	2.0	2.1	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	5	1.6	1.6	1.4	1.5	1.6 J	1.6	1.5	1.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	100	23	23	20	20	22 J	22	22	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	1600	0.9	0.9	0.9	0.9	0.6 J	0.6	0.7	0.7	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 UJ	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 UJ	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 UJ	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	--	0.6	0.6	0.5 U	0.5	0.5 UJ	0.5 U	0.5 U	0.5 U	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 UJ	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 UJ	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	0.0320	0.0306	0.0362	0.0340	0.0365	0.0345	0.0314	0.0330	0.0070	0.0023	0.0025	0.0021 U	NA	NA	NA	NA	NA	NA
Iron (6010B/200.8)	0.3	24.1	23.7	24.1	24.3	25.5	23.3	25.3	25.4	5.49	4.35	3.53	1.2	2.40	1.94	1.97	2.62		
Manganese (6010B/200.8)	0.05	3.82	3.81	3.85	3.91	3.75	3.50	3.76	3.71	3.40	3.23	2.93	2.22	6.05	7.02	6.62	7.97		
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	--	6.43	6.43	6.41	6.42	6.42	6.42	6.43	6.43	6.16	6.07	6.21	6.25	NA	6.45	6.55	6.77		
Temperature (°C)	--	12.4	12.4	15.6	15.7	13.6	13.7	13.5	13.5	14.1	13.9	14.8	14.3	NA	14.3	13.8	14.1		
Specific Conductivity (µS)	--	1,430	1,433	1,164	1,165	1,085	1,086	1,080	1,067	332	251	255	196	NA	555	538	498.5		

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, Lab Sample ID, Lab SDG, and Sample Date			
		French Drain 8977633 1797829	French Drain 9580976 1936930	French Drain 2040573 1041952	French Drain 1306503 2097790
		5/4/2017	4/26/2018	4/24/2019	4/28/2020
Volatiles (µg/L; Method SW8260B/C)					
1,2-Dichlorobenzene	600	0.9	0.9	0.9	1
1,4-Dichlorobenzene	1.8	3.1	3.2	3.1	3.7
Benzene	5	0.9	0.8	0.6	0.7
Chlorobenzene	100	16	16	16	18
cis-1,2-Dichloroethene	70	0.4	0.6	0.2 U	0.3
Isopropylbenzene	1600	1.6	1.5	1.2	1.3
Naphthalene	320	0.8	0.8	0.5 U	0.5 U
n-Butylbenzene	--	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	--	1.4	1.3	1.0	1.1
sec-Butylbenzene	--	0.8	0.8	0.7	0.7
Toluene	1000	0.2	0.2 U	0.2 U	0.2 U
Vinyl Chloride	0.8	0.5	0.3	0.2 U	0.4
Dissolved Metals (mg/L)					
Arsenic (7060A/200.8)	0.004	NA	NA	NA	NA
Iron (6010B/200.8)	0.3	55.2	59.3	55.4	55.1
Manganese (6010B/200.8)	0.05	0.777	0.908	0.673	0.654
Conventionals					
Chloride (mg/L) (325.2, 300.0)	230	6.7	6.6	4.3	8.2
N-Ammonia (mg-N/L) (350.1M, SM4500NH3D)	--(b)	25.3	24.7	34.7	36.4
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	0.10	0.050 U	0.050 U	0.050 U
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	1.8	4.2	10.3	5.8
Chemical Oxygen Demand (mg/L) (410.4)	--	50.0 U	50.0 U	50.0 U	75.0 U
Total Organic Carbon (mg/L) (415.1, SM5310C)	--	10.6	9.8	10.6	11.6
Field Parameters					
pH	--	6.43	6.38	6.35	6.43
Temperature (°C)	--	12.0	12.1	11.5	11.6
Specific Conductivity (µS)	--	859	647	692	760

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

Notes:

- (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.

Abbreviations and Acronyms:

VOCs = volatile organic compounds

APPENDIX A

Laboratory Data Reports



ANALYSIS REPORT

Prepared by:

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

Prepared for:

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

Report Date: May 12, 2020 17:38

Project: Boeing Eastgate Landfill

Account #: 13419
Group Number: 2097790
State of Sample Origin: WA

Electronic Copy To Landau
Electronic Copy To The Boeing Company

Attn: Chris Kimmel
Attn: Jennifer Parsons

Respectfully Submitted,



Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/>. Historical copies may be requested through your project manager.



SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
EL-106R-200428 Dissolved Metals Water	04/28/2020 10:25	1306497
EL-105-200428 Dissolved Metals Water	04/28/2020 12:05	1306498
EL-103-200428 Water	04/28/2020 12:35	1306499
EL-103-200428 Dissolved Metals Water	04/28/2020 12:35	1306500
EL-100-200428 Water	04/28/2020 12:40	1306501
EL-100-200428 Dissolved Metals Water	04/28/2020 12:40	1306502
FrenchDrain-200428 Water	04/28/2020 13:20	1306503
FrenchDrain-200428 Dissolved Metals Water	04/28/2020 13:20	1306504
Trip Blanks Water	04/28/2020	1306505

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

Project Name: Boeing Eastgate Landfill
ELLE Group #: 2097790

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 8260C 25mL purge, GC/MS Volatiles**

Sample #s: 1306499, 1306501, 1306503, 1306505

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The Analyte(s) exceeding 20% Drift is not detected in this sample.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
Acrylonitrile	27
2-Butanone	23
4-Methyl-2-pentanone	27
2-Hexanone	29
trans-1,4-Dichloro-2-butene	26
1,2-Dibromo-3-chloropropane	24

Preservation requirements were not met. The sample was received at pH <2 which is not the preservation specified for acrolein or acrylonitrile under the referenced method. The preservation criteria is pH of 4-5.

EPA 200.8 rev 5.4, Metals Dissolved

Batch #: 201211511601A (Sample number(s): 1306498 UNSPK: 1306498 BKG: 1306498)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Arsenic

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Arsenic

SW-846 6010D Rev.4, July 2014, Metals Dissolved

Batch #: 201211486601 (Sample number(s): 1306497-1306498, 1306500, 1306502, 1306504 UNSPK: 1306497 BKG: 1306497)

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

EPA 410.4, Wet Chemistry

Batch #: 20127400101B (Sample number(s): 1306503 UNSPK: 1306503 BKG: 1306503)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Chemical Oxygen Demand

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: EL-106R-200428 Dissolved Metals Water
Boeing Eastgate Landfill**The Boeing Company**
ELLE Sample #: WW 1306497
ELLE Group #: 2097790
Matrix: Water**Project Name:** Boeing Eastgate Landfill**Submittal Date/Time:** 04/29/2020 10:35
Collection Date/Time: 04/28/2020 10:25

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	Metals Dissolved	SW-846 6010D Rev.4, July 2014	mg/l	mg/l	
01754	Iron	7439-89-6	2.62	0.206	1
07058	Manganese	7439-96-5	7.97	0.0103	1

Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:22	Patrick J Engle	1
07058	Manganese	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:22	Patrick J Engle	1
14866	ICP filtered no-digest SW-846	SW-846 3005A	1	201211486601	04/30/2020 11:00	James L Mertz	1

Sample Description: EL-105-200428 Dissolved Metals Water
Boeing Eastgate Landfill**The Boeing Company**
ELLE Sample #: WW 1306498
ELLE Group #: 2097790
Matrix: Water**Project Name:** Boeing Eastgate LandfillSubmittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:05

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	Metals Dissolved				
06025	Arsenic	EPA 200.8 rev 5.4 7440-38-2	mg/l 0.0021 U	mg/l 0.0021	1
		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	
01754	Iron	7439-89-6	1.20	0.206	1
07058	Manganese	7439-96-5	2.22	0.0103	1

Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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	201211511601A	05/01/2020 19:53	Patrick J Engle	1
01754	Iron	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:42	Patrick J Engle	1
07058	Manganese	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:42	Patrick J Engle	1
15116	ICPMS filtered no-digest 200.8	EPA 200.8 rev 5.4	1	201211511601	04/30/2020 10:45	James L Mertz	1
14866	ICP filtered no-digest SW-846	SW-846 3005A	1	201211486601	04/30/2020 11:00	James L Mertz	1

Sample Description: EL-103-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306499
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:35

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260C 25mL purge	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	1.5	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	0.5 U	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	22	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	2.0	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	0.7	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

Sample Description: EL-103-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306499
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:35

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL purge	ug/l		ug/l	
11996	Naphthalene	91-20-3	0.5	U	0.5	1
11996	n-Propylbenzene	103-65-1	0.5	U	0.5	1
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-Trichloroproppane	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

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The Analyte(s) exceeding 20% Drift is not detected in this sample.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
Acrylonitrile	27
2-Butanone	23
4-Methyl-2-pentanone	27
2-Hexanone	29
trans-1,4-Dichloro-2-butene	26
1,2-Dibromo-3-chloropropane	24

Preservation requirements were not met. The sample was received at pH <2 which is not the preservation specified for acrolein or acrylonitrile under the referenced method. The preservation criteria is pH of 4-5.

Sample Comments

State of Washington Lab Certification No. C457

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 25mL purge	1	H201252AA	05/04/2020 11:39	Jennifer K Howe	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: EL-103-200428 Water
Boeing Eastgate Landfill**The Boeing Company**
ELLE Sample #: WW 1306499
ELLE Group #: 2097790
Matrix: Water**Project Name:** Boeing Eastgate LandfillSubmittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:35**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H201252AA	05/04/2020 11:38	Jennifer K Howe	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: EL-103-200428 Dissolved Metals Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306500
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:35

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved 06025	Arsenic	EPA 200.8 rev 5.4 7440-38-2	mg/l 0.0314	mg/l 0.0021	1
		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	
01754	Iron	7439-89-6	25.3	0.206	1
07058	Manganese	7439-96-5	3.76	0.0103	1

Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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	201261511601A	05/07/2020 14:16	Bradley M Berlot	1
01754	Iron	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:46	Patrick J Engle	1
07058	Manganese	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 11:46	Patrick J Engle	1
15116	ICPMS filtered no-digest 200.8	EPA 200.8 rev 5.4	1	201211511601	04/30/2020 10:45	James L Mertz	1
15116	ICPMS filtered no-digest 200.8	EPA 200.8 rev 5.4	2	201261511601	05/05/2020 12:00	Annamaria Kuhns	1
14866	ICP filtered no-digest SW-846	SW-846 3005A	1	201211486601	04/30/2020 11:00	James L Mertz	1

Sample Description: EL-100-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306501
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:40

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260C 25mL purge	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	0.5 U	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	2.1	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	0.7	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

Sample Description: EL-100-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306501
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:40

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL purge	ug/l		ug/l	
11996	Naphthalene	91-20-3	0.5	U	0.5	1
11996	n-Propylbenzene	103-65-1	0.5	U	0.5	1
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-Trichloroproppane	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

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The Analyte(s) exceeding 20% Drift is not detected in this sample.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
Acrylonitrile	27
2-Butanone	23
4-Methyl-2-pentanone	27
2-Hexanone	29
trans-1,4-Dichloro-2-butene	26
1,2-Dibromo-3-chloropropane	24

Preservation requirements were not met. The sample was received at pH <2 which is not the preservation specified for acrolein or acrylonitrile under the referenced method. The preservation criteria is pH of 4-5.

Sample Comments

State of Washington Lab Certification No. C457

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 25mL purge	1	H201252AA	05/04/2020 12:00	Jennifer K Howe	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: EL-100-200428 Water
Boeing Eastgate Landfill**The Boeing Company**
ELLE Sample #: WW 1306501
ELLE Group #: 2097790
Matrix: Water**Project Name:** Boeing Eastgate LandfillSubmittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:40**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H201252AA	05/04/2020 11:59	Jennifer K Howe	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: EL-100-200428 Dissolved Metals Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306502
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 12:40

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Metals Dissolved 06025	Arsenic	EPA 200.8 rev 5.4 7440-38-2	mg/l 0.0330	mg/l 0.0021	1
		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	
01754	Iron	7439-89-6	25.4	0.206	1
07058	Manganese	7439-96-5	3.71	0.0103	1

Sample Comments

State of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.

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	201261511601A	05/07/2020 14:23	Bradley M Berlot	1
01754	Iron	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 12:02	Patrick J Engle	1
07058	Manganese	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 12:02	Patrick J Engle	1
15116	ICPMS filtered no-digest 200.8	EPA 200.8 rev 5.4	1	201211511601	04/30/2020 10:45	James L Mertz	1
15116	ICPMS filtered no-digest 200.8	EPA 200.8 rev 5.4	2	201261511601	05/05/2020 12:00	Annamaria Kuhns	1
14866	ICP filtered no-digest SW-846	SW-846 3005A	1	201211486601	04/30/2020 11:00	James L Mertz	1

Sample Description: FrenchDrain-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306503
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 13:20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260C 25mL purge	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	0.7	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	0.7	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	18	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	1.0	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	0.5 U	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	3.7	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	0.3	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	1.3	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

Sample Description: FrenchDrain-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306503
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 13:20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260C 25mL purge	ug/l	ug/l	
11996	Naphthalene	91-20-3	0.5 U	0.5	1
11996	n-Propylbenzene	103-65-1	1.1	0.5	1
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	0.4	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

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The Analyte(s) exceeding 20% Drift is not detected in this sample.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
Acrylonitrile	27
2-Butanone	23
4-Methyl-2-pentanone	27
2-Hexanone	29
trans-1,4-Dichloro-2-butene	26
1,2-Dibromo-3-chloropropane	24

Preservation requirements were not met. The sample was received at pH <2 which is not the preservation specified for acrolein or acrylonitrile under the referenced method. The preservation criteria is pH of 4-5.

Wet Chemistry		EPA 300.0	mg/l	mg/l	
00224	Chloride	16887-00-6	8.2	2.0	5
00228	Sulfate	14808-79-8	5.8	5.0	5
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	0.10 U	0.10	1
00219	Nitrite Nitrogen	14797-65-0	0.050 U	0.050	1
14865	Nitrite/Nitrate Total	n.a.	0.10 U	0.10	1

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: FrenchDrain-200428 Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306503
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 13:20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
00273	Wet Chemistry Total Organic Carbon	SM 5310 C-2011 n.a.	mg/l 11.6	mg/l 1.0	1
04001	Chemical Oxygen Demand	EPA 410.4 n.a.	mg/l 75.0 U	mg/l 75.0	1
12677	Ammonia-Nitrogen	SM 4500-NH3 D-2011 7664-41-7	mg/l 36.4	mg/l 1.2	5

Sample Comments

State of Washington Lab Certification No. C457

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 25mL purge	1	H201252AA	05/04/2020 12:22	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H201252AA	05/04/2020 12:21	Jennifer K Howe	1
00224	Chloride	EPA 300.0	1	20125135217B	05/04/2020 21:51	Kevin Litwa	5
00228	Sulfate	EPA 300.0	1	20125135217B	05/04/2020 21:51	Kevin Litwa	5
00220	Nitrate Nitrogen	EPA 353.2	1	20123106101A	05/02/2020 09:45	Ashlynn M Cornelius	1
00219	Nitrite Nitrogen	EPA 353.2	1	20121105101A	04/30/2020 08:12	Ashlynn M Cornelius	1
14865	Nitrite/Nitrate Total	EPA 353.2	1	20129148651A	05/11/2020 15:00	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	20132667603B	05/12/2020 12:57	Drew M Gerhart	1
04001	Chemical Oxygen Demand	EPA 410.4	1	20127400101B	05/06/2020 09:31	Susan A Engle	1
12677	Ammonia-Nitrogen	SM 4500-NH3 D-2011	1	20128007201A	05/07/2020 20:57	Michelle L Lalli	5

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: FrenchDrain-200428 Dissolved Metals Water
Boeing Eastgate Landfill**The Boeing Company**
ELLE Sample #: WW 1306504
ELLE Group #: 2097790
Matrix: Water**Project Name:** Boeing Eastgate LandfillSubmittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020 13:20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
	Metals Dissolved	SW-846 6010D Rev.4, July 2014	mg/l	mg/l	
01754	Iron	7439-89-6	55.1	0.206	1
07058	Manganese	7439-96-5	0.654	0.0103	1

Sample CommentsState of Washington Lab Certification No. C457
This sample was field filtered for dissolved metals.**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 12:05	Patrick J Engle	1
07058	Manganese	SW-846 6010D Rev.4, July 2014	1	201211486601	05/01/2020 12:05	Patrick J Engle	1
14866	ICP filtered no-digest SW-846	SW-846 3005A	1	201211486601	04/30/2020 11:00	James L Mertz	1

Sample Description: Trip Blanks Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306505
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL purge	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	0.2	U	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	0.5	U	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	0.5	U	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	0.5	U	0.5	1
11996	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
11996	1,4-Dichlorobenzene	106-46-7	0.5	U	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	0.5	U	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

Sample Description: Trip Blanks Water
Boeing Eastgate Landfill

The Boeing Company
ELLE Sample #: WW 1306505
ELLE Group #: 2097790
Matrix: Water

Project Name: Boeing Eastgate Landfill

Submittal Date/Time: 04/29/2020 10:35
Collection Date/Time: 04/28/2020

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL purge	ug/l		ug/l	
11996	n-Propylbenzene	103-65-1	0.5	U	0.5	1
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

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The Analyte(s) exceeding 20% Drift is not detected in this sample.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
Acrylonitrile	27
2-Butanone	23
4-Methyl-2-pentanone	27
2-Hexanone	29
trans-1,4-Dichloro-2-butene	26
1,2-Dibromo-3-chloropropane	24

Preservation requirements were not met. The sample was received at pH <2 which is not the preservation specified for acrolein or acrylonitrile under the referenced method. The preservation criteria is pH of 4-5.

Sample Comments

State of Washington Lab Certification No. C457

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 25mL purge	1	H201252AA	05/04/2020 11:17	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H201252AA	05/04/2020 11:16	Jennifer K Howe	1

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

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 ug/l	LOQ ug/l
Batch number: H201252AA	Sample number(s): 1306499,1306501,1306503,1306505	
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
Bromoform	0.5 U	0.5
Bromochloromethane	0.5 U	0.5
Bromodichloromethane	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

*- 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.

Quality Control SummaryClient Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

Method Blank (continued)

Analysis Name	Result ug/l	LOQ ug/l
Ethylbenzene	0.5 U	0.5
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: 201211486601	Sample number(s): 1306497-1306498,1306500,1306502,1306504	
Iron	0.206 U	0.206
Manganese	0.0103 U	0.0103
Batch number: 201211511601A	Sample number(s): 1306498	
Arsenic	0.0021 U	0.0021
Batch number: 201261511601A	Sample number(s): 1306500,1306502	
Arsenic	0.0021 U	0.0021
Batch number: 20121105101A	Sample number(s): 1306503	
Nitrite Nitrogen	0.050 U	0.050
Batch number: 20123106101A	Sample number(s): 1306503	
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.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

Method Blank (continued)

Analysis Name	Result	LOQ
	mg/l	mg/l
Batch number: 20125135217B	Sample number(s): 1306503	
Chloride	0.40 U	0.40
Sulfate	1.0 U	1.0
Batch number: 20132667603B	Sample number(s): 1306503	
Total Organic Carbon	1.0 U	1.0
Batch number: 20127400101B	Sample number(s): 1306503	
Chemical Oxygen Demand	75.0 U	75.0
Batch number: 20128007201A	Sample number(s): 1306503	
Ammonia-Nitrogen	0.24 U	0.24

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: H201252AA	Sample number(s): 1306499,1306501,1306503,1306505								
Acetone	37.5	38.62	37.5	37.89	103	101	60-146	2	30
Acrolein	37.5	45.63	37.5	42.76	122	114	45-140	6	30
Acrylonitrile	25	33.8	25	31.45	135	126	64-139	7	30
Benzene	5.00	5.18	5.00	5.19	104	104	80-120	0	30
Bromobenzene	5.00	4.95	5.00	4.90	99	98	80-120	1	30
Bromoform	5.00	5.03	5.00	4.93	101	99	80-120	2	30
Bromochloromethane	5.00	5.09	5.00	5.11	102	102	73-124	0	30
Bromodichloromethane	5.00	5.09	5.00	5.11	102	102	73-124	0	30
Bromoform	5.00	5.15	5.00	5.06	103	101	49-144	2	30
Bromomethane	5.00	5.00	5.00	4.97	100	99	60-136	1	30
2-Butanone	37.5	48.16	37.5	47.07	128	126	59-141	2	30
n-Butylbenzene	5.00	5.02	5.00	4.96	100	99	74-123	1	30
sec-Butylbenzene	5.00	4.85	5.00	4.84	97	97	80-120	0	30
tert-Butylbenzene	5.00	4.87	5.00	4.92	97	98	79-120	1	30
Carbon Disulfide	5.00	5.13	5.00	5.02	103	100	67-130	2	30
Carbon Tetrachloride	5.00	5.32	5.00	5.29	106	106	64-141	1	30
Chlorobenzene	5.00	5.10	5.00	5.10	102	102	80-120	0	30
Chloroethane	5.00	5.03	5.00	5.01	101	100	63-120	0	30
Chloroform	5.00	5.29	5.00	5.28	106	106	80-120	0	30
Chloromethane	5.00	5.04	5.00	5.01	101	100	56-124	1	30
2-Chlorotoluene	5.00	4.91	5.00	4.87	98	97	80-120	1	30
4-Chlorotoluene	5.00	4.97	5.00	4.99	99	100	80-120	0	30
1,2-Dibromo-3-chloropropane	5.00	6.69	5.00	6.63	134	133	56-148	1	30
Dibromochloromethane	5.00	5.22	5.00	5.22	104	104	64-138	0	30
Dibromomethane	5.00	5.21	5.00	5.31	104	106	80-122	2	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.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

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
trans-1,4-Dichloro-2-butene	25	31.21	25	30.44	125	122	10-172	2	30
1,2-Dichlorobenzene	5.00	5.12	5.00	5.05	102	101	80-120	1	30
1,3-Dichlorobenzene	5.00	5.03	5.00	4.95	101	99	80-120	2	30
1,4-Dichlorobenzene	5.00	5.16	5.00	5.04	103	101	80-120	2	30
1,1-Dichloroethane	5.00	5.23	5.00	5.22	105	104	74-120	0	30
1,2-Dichloroethane	5.00	5.00	5.00	5.00	100	100	69-122	0	30
1,1-Dichloroethene	5.00	5.06	5.00	5.03	101	101	80-131	1	30
cis-1,2-Dichloroethene	5.00	5.30	5.00	5.38	106	108	80-122	2	30
trans-1,2-Dichloroethene	5.00	5.04	5.00	5.04	101	101	80-122	0	30
1,2-Dichloropropane	5.00	5.39	5.00	5.49	108	110	80-120	2	30
1,3-Dichloropropane	5.00	5.02	5.00	5.00	100	100	80-120	0	30
2,2-Dichloropropane	5.00	5.08	5.00	5.08	102	102	61-141	0	30
1,1-Dichloropropene	5.00	5.08	5.00	5.14	102	103	74-120	1	30
cis-1,3-Dichloropropene	5.00	4.91	5.00	4.93	98	99	67-121	0	30
trans-1,3-Dichloropropene	5.00	4.71	5.00	4.75	94	95	61-129	1	30
Ethylbenzene	5.00	4.88	5.00	4.85	98	97	80-120	1	30
Ethylene dibromide	5.00	5.03	5.00	5.10	101	102	80-120	1	30
Hexachlorobutadiene	5.00	5.20	5.00	5.16	104	103	72-132	1	30
2-Hexanone	25	32.6	25	32.5	130	130	52-140	0	30
Isopropylbenzene	5.00	4.81	5.00	4.81	96	96	80-120	0	30
4-Isopropyltoluene	5.00	4.84	5.00	4.80	97	96	80-120	1	30
Methyl Iodide	5.00	4.88	5.00	4.84	98	97	77-120	1	30
4-Methyl-2-pentanone	25	32.54	25	31.28	130	125	55-140	4	30
Methylene Chloride	5.00	5.15	5.00	5.11	103	102	80-120	1	30
Naphthalene	5.00	4.20	5.00	4.28	84	86	64-122	2	30
n-Propylbenzene	5.00	4.90	5.00	4.90	98	98	74-122	0	30
Styrene	5.00	5.03	5.00	5.02	101	100	80-120	0	30
1,1,1,2-Tetrachloroethane	5.00	5.10	5.00	5.05	102	101	71-134	1	30
1,1,2,2-Tetrachloroethane	5.00	5.03	5.00	5.02	101	100	75-123	0	30
Tetrachloroethene	5.00	5.28	5.00	5.22	106	104	80-120	1	30
Toluene	5.00	5.02	5.00	5.02	100	100	80-120	0	30
112Trichloro122Trifluoroethane	5.00	5.02	5.00	5.06	100	101	75-133	1	30
1,2,3-Trichlorobenzene	5.00	4.83	5.00	4.90	97	98	68-125	1	30
1,2,4-Trichlorobenzene	5.00	4.76	5.00	4.74	95	95	68-122	0	30
1,1,1-Trichloroethane	5.00	5.04	5.00	4.94	101	99	78-126	2	30
1,1,2-Trichloroethane	5.00	5.17	5.00	5.18	103	104	80-120	0	30
Trichloroethene	5.00	5.05	5.00	5.08	101	102	80-120	0	30
Trichlorofluoromethane	5.00	5.66	5.00	5.62	113	112	62-136	1	30
1,2,3-Trichloropropane	5.00	5.10	5.00	5.00	102	100	80-125	2	30
1,2,4-Trimethylbenzene	5.00	4.74	5.00	4.67	95	93	80-120	2	30
1,3,5-Trimethylbenzene	5.00	4.78	5.00	4.76	96	95	80-120	0	30
Vinyl Acetate	12.5	10.78	12.5	11.01	86	88	38-145	2	30
Vinyl Chloride	5.00	5.15	5.00	5.07	103	101	60-125	2	30
m,p-Xylene	10	10.09	10	10.08	101	101	80-120	0	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.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

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
o-Xylene	5.00	4.86	5.00	4.93	97	99	80-120	1	30
	mg/l	mg/l	mg/l	mg/l					
Batch number: 201211486601	Sample number(s): 1306497-1306498,1306500,1306502,1306504								
Iron	0.400	0.440			110		80-120		
Manganese	0.0200	0.0226			113		80-120		
Batch number: 201211511601A	Sample number(s): 1306498								
Arsenic	0.0100	0.0118			118*		85-115		
Batch number: 201261511601A	Sample number(s): 1306500,1306502								
Arsenic	0.0100	0.00949	0.0100	0.00964	95	96	85-115	2	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 20121105101A	Sample number(s): 1306503								
Nitrite Nitrogen	0.700	0.674			96		90-110		
Batch number: 20123106101A	Sample number(s): 1306503								
Nitrate Nitrogen	2.50	2.73			109		90-110		
Batch number: 20125135217B	Sample number(s): 1306503								
Chloride	3.00	2.83			94		90-110		
Sulfate	7.50	7.15			95		90-110		
Batch number: 20132667603B	Sample number(s): 1306503								
Total Organic Carbon	25	25.22			101		91-113		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 20127400101B	Sample number(s): 1306503								
Chemical Oxygen Demand	500	496.8	500	499.1	99	100	94-110	0	3
Batch number: 20128007201A	Sample number(s): 1306503								
Ammonia-Nitrogen	5.00	5.19			104		82-124		

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
Batch number: 201211486601	Sample number(s): 1306497-1306498,1306500,1306502,1306504 UNSPK: 1306497									
Iron	2.62	0.418	3.02	0.418	3.00	94 (2)	91 (2)	75-125	0	20
Manganese	7.97	0.0209	7.99	0.0209	7.92	90 (2)	-275 (2)	75-125	1	20

*- 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.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

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: 201211511601A Arsenic	Sample number(s): 1306498 UNSPK: 1306498 0.00170	0.0104	0.0135	0.0104	0.0132	113	110	70-130	2	20
Batch number: 20127400101B Chemical Oxygen Demand	mg/l	mg/l	mg/l	mg/l	mg/l				100	94-110
	48.9	400	447.1							

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: 201211486601 Iron	Sample number(s): 1306497-1306498,1306500,1306502,1306504 BKG: 1306497 2.62	2.61	0	20
Manganese	7.97	7.89	1	20
Batch number: 201211511601A Arsenic	Sample number(s): 1306498 BKG: 1306498 0.00170	0.00120	35* (1)	20
Batch number: 20127400101B Chemical Oxygen Demand	mg/l	mg/l		
	48.9	44.3	10* (1)	9

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: H201252AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1306499	106	105	97	97
1306501	105	107	97	97
1306503	104	101	97	98
1306505	108	107	97	91
Blank	107	109	96	91

*- 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.

Quality Control Summary

Client Name: The Boeing Company
Reported: 05/12/2020 17:38

Group Number: 2097790

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: H201252AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
LCS	103	102	97	96
LCSD	103	102	99	95
Limits:	80-120	80-120	80-120	80-120

*- 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.



Group Number(s): 2097790

Client: BOEING**Delivery and Receipt Information**

Delivery Method: Fed Ex Arrival Date: 04/29/2020
 Number of Packages: 1 Number of Projects: 1
 State/Province of Origin: Washington

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	Total Trip Blank Qty:	4
Samples Chilled:	Yes	Trip Blank Type:	HCl
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Julissa Rivera-Santa***Samples Chilled Details**

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

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	46730060WS	0.2	IR	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	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents	MCL	Maximum Contamination Limit
mg	milligram(s)		
<	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.		

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.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is less than the LOQ
K2	Continuing Calibration Blank is above the QC limit and the sample result is less than the LOQ
K3	Initial Calibration Verification is above the QC limit and the sample result is less than the LOQ
K4	Continuing Calibration Verification is above the QC limit and the sample result is less than the LOQ
J (or G, I, X)	Estimated value >= 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.
P^	Concentration difference between the primary and confirmation column > 40%. The higher 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
Z	Laboratory Defined - see analysis report

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.

APPENDIX B

Laboratory Data Quality Evaluation

Technical Memorandum

TO: Project File
FROM: Kristi Schultz
DATE: June 12, 2020
RE: **Boeing Former Eastgate Landfill**
April 28, 2020 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 April 28, 2020. A data quality evaluation was performed on the following analyses:

- Volatile organic compounds (VOCs; US Environmental Protection Agency [EPA] Method SW-846 8260C)
- Dissolved metals (EPA Method 200.8 Rev 5.4 [arsenic] and Method SW6010D [iron and manganese])
- Ammonia as nitrogen (EPA Method SM 4500-NH3 D-2011)
- Total Organic Carbon (TOC; Method SM 5310 C-2011)
- 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 (ELLE) located in Lancaster, Pennsylvania. This data quality evaluation covers ELLE data package 2097790.

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. Data qualifiers are summarized in Table 1. 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

A signed COC record was attached to the data packages. The laboratory received all samples in good condition, with the following exception:

- The laboratory noted the preservation requirements for acrolein and acrylonitrile associated with the VOC samples were not met (pH criteria is 4-5 for these compounds; the samples were received with pH <2). The results for the associated compounds were qualified as estimated (UJ), as indicated in Table 1.

All analyses were performed as requested. No special cleanups or handling methods were requested.

Upon receipt by ELLE, 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 0.2°C, which is within the EPA-recommended limit of ≤6°C. No qualification of the data was necessary.

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. 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.

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.

Blind 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.

Quantitation Limits

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

Audit/Corrective Action Records

No corrective action records were generated for these sample batches. Based on the laboratory's case narratives, continuing calibration verification (CCV) recovery results were within laboratory-specified control limits. No qualification of the data was necessary.

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, and blind field duplicate samples. Data accuracy was evaluated through laboratory control samples 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/ljl
[P:\025\089\FILERM\T\DATA\DV MEMOS\2020 APRIL DV_TM.DOCX]

References

- EPA. 2016a. National Functional Guidelines for Inorganic Superfund Methods Data Review. edited by Office of Superfund Remediation and Technology Innovation (OSRTI). Washington, DC: US Environmental Protection Agency.
- 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.

Table 1
Summary of Data Qualifiers
April 2020 Event Water Sampling Results
Boeing Eastgate

Page 1 of 1

Lab SDG	Sample ID	Analyte	Conc.	Lab Qualifier	Data Qualifier	Reason Code
2097790	EL-103-200428	Acrolein	25.0	U	UJ	Improper sample preservation
2097790	EL-103-200428	Acrylonitrile	5.0	U	UJ	Improper sample preservation
2097790	EL-100-200428	Acrolein	25.0	U	UJ	Improper sample preservation
2097790	EL-100-200428	Acrylonitrile	5.0	U	UJ	Improper sample preservation
2097790	FrenchDrain-200428	Acrolein	25	U	UJ	Improper sample preservation
2097790	FrenchDrain-200428	Acrylonitrile	5.0	U	UJ	Improper sample preservation

Notes:

U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.

UJ = The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Abbreviations/Acronyms:

ID = Identification

SDG = sample delivery group