Bridgeton Landfill, LLC, Cotter Corporation (N.S.L.), and the United States Department of Energy ("OU-3 Respondents")

West Lake Operable Unit 3

2021 Annual Hydrogeologic and Site Characterization Report

1 March 2022, Revised 17 January 2023

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1 March 2022, Revised 17 January 2023

West Lake Operable Unit 3

2021 Annual Hydrogeologic and Site Characterization Report

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Acronyms and Abbreviations

Name	Description
µg/L	Microgram per liter
µg/m^3	Microgram per cubic meter
AA	Outdoor ambient air
AF	Attenuation factor
Annual Report	Annual Hydrogeologic and Site Characterization Report
Bridgeton Landfill	Bridgeton Landfill, LLC
Cascade	Cascade Remediation Services, LLC
CDFM	Corehole dynamic flow meter
CHS	Cased Hole Sampler
COLOG	COLOG, Inc.
COPC	Constituent of potential concern
CSM	Conceptual site model
EB	Equipment blank
ECLD	Earth City Levee District
ERM	ERM Consulting & Engineering, Inc.
FB	Field blank
Feezor	Feezor Engineering, Inc.
FLUTe^{TM}	Flexible Underground Technologies^{TM}
FNU	Formazin Nephelometric Unit
FS	Feasibility Study
FSP	Field Sampling Plan
ft/ft	Feet per foot
HVAC	Heating, ventilation, and air conditioning
IA	Indoor air
ISL	Inactive Sanitary Landfill
LCS	Leachate collection sump
LEL	Lower explosive limit
LT	Long-term
MCL	Maximum contaminant level
MDC	Minimum detectable concentration
MDNR	Missouri Department of Natural Resources
mL	Milliliter
NMR	Nuclear magnetic resonance
NTU	Nephelometric Turbidity Unit
ORP	Oxidation-reduction potential
OU-	Operable Unit
OU-3 Respondents	Bridgeton Landfill, LLC, Cotter Corporation (N.S.L.), and the United States Department of Energy
pCi/L	Picocuries per liter
ppmv	Parts per million by volume
PVC	Polyvinyl chloride

Q1	First quarter
Q2	Second quarter
Q3	Third quarter
Q4	Fourth quarter
QAPP	Quality Assurance Project Plan
QC	Quality control
Redox	Reduction-oxidation
RI	Remedial Investigation
RIM	Radiologically impacted material
RIM	Radiologically impacted material
RSL	Regional screening level
Site	West Lake Landfill
SOP	Standard operating procedure
SSV	Sub-slab vapor
ST	Short-term
Tech Memo	Technical Memorandum
THF	Tetrahydrofuran
TSU	Time-stratigraphic unit
UEL	Upper explosive limit
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VI	Vapor intrusion
VISL	Vapor intrusion screening level
VOC	Volatile organic compound
WLM	Water level meter

1. INTRODUCTION

ERM Consulting & Engineering, Inc. (ERM) has prepared this revised *2021 Annual Hydrogeologic and Site Characterization Report* (2021 Annual Report) on behalf of Bridgeton Landfill, LLC (Bridgeton Landfill), Cotter Corporation (N.S.L.), and the United States Department of Energy (collectively, "OU-3 Respondents") to describe the tasks completed at the West Lake Landfill Superfund Site (Site) under the Remedial Investigation (RI) / Feasibility Study (FS) Work Plan for Site-wide groundwater (Operable Unit [OU-] 3) for the period from quarter one 2021 (Q1) through quarter three (Q3) 2021 (the 2021 "reporting period"). This report has been prepared in accordance with the OU-3 RI/FS Statement of Work attachment to the Administrative Settlement Agreement and Order on Consent and has been revised to address pertinent comments from the United States Environmental Protection Agency (USEPA), which are discussed in subsequent paragraphs. This report describes the activities completed by ERM and other OU-3 contractors under the RI/FS Work Plan (ERM 2020) for the reporting period, including documentation of deviations from the Field Sampling Plan (FSP; Volume 2a of the 2020 RI/FS Work Plan) and Quality Assurance Project Plan (QAPP; Volume 2b of the 2020 RI/FS Work Plan); and preliminary updates to the Conceptual Site Model (CSM).

Since initiation of the OU-3 investigation in Q4 2020, annual reports have been submitted on a calendar year basis; however, due to the time required for laboratory sample analysis and data validation, it was not feasible to include validated data from Q4 into annual reports by the submittal deadline of 1 March. As discussed with USEPA during a call on 23 March 2022 and documented in a letter dated 30 March 2022, the USEPA requested that the 2021 Annual Report include activities from Q1 through Q3 of 2021 and that all subsequent annual reports will include the fourth quarter (Q4) of the prior reporting year through Q3 of the current reporting year. This 2021 Annual Report has been revised to reflect the requested reporting period of Q1 through Q3 2021, and to address comments on the initial 2021 Annual Report, received from the USEPA on 17 November 2022.

The initial 1 March 2022 submittal of the 2021 Annual Report included responses to some of the USEPA comments on the 2020 Annual Report. Due to the timing of when some data were received, some comments from the 2020 Annual Report were addressed in the 2021 Annual Report, as summarized in Table 1-1 below.

Table 1-1 Summary of 2020 Annual Report Comments and Associated Responses

2020 Annual Report Comment	Location in 2021 Annual Report	Additional Comments
[Section 2.2.1] discusses the Nuclear Magnetic Resonance (NMR) logging that was completed in existing site wells, but does not provide a discussion of whether existing well screen intervals are appropriately placed based on the NMR data. Revise this section to include a discussion of the existing well screen depths and how they correspond with the NMR results.	Section 3.3.1	Once the proposed new wells have been installed (anticipated in 2022) and monitored and the CSM has been updated, opportunities for further refinement can be identified, including whether pre-existing well screen intervals are appropriately placed to evaluate the nature and extent of constituents of potential concern, as appropriate.

2020 Annual Report Comment	Location in 2021 Annual Report	Additional Comments
In addition to the initial NMR logging in existing wells, other existing site wells have been logged using the NMR tool. Revise [Section 2.2.1] to provide a discussion of the planned NMR logging of other existing site wells and the rationale for selection.	Section 2.3.2.1 and Section 3.3.1	Additional discussion regarding rationale for selection of pre-existing wells logged with NMR in 2020 has been included in the revised 2020 report. No additional pre-existing wells were logged with NMR in 2021; geophysical logging was conducted by COLOG in the boreholes of new wells installed in 2021.
A cross section was presented during a meeting on January 19, 2021, which was developed using the NMR data from the initial logging activities of existing wells; however, that cross section is not included in this report. Revise this report to include the NMR cross section.	Section 4.0	Cross sections are included in the 2021 Annual Report.
The first paragraph of Section 2.4 notes that water levels in St. Louis and Salem Formation bedrock wells may be affected by pumping of the Bridgeton Landfill leachate collection system and/or the effects of the subsurface reaction within the South Quarry.	Section 3.5.1	Evaluation of the potential influences of pumping activities and landfill characteristics on the groundwater flow systems in alluvium and bedrock is ongoing. The effects of leachate pumping will be evaluated and discussed in upcoming reports, including the 2022 Annual Report, as additional data are collected and available to make those interpretations.
[Section 2.4] of the report should be revised to include pumping conditions (e.g., pumping locations, pumping rates, subsurface reaction indicators) at the time of data collection so these effects can be better distinguished. Additionally, potentiometric surface maps should reflect the effects of leachate collection pumping in the Bridgeton Landfill on the groundwater.		
Further, revise [Section 2.4] to discuss the potential for leachate collection system pumping to impact the alluvium.		
Vapor intrusion sampling locations were only generally proposed, pending the building inspection. Although this inspection has been completed, specific vapor intrusion sampling locations selected within each building remain unclear. Revise the report to include figures depicting vapor intrusion air and soil gas sampling locations relative to each building configuration. Also include a discussion for the rationale used in selecting sampling locations including consideration of building envelope openings; interior partitions, chemical use/storage, and HVAC systems; and subsurface footers, vapor systems, and conduits. Although the building size generally dictates the minimum number of indoor air samples per building, consider whether factors such as multiple foundations, a high degree of partitioning, or non-industrial use areas indicate a need for additional samples.	Section 2.11 and Section 3.9 through 3.12	None.

2020 Annual Report Comment	Location in 2021 Annual Report	Additional Comments
Discussion of the updated CSM remains highly generalized. Revise to discuss how data collected during the past year supported, refuted, or expanded each CSM element. Specific examples follow.	Section 4.0	The OU-1 investigation of RIM in Areas 1 and 2 is ongoing. Activities pertaining to the OU-1 investigation are not included in the OU-3 Statement of Work. The results of the OU-1 investigation will be reviewed when complete and incorporated into the OU-3 RI as appropriate. Site-specific bedrock information is provided in Appendix C. Once the full network of proposed new wells has been installed (anticipated in 2022) and monitored and the CSM has been updated, opportunities for further refinement of the CSM can be identified.
Revise [Section 3.0] to provide additional CSM updates including an updated understanding of the solid waste placement (Work Plan Section 3.2.1.), updated site-specific bedrock information (Work Plan Section 3.2.3) including the rock quality designation or percentage of intact rock retrieved from bedrock cores during new well construction, and preliminary feedback on potential need for additional well locations or depth intervals.		

NMR = nuclear magnetic resonance; RIM = radiologically impacted material

Disclaimer

The OU-3 RI drilling and groundwater sampling programs are ongoing. This Annual Report provides a summary of activities completed and data collected during the reporting period but is not intended to provide the comprehensive Site dataset or interpretation of all data collected to date. Because the current dataset represents only a portion of total proposed dataset, it is not appropriate to develop final interpretations regarding Site conditions, since those interpretations may change as additional data are collected and interpreted. Because significant information is still outstanding, any interpretations presented herein are subject to revision as additional data are collected and interpreted. As noted in the RI/FS Work Plan, the RI Report will be prepared following completion of Site characterization activities and will summarize the findings of the RI process and provide final interpretation of data collected, including the final CSM.

2. STATUS OF TASKS COMPLETED OR IN PROGRESS

2.1 Summary of Approved Technical Memos

During the reporting period, USEPA approved a number of changes to the RI/FS Work Plan, FSP, and QAPP that were documented in Technical Memoranda (Tech Memos), a list of which is provided in the table below. Additional details about the specific, approved changes can be found in the referenced Tech Memo documents.

Table 2-1: Summary of Tech Memos and USEPA Approvals

Tech Memo	Submittal Date	USEPA Approval Date	Summary of Change
Tech Memo 3	6 January 2021	7 January 2021	■ VI sampling in one additional building space
Tech Memo 4	15 January 2021	26 January 2021	■ Schedule changes
Tech Memo 5	22 January 2021	29 January 2021	■ Additional new single-screen monitoring wells (MW-117, MW-118, MW-408, and MW-409) ■ New WATERLOO APS™ boring (APS-021)
Tech Memo 6	3 February 2021	9 February 2021	■ Schedule changes
Tech Memo 7	12 February 2021	19 March 2021	■ Schedule changes
Tech Memo 8	17 February 2021	19 March 2021	■ Schedule changes ■ Change in laboratory for alkalinity testing for solid matrix samples
Tech Memo 9	10 March 2021	16 March 2021	■ Monitoring well location changes ■ Addition of new multi-level monitoring well (MW-112) ■ Changes in field drilling procedures to accommodate weekend work schedule
Tech Memo 10	2 April 2021; Revised 19 May and 17 September 2021	Not approved as of end of Q3 2021	■ Changes to high-resolution data collection for bedrock borings
Tech Memo 11	9 April 2021; Revised 14 May 2021	7 June 2021	■ Change in laboratory methods for groundwater sampling
Tech Memo 12	21 April 2021; Revised 15 June and 17 September 2021	Not approved as of end of Q3 2021	■ Well construction changes ■ Well development procedure changes
Tech Memo 13	22 April 2021; Revised 28 May 2021	7 September 2021	■ Monitoring well location changes ■ Pumping test method changes ■ Geophysical logging changes at MW-213
Tech Memo 14	28 April 2021	27 May 2021	■ Schedule changes ■ Monitoring well location changes

Tech Memo	Submittal Date	USEPA Approval Date	Summary of Change
Tech Memo 15	13 May 2021; Revised 24 August 2021	Not approved as of end of Q3 2021*	■ Piezometer installation scope and location changes
Tech Memo 16	7 June 2021; Revised 18 June 2021	23 June 2021	■ Alluvial matrix sampling change
Tech Memo 17	29 July 2021; Revised 31 August 2021	Not approved as of end of Q3 2021	■ Schedule changes
Tech Memo 18	24 August 2021	Not approved as of end of Q3 2021*	■ Reduction in laboratory methods for groundwater sampling at some well locations
Tech Memo 19	17 September 2021	Not approved as of end of Q3 2021*	■ Changes to off-Site well installation scope

VI = vapor intrusion

**Additional revisions to Tech Memos 15, 18, and 19 in response to USEPA comments were in progress as of the end of Q3 2021.*

2.2 Well Inventory and Maintenance

During the reporting period, ERM submitted a revision to the *Well Inventory Summary Report* (originally dated 16 November 2020) and two report addenda to document well maintenance, repair, and sediment removal activities performed by Feezor Engineering, Inc. of Chatham, Illinois (Feezor). Submittals summarizing well inventory and maintenance activities conducted during the reporting period included the following:

- *Revised Well Inventory Summary Report* dated 5 April 2021: The revised report addressed comments received from the USEPA on 5 March 2021. The revision included an Off-Site Water Supply Inventory prepared by Feezor (Appendix A of the *Revised Well Inventory Summary Report*) and updated well network recommendations (described in Table 5 of the *Revised Well Inventory Summary Report*).
- *Addendum to Off-Site Water Supply Well Inventory: Visual Assessment Report* dated 11 June 2021: This Addendum to Appendix A of the April 2021 *Revised Well Inventory Summary Report* summarized the results of an off-Site visual assessment performed by Feezor in May 2021. The purpose of the off-Site visual assessment was to identify any potential private well structures that were not identified during the initial off-Site water supply well inventory, and to visually inspect wells that were previously identified as potential water supply wells for additional information.
- *Addendum to the Revised Well Inventory Summary Report* dated 29 July 2021: This Addendum documented well maintenance activities completed at wells installed by the Missouri Department of Natural Resources (MDNR), for which the OU-3 Respondents gained legal access following submittal of the Revised Well Inventory Summary Report. Based on the results discussed in this report, MO-1-SDR, MO-3-SS, and MO-3-SDR were added to the OU-3 monitoring program in the second quarter (Q2) of 2021. MO-1-SS was proposed for removal from the OU-3 monitoring program due to bentonite in the well screen and MO-2-SD required further assessment at the time of submittal.

In addition to the monitoring well inventory work, Bridgeton Landfill provided information regarding the current status of the leachate collection sumps (LCSs) in the Bridgeton Landfill. LCS locations are shown on Figure 1 along with other locations that were pumping at the end of Q3 2021. The operational status

and sampling frequency of LCSs are presented below in Table 2-2. Operational LCSs require periodic downtime for maintenance. None of the pumping locations shown on Figure 1 intercept groundwater.

Table 2-2: Leachate Collection Sump Status

LCS ID	Location	Constructed Screened Interval (feet below ground surface)	Operational / Pumping Status	Sampling Frequency
LCS-1D	South Quarry	187–247	Not operational	Unable to be sampled
LCS-2D	South Quarry	197.25–257.25	Not operational	Unable to be sampled
LCS-3D	South Quarry	40–138	Operational / pumps continuously	Quarterly
LCS-4B	South Quarry	235–295	Not operational	Unable to be sampled
LCS-5A	North Quarry	140–290	Operational / pumps continuously	Quarterly
LCS-5B	North Quarry	145–295	Operational / pumps intermittently due to low leachate levels and yield	Unable to be sampled due to lack of sampling port
LCS-6B	North Quarry	45–85	Operational / pumps intermittently due to low leachate levels and yield	Unable to be sampled due to low flow

Notes: Six LCSs are permitted by MDNR under Permit Number 0118912 (LCS-1D, LCS-2D, LCS-3D, LCS-4B, LCS-5B, and LCS-6B). Screened intervals listed above were taken from LCS construction logs and do not take into account potential settling since installation.

As noted above, LCS-5A and LCS-3D have been routinely sampled since OU-3 quarterly monitoring began in 2020. With assistance from Bridgeton Landfill, the OU-3 Respondents are evaluating modifications to the LCS infrastructure, operation, and sampling procedures to potentially enable sample collection from LCS-5B and LCS-6B in the future, as long as such modifications are safe, will not interfere with operation of the Bridgeton infrastructure, and do not result in noncompliance with Bridgeton's permit.

With the exception of LCS-3D, the LCSs in the South Quarry of the Bridgeton Landfill are not operational due to a heat-producing subsurface reaction within the Bridgeton Landfill South Quarry, which resulted in conditions that adversely affected LCSs installed in this landfill. These conditions are described in the July 2018 *Work Plan – South Quarry Subsurface Assessment Actions & Leachate Collection Sump (LCS) Installations* (Feezor 2018) and include significant settlement of the surface topography and subsurface temperatures (at depths ranging from 40 feet to more than 200 feet below the surface) in excess of 200 degrees Fahrenheit. Feezor (2018) describes settlement and temperature conditions that must be met before the South Quarry LCSs can safely be replaced. As documented in the November 2021 *Annual Report: South Quarry Subsurface Conditions Monitoring For LCS Installations* (Feezor 2021), as of the end of the reporting period, subsurface conditions in the South Quarry would "likely impart a higher degree of potential risk to human health during installations of Temperature Monitoring Probes or leachate collection sumps," thus, conditions must improve before the LCSs in the South Quarry can be replaced. Three LCSs are not shown on Figure 1 or listed in Table 2-2 above because they are not operational, not permitted, and not able to be sampled because the LCS is compromised (LCS-3C) or have been abandoned (LCS-4C and LCS-6).

Additional information about the leachate collection system, including frequency of pump use and pumping rates, is summarized in weekly and monthly reports submitted by Bridgeton Landfill to MDNR. Historical influent analytical data were previously reported in Appendix F-7 of the OU-1 Remedial Investigation Addendum (EMSI 2018b); no recent influent or effluent data, including for the reporting period, are available.

2.3 High-Resolution Site Characterization and Monitoring Well Installation

2.3.1 WATERLOO APS™

WATERLOO APS™ borings APS-001 through APS-005 were completed in December 2020 and are described in the revised 2020 Annual Report (ERM 2022a). ERM and Cascade Remediation Services, LLC (Cascade) remobilized to the Site on 5 January 2021 to continue vertical groundwater profiling activities using the WATERLOO APS™. The WATERLOO APS™ tool collects discrete-interval groundwater samples from a vertical intake port that is about 4 inches long; therefore, the data collected using this tool are considered screening data that were used to support the design of monitoring well screen intervals. The relative permeability of the soil is measured continuously by injecting a small volume of potable water into the formation. The permeability results are presented as index of hydraulic conductivity. Discrete-interval groundwater samples were collected approximately every 5 feet during borehole advancement, or immediately above the closest low permeability layer based on real-time review of the index of hydraulic conductivity log. The field parameter data shown on the WATERLOO APS™ field logs (Appendix A) were used by Cascade to determine when a representative groundwater sample could be collected by comparing the results to stabilization criteria noted in the FSP. Consistent with the FSP, in certain instances of low groundwater yield, groundwater samples were collected without collecting a full set of stabilized field parameter data. See Table 2-3 below and attached Figure 2 for a summary of WATERLOO APS™ borings completed during the reporting period.

Table 2-3: Completed WATERLOO APS™ Borings

WATERLOO APS™ Location	Associated Monitoring Well Cluster	Termination Depth (feet below ground surface)	Refusal Depth within 5 Feet of Bedrock (Y/N)	Number of Groundwater Samples Collected	Date Profile Completed
APS-004B	MW-306	118.5	Y	4	2 March 2021
APS-006	MW-405	120.0	Y	21	11 January 2021
APS-007	MW-400	110.0	Y	20	13 January 2021
APS-008	MW-401	110.0	Y	20	20 January 2021
APS-011	MW-402	111.6	Y	18	8 March 2021
APS-012	MW-213	90.7	Y	17	19 March 2021
APS-013	MW-505	76.5	Y	12	22 January 2021
APS-018	MW-504	113.5	Y	21	6 March 2021
APS-019	MW-407R	115.8	Y	20	8 January 2021
APS-020	MW-111	89.4	Y	9	26 January 2021
APS-021	MW-118	73.1	N/A*	5	21 March 2021

Y = Yes, refused within 5 feet of bedrock; N/A = Not Applicable
**Sonic borehole not advanced to bedrock; therefore, it was not possible to verify the depth to bedrock.*

As shown in Table 2-3 and documented in the 2020 Annual Report, total boring depths achieved were greater than the target depth of 70 feet indicated in the FSP, and at all but one location, the WATERLOO APS™ tooling was confirmed to have effectively reached the top of bedrock (i.e., the tooling either encountered refusal at the top of bedrock or within 5 feet of bedrock, as later confirmed during advancement of co-located borings using rotosonic drilling methods). At APS-021 the co-located borehole for well installation was not advanced to the bedrock surface because the single-screen monitoring well was designed to target shallow alluvium; therefore, the bedrock surface depth was not confirmed at this location. The target depth of 70 feet noted in the FSP was based on the assumption that the tooling would not be able to penetrate the presumed gravel-rich soil beyond that estimated depth. Actual field conditions allowed the tooling to be advanced to significantly greater depths (over 110 feet) at most locations before the tooling either reached hard refusal on bedrock, or the friction eventually exceeded the available downward pressure of the tooling (defined as a rate of penetration refusal). As documented in the 2020 Annual Report, APS-004 was initially advanced to a depth of 100 feet and 17 groundwater samples were collected. In 2021, a co-located boring APS-004B was advanced in order to collect additional groundwater samples from 100 feet below ground surface to the top of the bedrock.

WATERLOO APS™ boring locations were surveyed by Weaver Consultants Group of Collinsville, Illinois on 14 January 2021 and from 7 to 8 June 2021; survey data are provided in the attached Table 1. Attached Table 2a includes a summary of the groundwater analytical results from WATERLOO APS™ borings completed during the reporting period and attached Table 3 summarizes the associated quality control (QC) samples.

A Stage 1 validation was performed on all screening data to verify accuracy and completeness of the dataset prior to use. An internal review checklist was completed for each data set and any identified data quality issues were communicated to the project team. Appendix A includes the WATERLOO APS™ logs, including a subset of the field and analytical data collected using this tool.

ERM noted the following deviations from the FSP during the WATERLOO APS™ program:

- The equipment blank (EB) samples were named to correspond to the location of each sample (e.g., EB-APS-005-WQ-20201201) instead of incrementally (e.g., EB-001).
- WATERLOO APS™ tooling was lost in-ground at location APS-006 and abandoned in place in accordance with Missouri Geological Survey well code (Variance ID #6719).
- The maximum target depth for WATERLOO APS™ borings was 70 feet; however, all boreholes were advanced to greater depths and groundwater samples were collected at 5-foot vertical intervals (with the exception of APS-021, as noted below) down to the depth of boring refusal. Therefore, more groundwater samples were collected from each WATERLOO APS™ boring for laboratory analyses than had been proposed in the FSP.

Additionally, as documented in Tech Memo 9, the sample interval at APS-021 was increased from 5-foot to 10-foot increments. The greater sample interval enabled Cascade to complete APS-021, which is located in a high-traffic area, over a 2-day weekend period.

2.3.2 Borehole Advancement, Borehole Geophysics, and Hydraulic Testing

2.3.2.1 Borehole Advancement and Borehole Geophysics

On 18 January 2021, ERM and Cascade mobilized to the Site to begin the rotosonic drilling program. Rotosonic drilling activities were completed between 18 January and 9 June 2021. During this time period, all on-Site monitoring well locations approved under the FSP were completed, including the additional OU-1 monitoring wells that were documented in Tech Memos. One off-Site monitoring well (MW-605) was also installed. Table 2-5 in Section 2.3.5 includes a summary of monitoring wells installed

during the reporting period. Two drill rigs operated simultaneously from the beginning of the program through 12 April 2021 and the second drill rig continued the drilling activities through 9 June 2021. Following installation of MW-605, rotosonic drilling activities were paused while the OU-3 Respondents worked to secure legal access to remaining off-Site locations and worked to receive approval to install monitoring wells within the Earth City Levee District (ECLD). Off-Site drilling activities resumed in Q4 2021 and will be documented in the 2022 Annual Report.

During advancement of each sonic borehole, a continuous soil core was collected, logged, and screened by a field geologist using a photoionization detector as described in the FSP. Throughout the rotosonic drilling program, COLOG, Inc. (COLOG) of Lakewood, Colorado periodically mobilized to the Site to complete geophysical logging activities. Geophysical logs from COLOG are provided in Appendix B, and boring logs depicting lithology, percentage of core recovery, and well completion data are provided in Appendix C. As noted on Figures 3 and 4, geophysical logging was completed at all newly installed monitoring well locations with the following exceptions as documented in the USEPA-approved Tech Memos:

- MW-117, MW-118, MW-408, and MW-409 were installed by the OU-3 program for OU-1 purposes and no geophysical logging was conducted at these locations (Tech Memo 5).
- No geophysical logging was conducted at MW-112 due to access and safety restrictions that limited the work to weekends (Tech Memo 9).
- Only natural gamma and induction logs were collected at MW-213 due to access and safety restrictions that prevented the heavier geophysical logging equipment from being utilized (Tech Memo 9).

Geophysical logging was conducted in both alluvium and bedrock boreholes using downhole tooling to provide high-resolution vertical profiling of various geologic, hydrogeologic, and water quality parameters at each well location. The tools used for geophysical logging in alluvium and bedrock are discussed in Sections 5.3.2 and 5.3.3 of the RI/FS Work Plan, respectively. A summary of the tools applied and details relevant to OU-3 investigations regarding data acquisition, tool measurements, and derived hydrogeologic properties was provided in Table 3-3 of the FSP. Previously existing wells that were logged using nuclear magnetic resonance (NMR) in 2020 were re-logged with induction, natural gamma, and spectral gamma during the reporting period (Figure 3). Table 4 provides a summary of the schedule of borehole geophysics conducted at the Site during the reporting period.

For alluvial interval logging, temporary polyvinyl chloride (PVC) casing was installed in the alluvium borehole after drilling reached bedrock. Following placement of the temporary casing, the outer drill casing was extracted, and the geophysical tools were deployed within the blank casing. This was necessary to protect the geophysical tools from potential collapse of the unconsolidated alluvium. For each alluvium location, logging activities were completed in a single day. Following logging, the temporary casing was over-drilled and removed using casing-advanced rotosonic drilling.

Following completion of alluvium logging, some borings were advanced into bedrock as shown on Figures 3 and 4. For locations designated for alluvium and bedrock screens or bedrock-only screens, rotosonic casing was installed approximately 5 feet into bedrock and left in place to seal the alluvium from the bedrock and a smaller diameter coring tool was advanced to the total depth of the boring. Upon reaching the total depth, the inner drill casing was extracted, and the geophysical tools were deployed within the open bedrock borehole. Bedrock borehole logging generally took 2 days to complete due to the additional logging tools that were run in the open boreholes. If bedrock boreholes could not be logged within 48 hours of drilling, a temporary liner was installed in the open borehole until logging could be completed. Table 2-4 summarizes the geophysical logging tools used in alluvium and bedrock.

Table 2-4: Summary of Geophysical Logging Tools

Alluvium Geophysical Logging Tools	Bedrock Geophysical Logging Tools
NMR	NMR
Induction	Induction
Natural gamma / spectral gamma	Natural gamma / spectral gamma
	Caliper
	Fluid temperature and resistivity
	Acoustical and optical televiewer
	CDFM
	Depth-specific borehole water sampling

CDFM = corehole dynamic flow meter; NMR = nuclear magnetic resonance

The order in which the geophysical tools were used was based on the geophysical service provider's specifications and, in some cases, included stacked tools that were run in tandem to collect data simultaneously (e.g., natural gamma and induction). Generally, the caliper, fluid temperature and resistivity, and televiewer logs were collected first to ensure the borehole was stable. Following collection of those logs and upon confirmation that the borehole was stable, NMR, induction, natural gamma, spectral gamma, corehole dynamic flow meter (CDFM), and depth-specific sampling was conducted. Following the installation of MW-304, MW-400, MW-205, and MW-404, discontinuation of depth-discrete bedrock groundwater samples was requested and approved per Tech Memo 10. Analytical results from the depth-specific borehole water sampling are included in Appendix B. As described in Tech Memo 13, at MW-400 additional aquifer testing was conducted using straddle packers to isolate intervals of interest within the alluvium and bedrock to provide additional hydrogeologic parameter data that could be compared to the NMR and CDFM geophysical hydraulic conductivity measurements.

Data acquisition was conducted in accordance with specifications and standard operating procedures (SOPs) provided by COLOG and the geophysical equipment manufacturers; Appendix C of the FSP includes these SOPs. Field logs were generated and interpreted in real time to determine optimal well screen depths for both the multi-level Cased Hole Sampler (CHS) wells, developed by Flexible Underground Technologies™ (FLUTe™) of Alcalde, New Mexico, and wells completed with individual well screens.

Logging tools that typically do not require field calibration were calibrated by COLOG at their facility in Colorado prior to arrival at the Site. Those tools that require periodic field calibration (e.g., caliper tool) were calibrated by COLOG in the field using appropriate calibration standards prior to use with oversight by ERM for verification purposes. Calibration logs from the reporting period will be included in the 2022 Annual Report. Following a technical review of the field results, COLOG provided final logs for this reporting period, which are included in Appendix B and discussed further in Section 3.3.1.

2.3.2.2 Hydraulic Testing

Straddle-packer testing was conducted at MW-113 (bedrock) and MW-400 (bedrock and alluvium) to estimate hydraulic conductivity and to compare with NMR and CDFM logging results for the newly installed wells. MW-113 was proposed for hydraulic testing in the FSP to address the issue of interconnectivity of fractures and flow within bedrock. MW-400 was subsequently proposed and approved for hydraulic testing in Tech Memo 13 in order to provide quantitative hydraulic conductivity data for comparison to the NMR hydraulic conductivity estimates for both alluvium and bedrock. Specific depth intervals were isolated by inflating the packers above and below, and slug testing was conducted by

removing a slug of groundwater and then monitoring the water level recovery within each interval to estimate hydraulic conductivity. As proposed in Tech Memo 13, the testing method was changed from pneumatic slug testing (as proposed in the FSP) to a submersible pump to address health and safety concerns. At MW-113, four intervals were tested—one in the St. Louis Formation, two in the Salem Formation, and one in the Warsaw Formation. For MW-400, testing was conducted in two alluvial intervals and two bedrock intervals (Salem and Warsaw). Hydraulic testing results are discussed further in Section 3.3.2 and testing results are included in Appendix B.

2.3.3 Aquifer Matrix Sampling

Aquifer matrix sampling was performed at locations MW-404 and MW-407R. Samples from MW-404 were stored on Site with no temperature preservation for over 3 months prior to shipment to the laboratory due to a delay in monitoring well screen selection and, thus, sample interval selection. The USEPA was notified of the QAPP and FSP deviation and the alluvial well MW-407R was selected and sampled as a replacement following all preservation and holding time requirements as documented in Tech Memo 16. ERM was planning to only analyze metals and radiochemistry parameters that still met preservation and holding time requirements at well MW-404, but at the request of the USEPA, the laboratory proceeded to run the full aquifer matrix analyte list for the bedrock intervals at well MW-404 despite the sample condition, since the replacement well (MW-407R) is an alluvial-only well. Data quality implications and qualifications related to these data are discussed in Section 3.4. Though not specified in the FSP, an alluvial matrix grab sample was collected at location MW-112 from 49 to 51 feet below ground surface and analyzed for the full aquifer matrix analyte list after elevated radioactivity was detected by Ameriphysics radiation technicians during core scanning conducted in accordance with OU-1 protocols. Aquifer matrix sampling results are summarized in Table 5a and discussed in Section 3.4. The only non-disposable equipment used during aquifer matrix sampling was a rock hammer used on bedrock samples at well location MW-404. An associated EB sample was collected, and results are presented in Table 5b. Additional aquifer matrix sampling is planned for 2022 at the monitoring well locations designated in the FSP.

2.3.4 Monitoring Well Screen Selection

In accordance with the criteria described in Section 3.9 of the FSP, monitoring well screen intervals were selected using the high-resolution data generated from the WATERLOO APS™ and geophysical logging tools. Well screen selection was conducted using preliminary field logs after the geophysical logging had been completed, and ERM relied on multiple lines of evidence, including natural and spectral gamma (lithology and potential radionuclides), induction conductivity (lithology and pore fluid water quality) and, with respect to the St. Louis Formation, caliper, fluid temperature and resistivity, CDFM testing, and acoustical televiewer data to identify the presence of open fractures that may yield water under ambient and pumping conditions. In accordance with the FSP, screen selections were communicated to the USEPA prior to well installation. Table 6 provides the screen intervals and a rationale for the selection of each screen.

ERM noted the following deviations from the FSP:

- An additional shallow well screen was added to MW-306 as a replacement for MW-103 because the OU-3 Respondents were unable to gain legal access to gauge or sample MW-103, which is located off Site.
- MW-304-P3 and MW-404-P5 were unknowingly screened within the Warsaw Formation because the Warsaw Formation was shallower than expected and the contact was not visually apparent. The OU-3 Respondents requested to reduce the number of bedrock well screens at MW-405-P5 anticipating that the Salem Formation would not be thick enough to accommodate more than one bedrock

screen. The USEPA did not approve of a reduction in bedrock screens, even though the FSP specifically indicated that wells would not be installed in the Warsaw Formation; therefore, MW-405-P5 was also screened within the Warsaw Formation. This deviation was documented in Tech Memo 15.

2.3.5 Monitoring Well Installation

Following borehole advancement, testing, and well screen selection, monitoring wells were installed as either conventional single-screen wells or multi-level FLUTe™ CHS wells. Figure 3 shows the current OU-3 monitoring well network and Figure 4 shows off-Site monitoring wells, piezometers, and stilling wells installed during the reporting period. Monitoring wells installed during the reporting period are summarized in Table 2-5 below. Attached Tables 7a and 7b provide additional monitoring well construction details and survey data, respectively. Appendix C includes the associated combined borehole and well construction logs.

Table 2-5: Monitoring Well Completions

Location Name	Number of Alluvium/Bedrock Well Screens	Well Completion Date	CHS Calibration Date	Well Type
MW-111	3/0	8 March 2021	3 May 2021	CHS
MW-112	3/0	16 May 2021	16 May 2021	CHS
MW-113	0/1	4 May 2021	N/A	Single-screen
MW-117	1/0	9 March 2021	N/A	Single-screen
MW-118	1/0	17 April 2021	N/A	Single-screen
MW-205	0/1	2 April 2021	N/A	Single-screen
MW-213	2/0	17 May 2021	21 May 2021	CHS
MW-302	1/0	1 March 2021	N/A	Single-screen
MW-303	2/0	23 February 2021	3 May 2021	CHS
MW-304	1/2	1 April 2021	20 May 2021	CHS
MW-306	2/0	15 March 2021	3 May 2021	CHS
MW-400	3/2	6 March 2021	4 May 2021	CHS
MW-401	3/0	27 January 2021	19 March 2021	CHS
MW-404	3/2	24 May 2021	25 June 2021	CHS
MW-405	3/0	27 January 2021	16 March 2021	CHS
MW-407R	3/0	10 June 2021	24 June 2021	CHS
MW-408	1/0	24 January 2021	N/A	Single-screen
MW-409	1/0	24 January 2021	N/A	Single-screen
MW-505	3/0	23 March 2021	22 May 2021	CHS
MW-605	0/2	28 May 2021	30 June 2021	CHS

Note: MW-407 was originally installed on 17 March 2021 and was later identified to have been installed incorrectly. MW-407 was abandoned on 7 June 2021 and reinstalled as MW-407R.
N/A = not applicable

Throughout well construction activities completed during the reporting period, the USEPA approved various changes to the FSP via the submittal of multiple Tech Memos, as summarized in Section 2.1:

- At the beginning of the drilling program, Cascade used high-pressure water for decontamination of drilling equipment at six locations instead of steam cleaning as specified in the FSP (MW-400, MW-401, MW-408, MW-409, MW-303, and MW-304). Additionally, drilling equipment was decontaminated at each drill site rather than in the area designated for decontamination. These locations did not exhibit evidence of impacts during field screening and there were no observations of viscous liquids adhered to drilling tools. Details regarding this deviation were provided to the USEPA in the "Decontamination Procedures" memo dated 23 February 2021 and decontamination procedures in SOP #18 were updated to allow the use of pressure washing and decontamination, consistent with current USEPA guidance (USEPA 2020a), of drilling equipment at the drill site for locations within Areas 1 and 2 (see Tech Memo 12).
- The construction specifications for multi-level CHS wells and bedrock monitoring wells were modified as follows (see Tech Memo 12).

  - Allowance of a 1-foot (instead of 2-foot) bentonite seal between MW-111-P2 and MW-111-P1 due to having only 5 feet between screen intervals. The USEPA verbally approved this modification for MW-111 on 7 March 2021, prior to the submittal of Tech Memo 12.

  - Allowance of a 2-foot-thick sand layer to be added below the sump at the bottom of the well to prevent the monitoring well from sinking into the bentonite seal at the bottom of the borehole. This sand layer is separated from the sand filter pack that surrounds the well screen by a 2-foot-thick layer of coated bentonite pellets. The sand filter pack extends 2 feet below the bottom of the well screen. The USEPA verbally approved this modification for MW-304 on 31 March 2021.

  - The sand filter pack may extend 3 feet below the bottom of the well screen for boreholes that were drilled to depths greater than the target well depth (see revised FSP Figure 3-6) and the bentonite seal, constructed using coated bentonite pellets,[1] may extend up to 10 feet above the monitoring well screen (see revised FSP Figure 3-6, revised FSP page 32, and revised SOP #09). The USEPA verbally approved this modification for MW-205 on 1 April 2021.

  The changes noted above were implemented by the Missouri-licensed driller in accordance with MDNR requirements.

ERM noted the following deviations from the FSP during well construction:

- Following installation of the CHS system in monitoring well location MW-407 in March 2021, it was determined that the PVC well screens for Ports 1 and 2 were constructed 10 feet deeper than designed. In June 2021, Cascade abandoned the existing MW-407 well and installed a replacement CHS well adjacent to the original location (MW-407R).

As noted previously, monitoring well installation activities were paused at the end of June 2021 as the OU-3 Respondents worked to secure access to off-Site locations and worked to receive approval to install monitoring wells within the ECLD. Changes to the field schedule were documented in Revised Tech Memo 17 dated 31 August 2021, specified that off-Site well installation would resume by 15 November 2021 and would be completed by 5 August 2022. The modified field schedule was not approved by USEPA during the 2021 reporting period.

[1] The coated bentonite pellets are designed to resist hydration for at least 30 minutes following immersion in water, which allows them to settle through the water column to their final depth before hydration and expansion.

2.4 Monitoring Well Development

Well development was conducted at all newly installed monitoring wells prior to any gauging or sampling activities and no sooner than 48 hours after grouting was completed, as specified in the FSP. Development of newly installed single-screen monitoring wells was conducted by ERM using a submersible pump, and development of multi-level CHS wells was conducted by FLUTe™. A summary of well development information is provided in Table 8a for single-screen wells and Table 8b for multi-level wells, including well development dates, volumes purged, and field turbidity measurements.

During initial well development activities in March 2021, it was determined that the turbidity criterion at multi-level FLUTe™ CHS wells needed further refinement, due to the nature of the well construction. As described in Tech Memo 12 dated 21 April 2021, there are two components of the CHS well system (as shown in FSP Figure 3-5): 1) the outer PVC well screen, riser pipe, sand filter packs, and bentonite seals; and 2) the inner CHS well system. Therefore, there must be two phases of well development—phase one for the PVC well screen and phase two for the CHS well system. Following verbal concurrence from the USEPA, ERM proceeded with well development at the CHS wells in April and May 2021 using this two-phase approach. ERM subsequently proposed the following new turbidity criteria for CHS wells in Revised Tech Memo 12, dated 15 June 2021: at least one reading below 80 Nephelometric Turbidity Units (NTUs) during phase one of development; and at least one reading below 10 NTUs during phase two of development. These criteria were used to develop the remaining CHS wells in June 2021.

During a conference call with the USEPA and the United States Geological Survey (USGS) on 26 July 2021, a concern was raised about the ability to adequately isolate individual screen intervals during phase one of development at CHS wells and the possibility that purging may be drawing water in from other more transmissive screen intervals. In response to this concern, ERM proposed to develop all future CHS wells using a straddle-packer system to seal off and purge individual screens (see Revised Tech Memo 12 dated 17 September 2021).

ERM noted the following deviations from the FSP during well development:

- MW-205 was unable to achieve the turbidity criterion specified in the FSP (one reading below 10 NTU) during well development despite multiple attempts and purging over twice the minimum volume requirement (MW-205 is a single-screen bedrock well in the Salem Formation). During quarterly groundwater sampling events, turbidity has stabilized or dropped below 10 Formazin Nephelometric Units (FNUs) at this location. Note, the difference in turbidity units is based on the type of equipment approved for each activity. Turbidity is measured using a white light during well development activities (reported in NTUs) and using an infrared light source during quarterly groundwater monitoring (reported in FNUs). The two units of measurement are interchangeable, and both are considered adequate for project data quality objectives.
- MW-213 was left unlined for twice the amount of time specified in the FSP (96 hours instead of 48 hours) because field personnel were prioritizing issues at off-Site well MW-605. Therefore, more than double the minimum amount of water was purged from each screen in order to compensate for the additional time the well was left open.
- During phase one of CHS well development, MW-401-P1, MW-401-P3, MW-405-P1, and MW-405-P2 did not meet the turbidity criterion of at least one reading below 80 NTU because that criterion had not been defined at the time of well development. Turbidity readings during quarterly groundwater monitoring events were routinely below 10 FNU at these locations.
- MW-605 was left unlined from 15 to 26 May 2021 due to challenges deploying the blank liner at this location. Based on an ambient flow rate of approximately 87 gallons per day (determined using borehole geophysics data), it was estimated that an additional 957 gallons of water should be

removed from this boring to compensate for the additional time the hole was left open (i.e., 479 additional gallons at each of the two screens). However, during well development, the minimum volume could not be purged despite multiple attempts to purge the required amount. Additionally, MW-605-P2 did not meet the turbidity criterion during phase one (one reading below 80 NTU) or phase two (one reading below 10 NTU) of development.

- During phase two of CHS well development, MW-304-P3 and MW-404-P5 did not achieve a turbidity reading below 10 NTU. Turbidity during quarterly groundwater events is routinely below 10 FNU at MW-404-P5 and above 10 FNU at MW-304-P3.

2.5 Monitoring Well Gauging

Monthly gauging of the OU-3 well network was completed by Feezor throughout the reporting period; Table 9 summarizes the monthly gauging data. General gauging order was established following review of the analytical results from the Q4 2020 sampling event; water levels are measured first in wells that had the least amount of known contamination. Newly installed monitoring wells were incorporated into the gauging order accordingly as analytical results became available. Water level meters (WLMs) used during monthly gauging were calibrated by Feezor in January 2021 (WLMs used for conventional, single-screen wells) and April 2021 (WLMs used for CHS wells).

During each gauging event, certain wells could not be gauged for various reasons, including pending results of well inspection and lack of legal access, as described in the *Revised Well Inventory Summary Report*. No deviations from the FSP occurred with respect to monitoring well gauging during the reporting period.

2.6 Transducer Deployment and Monitoring

Transducers were installed in all newly installed CHS monitoring wells and in stilling wells SG-504, SG-505, and SG-600 during the reporting period. Transducer data are downloaded on a monthly basis during gauging events. Transducer data are discussed in Section 3.5.

ERM noted the following deviations from the FSP with respect to transducer deployment and monitoring:

- The transducer at PZ-101-SS was removed on 2 February 2021 so that downhole geophysics could be performed at this location. The transducer was reinstalled on 25 March 2021.
- Transducer readings were not recorded at PZ-209-SD between 13 January and 5 April 2021 and at PZ-111-KS between 3 May and 2 June 2021 due to technical difficulties with the logging equipment.
- Transducer readings could not be downloaded from SG-504 in July 2021 due to issues with the data cable, which is believed to be damaged. The data cable could not be inspected or fixed because of elevated water levels in the surface water body, which made it unsafe to access during the reporting period. No data have been downloaded from this transducer since 3 June 2021.

2.7 Monitoring Well and Leachate Collection Sump Sampling

ERM and Feezor completed three quarters of groundwater sampling during the reporting period, as summarized in Table 2-6 below.

Table 2-6: Summary of Groundwater Monitoring Events

Quarterly Sampling Event	Dates	Groundwater Locations Sampled	LCSs Sampled
Q1 2021	22 February–16 March	76	2
Q2 2021	4–26 May	108	2
Q3 2021	3–25 August	120	2

Figures 5a through 5c show the monitoring wells and LCS locations that were sampled during each quarterly sampling event. During each quarterly sampling event, certain wells could not be sampled for various reasons, including pending results of well inspection or a lack of legal access, as explained in Table 10. A summary of field parameters recorded at each location at the time of sampling is provided in Table 11. Due to the aeration that occurs during the collection of field parameters at multi-level wells, dissolved oxygen measurements from multi-level wells are not considered representative, as indicated by an “X” qualifier in Table 11. As noted in the FSP, dissolved oxygen measurements from multi-level wells are recorded for reference only. Validated groundwater and leachate analytical data for the reporting period are provided as Tables 12a through 12h and Tables 13a through 13h, respectively; validation reports are provided as Appendix D-2.

Each sampling event was conducted in 20 business days or less in accordance with Figure 8-1 of the FSP. Following receipt of Q4 2020 analytical data, a sampling order was established (i.e., from least to most impacted). Following well development, new monitoring wells were added to the OU-3 monitoring program and were generally sampled at the end of the event or following collection of an EB. Sampling order was reviewed and revised on a quarterly basis.

Quality assurance / QC samples were collected during each quarterly sampling event at the frequency prescribed in the QAPP and included blind field duplicates, matrix spike / matrix spike duplicates, EBs from decontaminated WLMs, field blanks (FBs), filter blanks from the in-line 0.45-micron filter and plunge filter for hexavalent chromium only, and trip blanks for volatile organic compounds (VOCs) and total petroleum hydrocarbons. EBs, FBs, and filter blanks were collected using laboratory-provided water. Trip blanks were provided by the laboratory. Validated field QC data for the reporting period are included as Tables 14a to 14d. A discussion of groundwater sampling results is provided in Section 4.0 of this Annual Report.

Sample collection order was modified at PZ-302-AS in accordance with the FSP during all three quarterly events during the reporting period due to low yield. All field parameters were stable at the time of initial sampling before the well went dry, with the exception of dissolved oxygen and ORP in Q3. During each quarterly event, Feezor returned multiple times on the same day and on the two following days to collect all remaining samples from this well.

ERM noted the following deviations from the FSP and QAPP during monitoring well sampling:

- Drawdown did not stabilize to within 0.3 foot of the initial depth to water at the monitoring wells listed below, despite maintaining flow rates within the acceptable range for low-flow sampling methods (i.e., less than 500 milliliters [mL] per minute). Attempts were made to control drawdown, including lowering pumping rates, without success. This indicates that these wells have low yields. With the exception of seven wells screened in unconsolidated deposits and one leachate riser, nearly all of the wells with drawdown issues are screened within bedrock. Not all bedrock wells at the Site exhibit low yields. Those wells that exhibit adequate yields to enable low-flow sampling with minimal drawdown intersect transmissive bedrock fractures that represent preferential groundwater flow paths within bedrock. Those wells that exhibit low yields (i.e., those listed below) intersect either

low-transmissivity fractures or the bedrock matrix, neither of which represent preferential groundwater flow paths within bedrock:

- Q1 to Q3: I-67, I-73, LR-100, MW-1204, PZ-100-KS, PZ-100-SD, PZ-100-SS, PZ-101-SS, PZ-102R-SS, PZ-102-SS, PZ-103-SS, PZ-104-KS, PZ-104-SS, PZ-105-SS, PZ-106-KS, PZ-106-SD, PZ-106-SS, PZ-107-SS, PZ-109-SS, PZ-111-SS, PZ-111-KS, PZ-111-SD, PZ-113-SS, PZ-115-SS, PZ-116-SS, PZ-200-SS, PZ-201A-SS, PZ-203-SS, PZ-204A-SS, PZ-204-SS, PZ-205-AS, PZ-205-SS, PZ-206-SS, PZ-208-SS, PZ-209-SD, PZ-209-SS, PZ-210-SD, PZ-210-SS, PZ-211-SD, PZ-211-SS, PZ-212-SD, PZ-212-SS, S-10, and S-5.
- Q2 to Q3 only: MO-1-SDR, MO-3-SDR, MO-3-SS, MW-205, and PZ-104-SD.
- Q3 only: D-81, D-85, and MW-113.

- Certain field parameters were not within the stabilization criterion defined by the FSP at the time of sampling at the monitoring wells listed below:
  - Dissolved oxygen was not stable at PZ-100-KS, S-10, and PZ-104-SS during the Q1 sampling event because field staff were utilizing an outdated version of the groundwater sampling log, which listed the incorrect stabilization criterion. Dissolved oxygen was not stable at PZ-302-AS during the Q3 sampling event because the well went dry.
  - Temperature was not stable at PZ-205-AS during the Q1 sampling event or at PZ-208-SS during the Q2 sampling event.
  - Specific conductivity was not stable at PZ-106-SD during the Q2 sampling event due to field team error; the final three readings were within 3.5 percent of each other, instead of 3 percent.
  - ORP was not stable at PZ-302-AS during the Q3 sampling event because the well went dry prior to stabilization. ORP was not stable at PZ-111-SD during Q3 due to a calculation error in the EQuIS Collect program (Build 7.21.1) that labeled the well as stable; the final three readings were within 15 millivolts of each other, instead of 10 millivolts. Stabilization at subsequent wells was calculated manually by field staff until the calculation error was corrected in EQUIS Build 7.21.3, which was uploaded to field tablets starting in Q1 2022.
- During the Q1 sampling event, an additional filtered sample was collected from PZ-303-AS for analysis of dissolved polychlorinated biphenyls to support further assessment of the polychlorinated biphenyl detection in this location.
- During the Q1 and Q2sampling events, the following wells were resampled for select parameters due to laboratory error:
  - Q1: PZ-212-SD for herbicides due to a laboratory QC failure.
  - Q2: I-65 for herbicides due to an accidental laboratory spike and MW-400-P4 and MW-408 for geochemical parameters due to bottle breakage during handling by the laboratory.
- During the Q3 sampling event, LCS-3D was resampled because the initial sample was received at the laboratory above the acceptable temperature. All ice was melted in the coolers containing the sample bottles and it is likely that there was not enough ice to compensate for the elevated temperature of the leachate matrix. Additional ice was added to the cooler during resampling and the sample was received at the laboratory within acceptable temperature limits.
- During the Q3 sampling event, Pace Indianapolis notified ERM of a power outage at Pace National in Baton Rouge, Louisiana caused by Hurricane Ida. Shipment of the samples to another laboratory was not feasible due to disruptions in travel and shipping services also caused by the hurricane. In order to analyze as much data as possible within holding time, Pace Indianapolis—which is

accredited for methane analysis by RSK-175—used sample volume from the extra unpreserved 100 mL amber glass vials collected for USEPA Method 8270C analysis to perform methane analysis. Pace National is the only laboratory within the Pace network that is accredited for carbon dioxide analysis; therefore, alternatives for carbon dioxide analysis were not available. During the power outage, carbon dioxide samples at Pace National were temperature preserved by refrigerators running on generator power. When power was restored at Pace National, the remaining carbon dioxide samples were analyzed with some holding time exceedances. Since methane and carbon dioxide require different analytical runs for each sample, Pace Indianapolis continued to perform the methane analysis for the remaining samples in order to maximize the efficiency of the carbon dioxide analysis at Pace National to meet holding times where possible. Data quality implications are discussed in Section 3.8.

- The tritium vials for well locations MW-408, D-83, and DUP-006 during Q3 broke in transit from Pace Indianapolis to Pace Pittsburgh. Pace Indianapolis filled a new 500 mL unpreserved amber vial with extra sample volume from one of the two 1,000 mL unpreserved amber bottles collected for herbicide analysis and sent the sample to Pace Pittsburgh for the tritium analysis.

2.8 Piezometer Installation

Five new piezometers were proposed in the FSP to provide supplemental groundwater level measurement points at locations distant from the Site for calibration of the groundwater model (700-series). During the reporting period, the OU-3 Respondents conducted frequent outreach and communicated regularly with the various property owners for each proposed piezometer location to obtain legal access. No piezometers were installed during the reporting period due to the difficulty of obtaining access and because piezometers would be installed most efficiently as a single mobilization, once access was secured to all locations. A summary of the access status as of the end of Q3 2021 for each piezometer is provided below.

- Access was secured at PZ-700.
- Access was secured at PZ-701.
- Access was secured at PZ-702; however, this location was proposed for replacement by data from existing piezometers within the Howard Bend Levee District (Tech Memo 15).
- Access was denied at PZ-703; this location was proposed for replacement by data from existing piezometers within the Howard Bend Levee District (Tech Memo 15).
- Access was secured at PZ-704.

Changes to piezometer locations based on safety and access were documented in Tech Memos 2, 15, and 20. As of the end of Q3 2021, a revision to Tech Memo 15 was in progress. This revision documents a location change for PZ-700 and a transducer installation planned for one piezometer in the Howard Bend Levee District. Piezometer installation is planned for 2022 and will be documented in the 2022 Annual Report.

2.9 Stilling Well Installation and Monthly Gauging

Nine stilling wells were proposed in the FSP to evaluate the temporal and spatial variability in surface water levels in nearby surface water bodies. During the reporting period, the OU-3 Respondents conducted frequent outreach and communicated regularly with the various property owners for each proposed stilling well location to obtain legal access. Three stilling wells were installed during the reporting period. A summary of the status of each stilling well as of the end of Q3 2021 is provided below.

- SG-200 was installed in December 2020.
- SG-400 was installed in December 2020.
- Installation of SG-500 is pending legal access from the ECLD.
- Access to SG-501 is secured.
- Access to SG-502 is secured.
- Access to SG-503 is secured.
- SG-504 was installed on 13 January 2021.
- SG-505 was installed on 19 April 2021.
- SG-600 was installed on 19 April 2021.

Stilling wells that have been installed are equipped with pressure transducers and the surface water elevation data are downloaded on a monthly basis. Installation of SG-501, SG-502, and SG-503 is planned for 2022. As of the end of Q3 2021, the OU-3 Respondents were still working to gain access to SG-500, with the assistance of the USEPA. The locations and installation status of stilling wells are shown on Figure 4. Some stilling well locations have been adjusted based on access and these changes were documented in Tech Memos 20 and 22.

2.10 Third-Party Data Collection

As described in Section 3.19 of the FSP, ERM collects third-party data for evaluation from Bridgeton Landfill, the National Oceanic and Atmospheric Administration's National Climatic Data Center's St. Louis Airport International Station, the on-Site meteorological station, and from the USGS stream gauge 06935965 at St. Charles, Missouri. A summary of data collection is provided below:

- Precipitation data are collected daily from the nearby St. Louis Lambert International Airport and are stored in ERM's EQuIS project database.
- Missouri River stage data from the USGS stream gauge 06935965 at St. Charles, Missouri are downloaded and stored in ERM's EQuIS project database daily. Automated calculations within the EQuIS database convert gauge height data to feet above mean sea level.

Additionally, Bridgeton Landfill provides weekly, monthly, and quarterly data submittals to MDNR, and provides copies of these submittals to ERM. As of the end of the reporting period, ERM was in the process of reviewing these submittals for data relevant to the OU-3 investigation objectives.

2.11 Vapor Intrusion Investigation Activities

During the reporting period, ERM completed three quarterly vapor intrusion (VI) sampling events at four selected buildings at the Site (i.e., the Engineering Building, the Pump House, the Scale House, and the Pretreatment Building Office) and two quarterly VI sampling events at the Asphalt Plant Building (due to property access issues delaying the start of sampling at the Asphalt Plant Building). The VI sampling events involved collection of paired indoor air (IA) and sub-slab vapor (SSV) samples and outdoor ambient air (AA) samples. Deviations from the FSP are discussed in this section.

On 13 January 2021, in accordance with the USEPA-approved FSP, vapor pins© were installed in the Engineering Building, Pump House, and Pretreatment Building Office to enable collection of SSV samples. One vapor pin© was installed at the Asphalt Plant Building on 15 April 2021 after access was granted. A vapor pin© was not installed at the Scale House as the floor of this building was constructed

over a raised foundation. The SSV samples for the Scale House were collected through an air vent system installed below the building.

2.11.1 Sampling Locations

VI sampling locations were selected based on a number of factors associated with building construction and use, including the following: envelope openings; interior partitions (e.g., walls or dividers); subsurface footers; known sub-slab conduits; vapor mitigation systems; heating, ventilation, and air conditioning (HVAC) systems; and known areas of chemical usage or storage. The sampling location(s) for each building is/are shown on Figures 6a through 6f.

2.11.1.1 Engineering Building (approximately 5,700 square feet)

This building has two distinct sections, each constructed at a different time. Based on visual observations, the building is slab-on-grade construction partitioned into offices, a conference room, a breakroom, restrooms, storage areas, and a garage. Doorways into individual rooms generally remain open except when in use. A ceiling vent fan in the front restroom operates when the building is occupied to assist with the turnover of air within the building. The building has a centralized forced-air electric HVAC system located in the utility room next to the conference room (i.e., in the central portion of the building). Electric service to the Engineering Building is provided through overhead electric supply lines. Known subsurface utilities in the building are the water and sanitary sewer lines servicing the restrooms and the floor drain in the HVAC room. No subsurface natural gas or propane services are provided to the building. Sewer lines drain to a sanitary collection tank off the south side of the building. Based on size, building use, and location of the subsurface utilities, three co-located SSV and IA sampling locations were defined within this building (one in each of the three main rooms of the building)—in the foyer, the conference room adjacent to the HVAC room floor drain sewer line, and the garage area.

2.11.1.2 Scale House (approximately 275 square feet)

This building is elevated approximately 5 feet above ground surface and consists of a raised-concrete perimeter wall, which is filled with granular backfill. The building has a modular-type construction and the air space below the building floor has an air intake pipe and a blower, which draws air through the space below the building and then vents it to the atmosphere. The building has two rooms—the control room and a restroom. The restroom door is open except when it is in use. The building has a centralized forced-air electric HVAC system located in the utility room on the western end of the building. Electric service to the Scale House is provided through overhead electric supply lines. Known subsurface utilities within this building are the water and sanitary sewer lines servicing the restroom, which drains to a holding tank on the outside of the building to the south. No subsurface natural gas or propane services are provided to the building. Based on building use, the IA sample location was placed in the center of the control room out of the way to not cause interference with daily activities. Because this building is elevated, the SSV sample was collected through the air intake of the venting system.

2.11.1.3 Pump House (approximately 675 square feet)

This building is partitioned into two approximately equal sections—a vacant area and a pump maintenance area. Based on visual observations, the building is a wood frame, slab-on-grade construction. HVAC is provided by an electric ceiling-mounted heater and a window air conditioning unit. Electric service to the Pump House is provided through trenched, subsurface electric supply lines. Based on size and use, one co-located SSV and IA sampling location was defined in a central portion of the pump maintenance area of the building.

2.11.1.4 Pretreatment Plant Office (approximately 700 square feet)

This office area is attached to the south side of the 21,000 square feet Pretreatment Building and is partitioned into three areas—an open office area, a locker room, and a restroom. The doors to the locker room and restroom are open except when in use. Based on visual observations, the building is concrete slab-on-grade construction with poured or tilt-up concrete walls. The office area has a separate electric HVAC system from the pretreatment plant area of the building. Electric service to the Pretreatment Plant Office is provided through overhead electric supply lines. Known subsurface utilities are sanitary sewer and water lines servicing the restroom and kitchenette area in the office. Based on size and use, one co-located SSV and IA sampling location was identified in a central portion of the office area where it would not interfere with daily activities.

2.11.1.5 Asphalt Plant Building (approximately 675 square feet)

This building is generally open and contains a control room on an elevated wooden platform, electrical switchgear, and a small kitchen area. Based on visual observations, the building is slab-on-grade construction with brick or wood frame walls covered with exterior siding. There are no known subsurface utilities underlying the building. There is no restroom or potable water service to the building. Although potable water is not provided to the building, any liquids that would be dumped into the sink in the kitchen area would drain to a sewer line located outside of the building. The building is serviced by one central electric HVAC system. Electric service to the Asphalt Plant is provided through overhead electric supply lines. No subsurface natural gas or propane services are provided to the building. Based on building size and use, one co-located SSV and IA sampling location was identified in the central portion of the building, away from the elevated wooden platform in an area where it would not interfere with daily activities.

2.11.1.6 Outdoor Ambient Air Locations

For each building, the AA samples were placed in the predominant upwind direction at the time of sampling relative to the building location. For consistency, if the predominant wind direction was the same as a previous sampling event, the AA sample was placed in the same general location as the previous event.

2.11.1.7 Additional Methane Sampling Locations

In September 2021, the OU-3 project team collected samples from additional locations not included in the USEPA-approved FSP. The purpose of the sampling was to collect additional information regarding methane concentrations in soil gas, and the locations were chosen to take advantage of soil borings being installed by the OU-1 project team along the northern perimeter of the OU-1 Area 1, near the Engineering Building. These locations were selected due to their proximity to the Engineering Building where sub-slab methane concentrations were detected (see discussion of results in Section 3.10). Real-time methane readings were collected in the field with a Landtec GEM-2000 landfill gas meter during soil boring installation and followed the methane field monitoring memo provided to the USEPA on 2 September 2021. Readings were collected at the top of the borehole as well as specified depth intervals down the borehole. The methane readings fluctuated over the monitoring interval and, therefore, both the minimum methane concentration and the maximum methane concentration at each depth were recorded.

2.11.1.8 OU-1 and OU-2 Sampling Locations

In accordance with the USEPA-approved RI Work Plan, OU-1 and OU-2 will evaluate landfill gas along landfill boundaries and share the results with the OU-3 project team. The OU-2 project team started landfill gas monitoring at locations along the western perimeter of the Inactive Sanitary Landfill (ISL) on 30 September 2021. No OU-2 landfill gas data had been reported as of the end of the reporting period.

The OU-1 project team had not installed or started monitoring landfill gas along the OU-1 boundary as of the end of the reporting period.

2.11.2 Building Surveys, Sample Collection, and Sample Analysis

Building surveys were completed in each building prior to the first sampling event and building survey results were checked for significant changes prior to each subsequent sampling event. When possible, products that contain VOCs were temporarily removed at least 24 hours prior to each sampling event. Appendix E includes a summary of building survey information. There were no significant modifications to buildings, their contents, or their use noted during follow-up building surveys performed prior to subsequent sampling events. VOC-containing products temporarily removed prior to subsequent sampling events were consistent with those removed prior to the initial event.

Following the pre-sampling surveys, ERM collected co-located SSV (5-minute sample) and IA (8-hour sample) samples and associated upwind AA (8-hour samples) samples for analysis of the parameters listed below. During the first sampling event at each building, ERM collected radon samples in the IA and associated AA over a “short-term” (ST), 48-hour period. Long-term (LT) radon sample collection over an approximately 3-month period was attempted outside each of the five buildings, but samples collected from the sample collection devices were not able to be analyzed, as described in more detail below.

Table 2-7 below summarizes the reporting period VI sampling activities. Unless otherwise noted, samples were collected under what was considered “normal operating conditions” for each building. In accordance with the FSP and QAPP, the IA samples and associated AA samples were analyzed for VOCs by USEPA Method TO-15 MOD/SIM and methane by TO-3; SSV samples were analyzed for VOCs by USEPA Method TO-15, methane by TO-3 MOD; and fixed gases (oxygen and carbon dioxide) by USEPA 3C MOD. VI sampling results are discussed in Section 3.9.

Table 2-7: Summary of Vapor Intrusion Sampling Activities

Building	Q1 2021 (Jan 2021)	Q2 2021 (Apr 2021)	Q3 2021 (Jul 2021)
Engineering Building	IA[1] +AA + SSV + ST Radon + LT Radon Deployment	IA+AA + SSV + LT Radon Retrieval	IA+AA + SSV
Scale House	IA[2] +AA + SSV + ST Radon + LT Radon Deployment	IA+AA + SSV + LT Radon Retrieval	IA+AA + SSV
Pump House	IA+AA + SSV + ST Radon + LT Radon Deployment	IA+AA + SSV + LT Radon Retrieval	IA+AA + SSV
Pretreatment Building Office	IA+AA + SSV + ST Radon + LT Radon Deployment	IA+AA + SSV + LT Radon Retrieval	IA+AA + SSV
Asphalt Plant Building	None[3]	IA+AA + SSV + ST Radon + LT Radon Deployment	IA+AA + SSV + LT Radon Retrieval

[1] Two Q1 IA/AA sampling events were completed at the Engineering Building due to the presence and noted continuous operation of a bathroom venting fan. The first Q1 sampling event (11 January 2021) was completed with the vent fan on (i.e., normal operation). The second Q1 sampling event (17 January 2021) was completed with the vent fan off and following a 13-hour shutdown of the vent fan. The remaining quarterly sampling events were completed with the vent fan running under normal operating conditions.

[2] Two Q1 IA/AA sampling events were completed at the Scale House due to the presence and noted continuous operation of a sub-slab mitigation system. The first Q1 sampling event (11 January 2021) was completed with the mitigation fan on (i.e., normal operation). The second Q1 sampling event (17 January 2021) was completed with the mitigation fan off and following a 13-hour shutdown of the fan. The remaining quarterly sampling events were completed with the fan running under normal operating conditions.

[3] The initial VI sampling event did not occur at the Asphalt Plant Building until Q2 2021 due to a delay in securing access to this building.

ERM noted the following deviations from the FSP:

- Moisture from precipitation leaked into the deployment boxes for the LT radon samples and negatively affected the charge on the plates in the e-chambers. All LT radon samples collected during the reporting period were affected by moisture and were unable to be analyzed.
- ST SSV radon readings were not collected from the SSV points during the initial quarterly VI sampling event conducted in January 2021. ST radon readings will be collected from all SSV points during Q1 2022.

3. RESULTS

3.1 Off-Site Water Supply Inventory

As summarized in the Off-Site Water Supply Inventory prepared by Feezor (Appendix A of the *Revised Well Inventory Summary Report* dated 5 April 2021), multiple off-Site wells were identified within the boundaries of the preliminary groundwater modeling domain. No substantial evidence of any additional potential water supply wells was discovered during the visual assessment conducted in May 2021.

3.2 Vertical Profiling in Groundwater

WATERLOO APS™ groundwater analytical results are generally consistent with groundwater analytical results from nearby monitoring wells where comparable data are available (Table 2b). Table 3-1 summarizes the correlation between monitoring well screen intervals and WATERLOO APS™ sample depths. The monitoring well data used for comparison were collected during the reporting period quarterly groundwater monitoring events. The data from the event closest in time to the date of the WATERLOO APS™ sampling were used.

Table 3-1: Summary of Monitoring Wells with Corresponding WATERLOO APS™ Samples

Monitoring Well	Well Screen Interval (feet below ground surface)	APS	APS Sample Depth (feet below ground surface)	Approximate Distance Between Monitoring Well and APS Boring
MW-302	68–78	APS-001	70–70.1 75–75.1	12 feet
MW-303	68–78	APS-002	70–70.1 75–75.1	0.5 feet
MW-304	106–116	APS-003	113–113.1	6 feet
MW-306	25–35	APS-004	25–25.1 30–30.1	7.5 feet
	80–90		80–80.1 85–85.1	
MW-404	48–58	APS-005	49–49.1 54.1–54.2	1 foot
	73–83		73.9–74 79–79.1	
	103–113		104–104.1 109–109.1	
MW-405	30–40	APS-006	30–30.1 35–35.1	11 feet
	70–80		70–70.1 75–75.1	
	90–100		90–90.1 95–95.1	
MW-400	20–30	APS-007	20–20.1 25–25.1	3.5 feet

Monitoring Well	Well Screen Interval (feet below ground surface)	APS	APS Sample Depth (feet below ground surface)	Approximate Distance Between Monitoring Well and APS Boring
	55–65		55–55.1 60–60.1	
	90–100		90–90.1 95–95.1	
MW-401	32–42	APS-008	35–35.1 40–40.1	24.5 feet
	62–72		65–65.1 70–70.1	
	92–102		95–95.1 100–100.1	
No nearby wells	N/A	APS-011	N/A	N/A
MW-213	50–60	APS-012	50–50.1 55–55.1	1 foot
	75–85		75–75.1 80–80.1	
MW-505	15–25	APS-013	19–19.1	3 feet
	40–50		40–40.1 45–45.1	
	65–75		65–65.1 70–70.1	
No nearby wells	N/A	APS-018	N/A	N/A
MW-407R	53.6–63.6	APS-019	55–55.1 60–60.1	0.5 feet
	73.6–83.6		75–75.1 80–80.1	
	103.6–113.6		105–105.1 110–110.1	
MW-111	39–49	APS-020	42.8–42.9 47.8–47.9	5 feet
	54–64		57–57.1 62.8–62.9	
	79–89		83–83.1 88–88.1	
MW-118	38–48	APS-021	38.1–38.2	23 feet

N/A = not applicable

The project database reports the upper sample depth at each sample interval, but not the full length of the 4-inch sample interval.

Groundwater samples collected from monitoring wells represent flow-weighted averages across the well screen interval (e.g., the well screen intervals documented in Table 3-1 are 10 feet long), whereas samples collected from WATERLOO APS™ borings are from a discrete 4-inch interval. Because of this difference in sampling interval, individual analyte concentrations may not be comparable between the two

sampling devices; however, the list of analytes detected are usually comparable. In most WATERLOO APS™ samples, all analytes detected at concentrations above laboratory reporting limits were also detected in the nearby monitoring well samples with three exceptions—detections of *cis*-1,2-dichloroethene, tetrachloroethene, and 1,4-dioxane in three WATERLOO APS™ samples that were not detected in the corresponding monitoring well.

- *cis*-1,2-dichloroethene was detected in groundwater samples from APS-001, but at shallower depths than the well screen of MW-302. At the depth of the well screen, the *cis*-1,2-dichloroethene concentrations were 0.30J and 0.46J µg/L, consistent with the measurements in the groundwater sample from MW-302 (<1.0 µg/L).
- Tetrachloroethene concentrations in APS-007 were 3.3 µg/L and 1.1 µg/L in samples collected at 25 and 20 ft bgs, respectively; this compound was not detected in the sample collected at 30 ft bgs. Tetrachloroethene was not detected (<1.0 µg/L) in the groundwater sample collected from MW-400-P1 (screened from 20 to 30 ft bgs), Since the MW-400-P1 sample is from a ten-foot interval, the low tetrachloroethene concentrations measured APS-007 at 20 and 25 ft bgs were likely diluted by groundwater containing no detectable tetrachloroethene (i.e., at 30 ft bgs), resulting in a tetrachloroethene concentration less than 1.0 µg/L in the MW-400-P1 sample.
- 1,4-dioxane was measured at concentrations of 92.9 J and 104 µg/L in APS-020 at 83 and 88 ft bgs, respectively, but was not detected in the APS-020 sample collected at 78 ft bgs, just above the top of the MW-111-P3 well screen. 1,4-dioxane was not detected above the laboratory method reporting limit of 100 µg/L in MW-111-P3 (screened 79 to 89 ft bgs). The 1,4-dioxane concentrations measured in the APS-020 samples were just above and just below the laboratory reporting limit of less than 100 µg/L; the corresponding monitoring well sample was likely diluted by groundwater containing lower concentrations of 1,4-dioxane, resulting in a monitoring well sample concentration of less than 100 µg/L (i.e., a non-detect result).

There were also “J” qualified (estimated below reporting limit) detections of 1,1-dichloroethane, carbon disulfide, *cis*-1,2-dichloroethene, cyclohexane, m,p-xylenes, o-xylene, vinyl chloride, total xylenes, acetone, ethyl benzene, and *trans*-1,2-dichloroethene in WATERLOO APS™ samples, which did not correspond to detections in the associated monitoring wells. Because the “J” qualified laboratory values are estimated below the laboratory method reporting limit, they are consistent with non-detect results reported in the associated monitoring well samples. Slight differences in sample concentrations or laboratory sample analysis can result in either “J” qualified reported results or non-detect results at concentrations below the method reporting limit.

Dissolved oxygen values are unreliable when ORP values are very low and, therefore, were not used to evaluate aquifer geochemical conditions. Assessment of the oxidation-reduction state is ongoing, and the results will be presented in the RI Report.

3.3 Geophysical Logging and Hydraulic Testing

3.3.1 Geophysical Logging

For each well location where geophysical logging was conducted, a combined summary log is presented for the alluvium and bedrock logging runs in Appendix B. Also included in Appendix B are the results of spectral gamma station testing, CDFM testing, depth-specific sampling, and an analysis of the acoustic televiewer fracture data collected in bedrock.

The results of geophysical logging were used to inform well screen selection, as discussed in Section 2.3.4, and were used to update the CSM, as discussed in Section 4. The advantages of geophysical logging are many—multiple tools are used that can independently detect changes in

lithologic properties, and, in combination, they provide multiple lines of evidence for such changes. For example, both gamma and conductivity logs will respond to higher clay content and serve as lithologic indicators, but conductivity will also respond to the water quality of pore fluids, such as elevated total dissolved solids associated with leachate. If there is an observed increase in conductivity without a similar increase in gamma, it can be assumed that the conductivity response is due to water quality rather than lithology. This can be especially useful at landfill sites where leachate detection is desired. ERM used the collective geophysical dataset to interpret geologic conditions. The following quality issues or deviations from the FSP were noted:

- NMR: Noise (i.e., the signal-to-noise ratio measured as a percent) was monitored during logging. Stacked noise ratios below 15 percent are considered reliable and quantitative for data analysis. Data with noise ratios above 15 percent are still usable, but derived values of porosity and hydraulic conductivity are considered more qualitative than quantitative. In general, stacked noise levels were at or below 20 percent within the saturated materials that were the focus of this investigation. Where noise ratios above 20 percent were observed within saturated materials, the data were regarded as qualitative rather than quantitative, but were still used for data evaluation.
- Optical Televiewer: The opacity of water within the open borehole is a primary limiting factor for optical televiewer usability. For this investigation, water in the boreholes was generally too opaque for effective use of this tool. As documented in Tech Memo 10, the acoustical televiewer may be used instead of the optical televiewer since the tools provide similar information in saturated media and the acoustical televiewer is effective in water that is opaque.
- CDFM: For CDFM testing at the Site, multiple conditions occurred that affected the usability of the data. For some locations, the borehole yielded very little water and resulted in excessive drawdown; while at other locations, open fractures near the contact between alluvium and bedrock yielded most of the water extracted and deeper borehole testing was close to, or below, the instrument detection limits. ERM relied mainly on CDFM data from locations where the above conditions were minimized.
- Depth-specific groundwater sampling: Groundwater samples were collected under pumping conditions immediately following CDFM testing. As with the WATERLOO APS™ data, a Stage 1 validation was performed on these screening data prior to use. Limitations of depth-specific water quality sampling are similar to those of CDFM testing with respect to both low overall formation yield and excessive yield from shallow intervals that obscure deeper-zone results. As documented in Tech Memo 10, depth-specific groundwater sampling results were not used to select bedrock screen intervals, as these data were determined to be unrepresentative of aquifer conditions at the depths where the samples were collected.

Geophysical logging results were used to assess various properties of the native formation materials, including porosity and hydraulic conductivity (NMR), bulk formation specific conductance (induction), natural gamma emittance (natural and spectral gamma), fluid temperature and conductivity in bedrock (fluid temperature and conductivity), bedrock borehole diameter (caliper), presence of fractures and sedimentary structures in bedrock (acoustical televiewer), and borehole yield and hydraulic conductivity in bedrock (CDFM). Data collected using some of these tools (i.e., NMR, induction, natural gamma, and acoustic televiewer) were used to aid in the interpretation of lithology and to identify contacts between different lithologies in vertical sequences. Data from some of these tools (e.g., NMR) can also be used to aid in the assessment of textural changes in vertical sequences (e.g., coarsening-upward or fining-upward sequences) that in turn can be used to define facies and facies sequences for stratigraphic analysis. The caliper, acoustical televiewer, and CDFM data can be used to identify fractures in bedrock and identify transmissive fractures. Bulk formation specific conductance and fluid conductivity data can be used to identify zones with elevated inorganic solute concentrations. Correlation of geophysical logs over spatial distances using characteristic curve-matching methods can then be used to assess lateral

variability in lithology and develop two--dimensional and three-dimensional visualizations of geologic stratigraphy. Appendix F includes a more detailed discussion regarding how various indicators and geophysical logs were used to correlate changes in geology/stratigraphy between well locations. Interpretation of the geophysical logs was integral to updating the CSM as described in Sections 4.2.1 (bedrock) and 4.2.2 (alluvium). As of end of the reporting period, the full network of monitoring wells proposed in the RI Work Plan had not been installed and additional investigative and data interpretation tasks remained. Data collection and interpretation will continue and the CSM will continue to be developed and updated, as appropriate, as those activities are completed. Once the full network of proposed new wells has been installed (anticipated in 2022) and monitored, and the CSM has been updated, opportunities for further refinement can be identified, including whether existing well screen intervals are appropriately placed to evaluate the nature and extent of constituents of potential concern (COPCs).

3.3.2 Hydraulic Testing

A summary of the bedrock hydraulic testing results at MW-113 and MW-400 compared to NMR and CDFM data is provided in Table 3-2 below. Testing results in alluvium at MW-400 are not included in the table because the hydraulic conductivity of the alluvial material was too high to create sufficient drawdown to stress the aquifer and observe recovery using the available pumping equipment. Straddle-packer and CDFM results represent the bulk hydraulic conductivity over the interval tested, while NMR provides high-resolution data (approximately every 1.5 feet) that show the range of hydraulic conductivities in materials over the same interval. Because groundwater is yielded from the most transmissive materials (particularly in bedrock), the upper-end hydraulic conductivity values for NMR testing should more closely approximate results of straddle-packer and CDFM testing.

Appendix B includes the methods used and results of straddle-packer testing conducted by COLOG.

Table 3-2: Hydraulic Testing Results

Formation	Testing Interval (feet below ground surface)	Straddle-Packer Hydraulic Conductivity (feet/day)	NMR Hydraulic Conductivity (feet/day)	CDFM Hydraulic Conductivity (feet/day)	Notes
St. Louis Formation	MW-113, 129–139	$9.6x10^{-2}$	$1.5x10^{-5}$ to $5.8x10^{-7}$	$2.6x10^{-1}$	Acoustic televiewer data identified multiple open fractures in the test interval, which dominate the hydraulic conductivity; this accounts for the significant difference between the NMR values and the other measurement results.
Salem Formation	MW-113, 140–150 170–180	$3.4x10^{-2}$ $4.5x10^{-2}$ $4.5x10^{-2}$	$3.5x10^{-5}$ to $2.6x10^{-2}$ $3.7x10^{-3}$ to $7.3x10^{-2}$	$9.9x10^{-2}$	Hydraulic conductivities in the intervals tested are dominated by matrix porosity rather than fracture porosity. The

Formation	Testing Interval (feet below ground surface)	Straddle-Packer Hydraulic Conductivity (feet/day)	NMR Hydraulic Conductivity (feet/day)	CDFM Hydraulic Conductivity (feet/day)	Notes
	MW-400, 145–155				NMR estimates show high-resolution variability within the intervals tested using straddle-packers and CDFM.
Warsaw Formation	MW-113, 221–231 MW-400, 190–TD	$1.6x10^{-2}$ $1.8x10^{-2}$	$3.0x10^{-3}$ to $1.3x10^{-6}$ $8.4x10^{-2}$ to $8.5x10^{-7}$	$9.0x10^{-2}$ $5.2x10^{-2}$	For MW-400, straddle-packer testing was conducted across a 50-foot interval with multiple observed fractures. NMR represents high-resolution variability within the intervals tested using straddle-packers and CDFM.

TD = total depth

In general, the hydraulic conductivity estimates derived from packer testing compared well with NMR and CDFM results in the Salem Formation, which is dominated by matrix porosity. In the St. Louis Formation, dominated by fracture flow, the packer tests and CDFM hydraulic conductivity estimates were significantly higher than the values derived from the NMR. For the St. Louis Formation, the disparity between the hydraulic conductivity estimates from NMR data compared to the straddle-packer and CDFM testing methods is due to the sampling interval of NMR data, which averages hydraulic conductivity over an approximately 1.5-foot interval. NMR cannot detect individual open fractures and quantify hydraulic conductivities associated with those fractures. Therefore, within fractured rock aquifers dominated by fracture flow, NMR data are more reflective of bulk-rock hydraulic conductivity over the interval measured, and thus may underestimate hydraulic conductivity values associated with individual fractures, which may be more accurately measured using straddle-packer and CDFM methods. In zones of the St. Louis Formation with high fracture density, NMR results were more comparable to packer and CDFM testing. For fractured rock aquifers dominated by matrix porosity with limited transmissive fractures (e.g., much of the Salem Formation at the Site), NMR data are representative of the bulk-rock hydraulic conductivity values and are comparable to hydraulic conductivity values generated using straddle-packer and CDFM data, although the NMR data is collected at higher-resolution and, therefore, shows greater variability. The peak hydraulic conductivities detected by NMR are comparable to the straddle-packer and CDFM results and are representative of the conductive intervals within the aquifer. Comparison of the various datasets is provided on Figure 3-1.

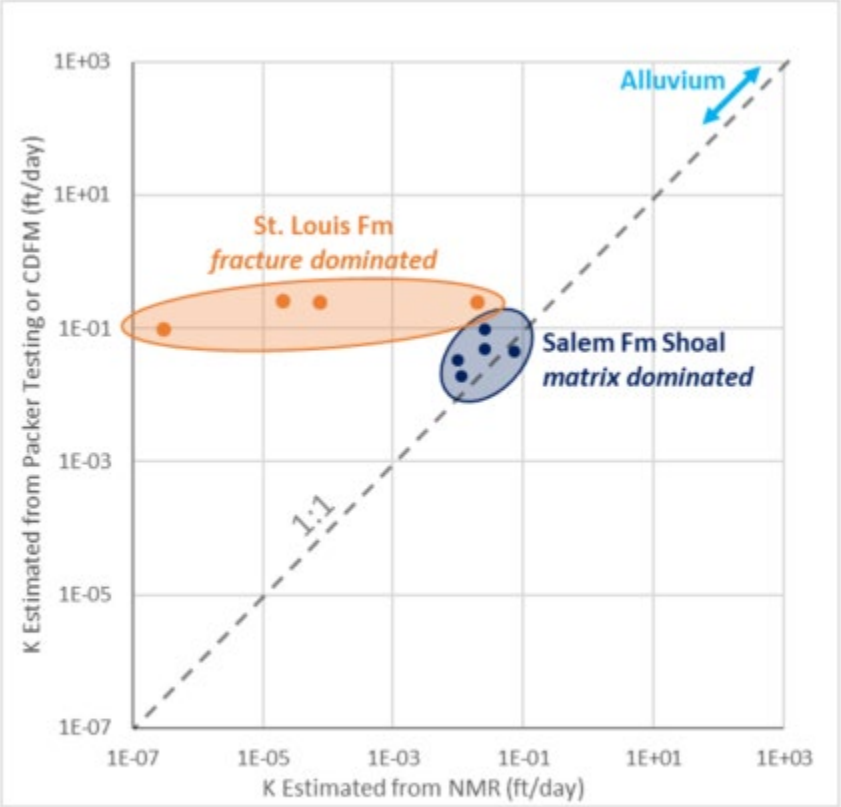


Figure 3-1: Comparison of NMR Hydraulic Conductivity Estimates with Packer and CDFM Testing Estimates Conducted in the Same Zones of Interest

NMR results can underestimate bulk hydraulic conductivities in the fracture-dominated St. Louis Formation but are reliable in the matrix porosity-dominated Salem Formation. Well screen selection in the St. Louis Formation was based on the totality of the data available at the time, not just NMR, as described in Section 2.3.4.

3.3.3 Geological Boring Logs

During rotosonic drilling, ERM field personnel recorded the lithological characteristics of soil and rock cores at all monitoring well locations installed during the reporting period (attached Figures 3 and 4). Alluvial descriptions included the Unified Soil Classification System, color, grain size, stiffness or density, moisture content, sorting, angularity, and plasticity, as applicable. Bedrock descriptions included weathering, bedding, color, grain/crystal size, strength, lithologic description, and geologic formation. Appendix C provides the boring logs depicting lithology, percentage of core recovery, and well completion data.

A comparison of the various geophysical logs with the lithological descriptions observed and recorded on the boring logs generally show good correlation. In alluvium, intervals with higher mobile porosity and hydraulic conductivity, based on NMR results, correspond to intervals where the aquifer material was recorded as sandy and gravelly material (e.g., medium to coarse sand and gravel). Thin beds (less than 1 foot thick) of finer-grained silty and clayey material may not be fully resolved by NMR but are observed

as increased capillary bound material over the NMR sampling interval (approximately 1.5 feet) that encompass the thin beds, and can often be observed on electrical conductivity and natural gamma logs that have better vertical resolution than the NMR tool. Incomplete core recovery is a common problem that affects the accuracy of depth interpretations on boring logs. As such, it is common to see small discrepancies between COLOG's and ERM's measured depths of certain geologic features.

VOC field screening data from the PID are noted on the geological boring logs for the relevant intervals. PID data were not used in the well screen selection process. In alluvium, groundwater analytical screening results from the WATERLOO APS™ borings were used as a more reliable source of data for quantifying the presence of VOCs below the water table. In bedrock, collective interpretation of the geophysical logs, as described in Section 3.3.1, was used to select well screen intervals.

In bedrock, variations in limestone type and rock quality are often subtle and are more readily detected by geophysical tools than visual observation (e.g., the degree of clay mineral content can be determined using the natural gamma log but cannot be easily discerned visually). Because of this, ERM field geologists used the geophysical logs to support field identification of formation contacts and other rock quality variations that could otherwise be difficult to determine visually. Bedrock boring logs correlate well with the acoustic televiewer and mechanical caliper results for fracture identification.

3.4 Aquifer Matrix Sampling

Validated aquifer matrix analytical data are provided as Tables 5a and 5b and the validation reports are provided as Appendix D-1. All analytical data underwent a Stage 2B validation and validation qualifiers are included with the results in Tables 5a and 5b. A number of general chemistry results for samples collected for MW-404 were rejected due to temperature and holding time exceedances; however, the metal and radiochemistry parameters were analyzed within holding time and did not have temperature preservation requirements. A total of 66 aquifer matrix results were qualified as rejected for an overall completeness of 95.1 percent. The project data completeness goal of 95 percent was met for this group of samples and the overall completeness percentage is expected to increase once all matrix samples have been collected.

During the reporting period, aquifer matrix samples were collected from three on-Site locations:

- 14 bedrock samples were collected from the MW-404 borehole;
- 11 alluvium samples were collected from the MW-407R borehole; and
- one alluvium sample was collected from the MW-112 borehole.

In accordance with the Work Plan and associated planning documents, solid matrix samples were analyzed for chemistry and geochemistry parameters. Solid matrix samples were not analyzed for physical properties. Physical properties of the aquifer matrix are assessed using downhole tooling (e.g., NMR). Aquifer matrix sampling results will be provided in the 2022 Annual Report, once all aquifer matrix samples identified in the Work Plan have been collected.

3.5 Groundwater Elevations and Flow

3.5.1 Monthly Monitoring Well Gauging

Figures 7a to 7i, 8a to 8i, and 9a to 9i show potentiometric surface maps for the reporting period. Potentiometric surface maps for Q1 and Q2 were previously shared with the USEPA; however, the maps were revised as additional data were collected and interpreted during the reporting period. For mapping purposes, the alluvium is treated as a single hydrostratigraphic unit with the shallow, intermediate, and deep alluvium wells combined into a single map and the lowest head value (presumed to be

representative of the most transmissive interval within the alluvium) used for contouring. During the reporting period, significant subsurface characterization activities were completed to generate a high-resolution dataset that was interpreted to identify environmental sequence stratigraphy at the Site. Using the results of this work, multiple potential time-stratigraphic units (TSUs) were identified. Additional data analysis is ongoing to determine if these TSUs represent separate hydrostratigraphic units.

Bedrock wells screened within the St. Louis and Salem Formations are arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill); water levels in these wells may be affected by pumping of the leachate collection system within the quarries. Figure 1 provides a map showing all locations that were pumping as of the end of the reporting period. During the reporting period, the leachate pretreatment plant treated 37,343,310 gallons,[2] which included leachate and condensate from LCS and gas extraction wells. ERM began obtaining information about the leachate collection system and landfill characteristics to use in support of hydrogeologic interpretations after the end of the reporting period. Evaluation of the potential influences of pumping activities and landfill characteristics on the groundwater flow systems in alluvium and bedrock is ongoing, and progress made during the 2022 reporting period on this evaluation will be reported in the 2022 Annual Report.

3.5.2 Pressure Transducer Data

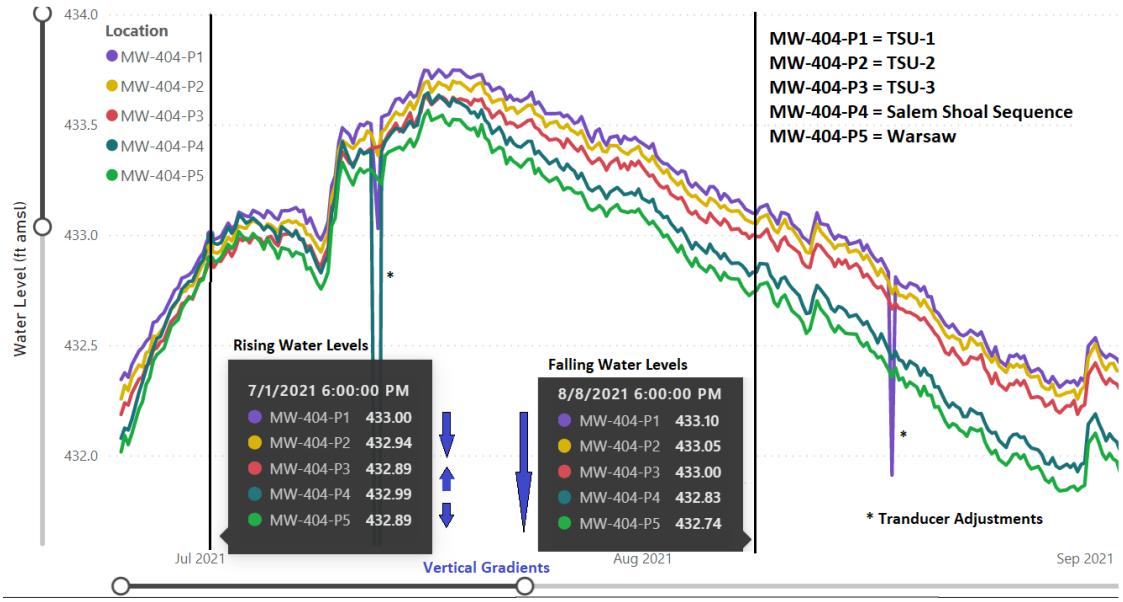
Transducer data are downloaded on a monthly basis during gauging events and are stored in ERM's EQuIS project database. The transducers record surface water (stilling wells) and groundwater (monitoring wells) elevation data at a frequency of one reading per hour. Transducer data are plotted in a PowerBI dashboard to enable analysis of temporal changes in groundwater and surface water elevations and to evaluate vertical hydraulic gradients.

The pressure transducers installed in the pre-existing (i.e., pre-RI) and the stilling wells (SG series wells) have recorded data for the full reporting period. The pressure transducers in the CHS multi-level wells (MW series wells) successively began recording data beginning with the completion of the first CHS system in May 2021.

The high-resolution results to date support the observation of consistent groundwater flow in a westerly to northwesterly direction. The results show that groundwater elevations fluctuate, sometimes notably, during the interval between the monthly manual gauging events (up to several feet during spring and early summer months and 5 feet annually). However, these fluctuation trends are consistent across the network of monitored locations and the resulting predominant horizontal hydraulic gradient does not appear to change significantly except during spring and early summer, when rising water table conditions can add variability over short periods of time.

The groundwater elevations observed in the multi-level CHS locations and in the few clusters of conventional monitoring wells where pressure transducers are installed show consistently low vertical hydraulic gradients that are generally less than 0.1 feet per foot (ft/ft) in alluvium and less than 0.5 ft/ft between alluvium and the Warsaw Formation. Temporal reversals of the vertical gradients are observed that correlate to changing conditions associated with seasonal stages of the Missouri River, particularly during spring and early summer when the river peaks (Figure 3-2). The reversed gradients appear to quickly revert once the river stage has peaked and begins to decline in fall and winter months.

[2] Leachate pretreatment plant volumes are operational field data that have not been verified or validated. These data represent volumes of water that came to the pretreatment plant through the West Lake Lift Station and the LCS force main to TK-200. These values exclude potentially impacted stormwater volumes and water used in leachate pretreatment plant processes. As with any field data, there is the possibility of errors, omissions, or irregularities as a result of technical malfunctions, operational changes, or a variety of other reasons which could impact the accuracy and/or completeness of the data.



Note: Drops in water level in the above figure are attributable to purging conducted at the well for Phase 2 of well development (13 July 2021) and Q3 groundwater sampling (18 August 2021).

Figure 3-2: Temporal Variations in Water Levels and Associated Vertical Gradients in both Alluvium and Bedrock at MW-404

Additional observations of the high-resolution groundwater elevation time series data demonstrate a number of bedrock monitoring wells that require an extended period of time—weeks and, in some cases, months—to recover after the water level in the well has been lowered from pumping during groundwater sampling activities.

Appendix G provides a summary of pressure transducer hydrographs.

3.5.3 Groundwater Elevation Data Quality Review

A preliminary QC process was developed to examine agreement between manual and transducer water level data sets for usability in developing potentiometric surface maps and groundwater contours for alluvium and bedrock at the Site. No data corrections were applied to either data set to address differences identified between the pressure transducer data and the manual measurements. Rather, the QC process was used as a selective tool to identify and exclude anomalous manual water level data from potentiometric maps. Transducer data were used as a calibration tool to assess the accuracy of the manual measurement data. Several factors contribute to the considerations of accuracy and reproducibility of manual gauging data, including equilibration of the water column to atmospheric pressure, precision and sensitivity of the measuring instrument, electrical conductivity of the fluid, consistency of the referenced measuring point, and user interpretation. This QC process was developed to maximize manual water level measurement data accuracy and reduce noise related to human and/or instrument error or precision.

The preliminary QC process is quantitative and qualitative. First, transducer water level data are compared to manually gauged water level data. During the reporting period, hourly transducer data were averaged into 6-hour intervals of calculated water levels. Averaged transducer-calculated water levels with the closest time stamp to their corresponding manual water level measurements were compared.

Deviations between transducer-calculated and corresponding manually gauged water levels greater than 0.10 feet[3] were further evaluated to identify potentially anomalous manual gauging data. Manual gauging data flagged as potentially anomalous through this process were qualitatively assessed for usability in preparing potentiometric surface maps. Subsequent assessment of potentially anomalous data included three steps.

1. Potentially anomalous manual water level measurements were compared to historical water level measurements to determine if the data appeared to be consistent with historical water-level trends.
2. Potentially anomalous manual water level measurements were compared to neighboring wells to determine if they appeared consistent with nearby water-level measurements.
3. Transducer pressure data trends were reviewed to rule out faulty data, such as sharp drops in water levels related to movement of the transducer or slow water level recharge following purging and groundwater sampling events, as described in Section 3.5.1 (e.g., those identified on the hydrographs for PZ-111-SD and PZ-209-SS).

Water level data flagged as anomalous are reported and identified as anomalous on the potentiometric surface maps and in the notes section of Table 9. When available, transducer data were used to replace anomalous manual measurements. Those instances are also identified in the Notes section of the Table 9. Transducer hydrographs are provided as Appendix G. The transducer hydrographs were used to assess general agreement between the manual gauging data and corresponding transducer data. Anomalous data flagged through the QC process described above may not be apparent on the hydrographs due to the scale of the y-axis on the hydrographs and thus are identified with a red circle around the manual gauging data point(s) on the hydrographs. Anomalies identified on the hydrographs include those identified through the QC process described above (e.g., those identified on the hydrographs for PZ-100-SS, MW-112-P1, and MW-401-P2).

Sharp declines in water levels observed in many hydrographs, mainly for wells screened in bedrock and especially those well near Bridgeton Landfill, were reviewed and confirmed to be attributable to drawdown due to purging during groundwater sampling events. Some wells were installed during the reporting period and thus had limited historical data available for comparison, which limited the ability to complete the QC process for those wells. The QC process is ongoing and will continue to be refined as more data become available for the well network. Refinements to the QC process will be discussed in future annual reports, as applicable.

3.6 Third-Party Data

Precipitation and Missouri River stage data are stored in ERM's EQuIS project database and are plotted in a PowerBI dashboard to enable temporal comparison of precipitation, river stage, surface water, and groundwater elevations.

Evaluation of the interaction between shallow groundwater and the engineered waterbody bordering the western Site boundary remains an outstanding investigative task because access for the installation of a stilling well within this water body (SG-500) had not been approved by ECLD during the reporting period.

Appendix H provides a summary of precipitation and river stage hydrographs.

[3] A deviation threshold of 0.10 feet was selected for QC purposes because vertical gradients in alluvium at the Site are generally less than 0.10 ft/ft.

3.7 Groundwater and Leachate Analytical Data

Validated radiochemistry analytical data for groundwater and leachate from the reporting period are provided in Tables 12a and 13a, respectively. All other validated analytical data for groundwater and leachate from the reporting period are provided in Tables 12b through 12h and Tables 13b through 13h, respectively. Validated field QC blank sample data from the reporting period are provided in Tables 14a through 14d. Validation reports are provided as Appendix D-2.

The attached tables include highlighting to identify detect and non-detect results that are greater than the maximum contaminant levels (MCLs) and/or the regional screening levels (RSLs)—both of which are used here for comparison purposes. For some analytes, the laboratory reporting limit in the USEPA -approved QAPP is higher than the MCL or RSL. Instances where laboratory reporting limits are above the reporting limits in the approved QAPP are discussed in Section 3.8. As specified in the QAPP, the RSLs are used to answer the principal study questions related to the presence and distribution of COPCs. MCLs are also provided for informational purposes as specified in the Statement of Work. The attached tables also include any relevant validation qualifiers. Section 3.8 includes additional discussion related to analytical data quality for the reporting period sampling events.

ERM created statistical summaries and generated box and whisker plots for the validated groundwater data, which are provided in Appendix I. The statistical summaries (Appendix I) include all analytes that were detected at concentrations above the laboratory reporting limit in at least one sample and are separated by the total and the dissolved fractions. Box and whisker plots are provided for all analytes that were detected at concentrations above the laboratory reporting limit in at least five samples to show the Site-wide range of detected values for these analytes. For analytes with established MCLs and/or RSLs, the MCLs and RSLs are shown on the box and whisker plots for comparison purposes. These statistical summaries and plots are included to provide quick comparisons of analytes against one another and against published screening values (i.e., RSLs/MCLs) when available. Additional statistical analysis of the data, as specified in Section 4.3.2 of the QAPP, will be completed when all RI data have been collected.

Over 350 analytes are evaluated as part of the OU-3 RI/FS. Ten COPCs (plus thorium isotopes, at the request of USEPA), listed alphabetically, were selected[4] to show on the plan view maps and cross section figures for alluvium and bedrock groundwater:

- Arsenic (Figures 10a through 10c and 11a through 11c)
- Benzene (Figures 12a through 12c and 13a through 13c)
- *cis*-1-2-dichloroethene (Figures 14a through 14c and 15a through 15c)
- 1,4-dioxane (Figures 16a through 17c)
- 2-methylnaphthalene (Figures 18a 19c)
- Combined radium 226/228 (Figures 20a through 21c)
- Tetrahydrofuran[5] (THF; Figures 22a through 23b)
- 1,2,4-trimethylbenzene (Figures 24a through 25c)
- Uranium (Figures 26a through 27c)
- Vinyl chloride (Figures 28a through 29c)

[4] These COPCs were selected following a quantitative process based on USEPA Superfund risk assessment guidance (USEPA 1989). The purpose of the COPC selection was to develop a short list of analytes to represent visually on figures while the RI is in progress, since it would be impractical to try to show all 350 analytes are assessed as part of the RI on figures.

[5] Analysis of samples for THF began in the second quarter of 2021.

- Thorium-230 and Thorium-232 (Figures 30a through 32c)

For the 11 analytes selected, the average and range of detected concentrations along with the frequencies of detections and MCL/RSL exceedances in alluvium and bedrock groundwater are discussed below. For all averages and ranges presented, total fractions are used, field duplicates are included, and samples identified as non-detect are excluded.

The average detected arsenic concentration in groundwater samples across the three quarters of validated data was 40.5 micrograms per liter (µg/L) (range of detected results: 0.12J µg/L to 526 µg/L) in alluvium monitoring well samples and 4.74 µg/L (range of detected results: 0.16J µg/L to 68.5 µg/L) in bedrock monitoring well samples. Arsenic was detected in 98.9 percent of alluvium monitoring well samples and in 92.4 percent of bedrock monitoring well samples. All detected arsenic concentrations were above the RSL of 0.052 µg/L. In alluvium, 34.8 percent of groundwater samples, and in bedrock, 11.7 percent of groundwater samples, contained arsenic at concentrations above the MCL of 10 µg/L.

The average detected benzene concentration in groundwater samples across the three quarters of validated data was 118 µg/L (range of detected results: 0.2J µg/L to 774 µg/L) in alluvium monitoring well samples and 35.9 µg/L (range of detected results: 1.50 µg/L to 277 µg/L) in bedrock monitoring well samples. Benzene was detected in 34.2 percent of alluvium monitoring well samples and in 20.7 percent of bedrock monitoring well samples. Benzene concentrations were reported as detected (above the method detection limit) and were above the RSL of 0.46 µg/L in 32.1 percent of alluvium groundwater samples and in 20.7 percent of bedrock groundwater samples. Although the method reporting limit of 1.0 µg/L is above the RSL, the method detection limit is lower so “J” qualified (estimated below the method reporting limit) values were included. In alluvium, 18.2 percent of groundwater samples, and in bedrock 10.3 percent of groundwater samples, contained benzene at concentrations above the MCL of 5 µg/L.

The average detected *cis*-1,2-dichloroethene concentration in groundwater samples across the three quarters of validated data was 3.03 µg/L (range of detected results: 0.28J µg/L to 14.5 µg/L) in alluvium monitoring well samples and 1.7 µg/L (range of detected results: 1.4 µg/L to 2.4 µg/L) in bedrock monitoring well samples. *cis*-1,2-Dichloroethene was detected in 19.3 percent of alluvium monitoring well samples and in 2.1 percent of bedrock monitoring well samples. *cis*-1,2-Dichloroethene concentrations were above the RSL of 3.6 µg/L in 3.7 percent of alluvium groundwater samples but were below the RSL in all bedrock groundwater samples. All *cis*-1,2-dichloroethene concentrations were below the MCL of 70 µg/L.

The average detected 1,4-dioxane concentration in groundwater samples in Q3 2021 (the only validated data with lower detection limits) was 143 µg/L (range of detected results: 1.5J µg/L to 2,270 µg/L) in alluvium groundwater and 61.5 µg/L (range of detected results: 3.96 µg/L to 925 µg/L) in bedrock monitoring well samples. 1,4-dioxane was detected in 72.5 percent of alluvium monitoring well samples and in 50.0 percent of bedrock monitoring well samples. All detected concentrations of 1,4-dioxane were above the RSL of 0.46 µg/L. There is no MCL for 1,4-dioxane.

The average detected 2-methylnaphthalene concentration in groundwater samples across the three quarters of validated data was 13.8 µg/L (range of detected results: 0.29J µg/L to 67.9 µg/L) in alluvium monitoring well samples. 2-methylnaphthalene was detected in 8.6 percent of alluvium monitoring well samples but was not detected in any bedrock monitoring well samples. 2-methylnaphthalene concentrations were reported as detected (above the method detection limit) and were above the RSL of 3.6 µg/L in 2.7 percent of alluvium groundwater samples. There is no MCL for 2-methylnapthalene.

The average detected combined radium-226 and radium-228 (hereafter shown as radium-226/228) activity levels in unfiltered (total) groundwater samples across the three quarters of validated data was 3.28 picoCuries per liter (pCi/L) (range of detected results: 0.059 pCi/L to 11.8 pCi/L) in alluvium

monitoring well samples and 4.57 pCi/L (range of detected results: 0.091 pCi/L to 57.4 pCi/L) in bedrock monitoring well samples. Combined radium-226/228 was detected in 70.0 percent of alluvium monitoring well samples and in 65.0 percent of bedrock monitoring well samples. Combined radium-226/228 activities above the MCL of 5 pCi/L were found in 24.4 percent of groundwater samples in alluvium, and 19.7 percent of groundwater samples in bedrock. There is no RSL for radium-226 or radium-228.

The average detected THF concentration in groundwater samples across the three quarters of validated data was 670 µg/L (range of detected results: 1.0J µg/L to 24,700 µg/L) in alluvium monitoring well samples and 49.5 µg/L (range of detected results: 5.1J µg/L to 1,030 µg/L) in bedrock monitoring well samples. THF was detected in 64.6 percent of alluvium monitoring well samples and in 34.3 percent of bedrock monitoring well samples. THF concentrations were above the RSL of 340 µg/L in 8.8 percent of alluvium groundwater samples and in 4.9 percent of bedrock groundwater samples. There is no MCL for THF.

The average detected thorium-230 activity in groundwater samples across the three quarters of validated data was 0.34 pCi/L (range of detected results: 0.05 pCi/L to 0.91 pCi/L) in alluvium monitoring well samples and 0.19 pCi/L (range of detected results: 0.05 pCi/L to 0.39 pCi/L) in bedrock monitoring well samples. Thorium-230 was detected in 4.3 percent of alluvium monitoring well samples and in 4.8 percent of bedrock monitoring well samples. The average detected thorium-232 activity in groundwater samples across the three quarters of validated data was 0.07 pCi/L (range of detected results: 0.05 pCi/L to 0.09 pCi/L) in alluvium monitoring well samples and 0.29 pCi/L (range of detected results: 0.18 pCi/L to 0.40 pCi/L) in bedrock monitoring well samples. Thorium-232 as detected in 1.6 percent of alluvium monitoring well samples and in 1.4 percent of bedrock monitoring well samples. Although there is no MCL or RSL for thorium isotopes, thorium-230 and thorium-232 are components of gross alpha radiation. All thorium isotope activities are well below the MCL of 15 pCi/L for gross alpha radiation.

The average detected 1,2,4-trimethylbenzene concentration in groundwater samples across the three quarters of validated data was 33.5 µg/L (range of detected results: 0.28J µg/L to 152 µg/L) in alluvium monitoring well samples and 1.7 µg/L (range of detected results: 0.19J µg/L to 3.3 µg/L[6]) in bedrock monitoring well samples. 1,2,4-trimethylbenzene was detected in 11.2 percent of alluvium monitoring well samples and in 1.4 percent of bedrock monitoring well samples. 1,2,4-trimethylbenzene concentrations were above the RSL of 5.6 µg/L in 4.3 percent of alluvium groundwater samples and below the RSL in all bedrock groundwater samples. There is no MCL for 1,2,4-trimethylbenzene.

The average detected uranium concentration in groundwater samples across the three quarters of validated data was 0.917 µg/L (range of detected results: 0.01J µg/L to 11.6 µg/L) in alluvium monitoring well samples and 1.40 µg/L (range of detected results: 0.06J µg/L to 6.3 µg/L) in bedrock monitoring well samples. Uranium was detected in 95.2 percent of alluvium monitoring well samples and in 96.6 percent of bedrock monitoring well samples. Uranium concentrations were reported as detected (above the method detection limit) and were above the RSL of 0.40 µg/L in 30.5 percent of alluvium groundwater samples and in 62.1 percent of bedrock groundwater samples. Although the method reporting limit of 1.0 µg/L is above the RSL, the method detection limit is lower so “J” qualified (estimated below the method reporting limit) values were included. No uranium concentrations were above the MCL of 30 µg/L.

The average detected vinyl chloride concentration in groundwater samples across the three quarters of validated data was 3.40 µg/L (range of detected results: 0.45J µg/L to 9.70 µg/L) in alluvium monitoring well samples and 5.18 µg/L (range of detected results: 0.79J µg/L to 2.05 µg/L) in bedrock monitoring well samples. Vinyl chloride was detected in 12.8 percent of alluvium monitoring well samples and in 2.8 percent of bedrock monitoring well samples. All detected concentrations of vinyl chloride were above

[6] The 1,2,4-trimethylbenzene values reported for bedrock groundwater samples were “J” qualified with estimated values below the laboratory reporting limit of 5 µg/L. Three samples had elevated reporting limits of 25 µg/L.

the RSL of 0.019 µg/L. In alluvium, 6.4 percent of groundwater samples contained vinyl chloride at concentrations above the MCL of 2 µg/L. All bedrock samples containing detectible concentrations of vinyl chloride had concentrations at or below the MCL.

3.8 Groundwater and Leachate Analytical Data Quality Summary

The laboratory met the approved reporting limits in the project QAPP with some exceptions. In most cases these elevated reporting limits were due to high concentrations of other target analytes and/or matrix interferences. Other variances in reporting limits for extractable methods were due to variances in initial sample volume used for extraction or the presence of sediment in the sample after extraction. In some cases, lower sample volumes resulted in reporting limits slightly higher than the QAPP reporting limits. Field teams have been instructed to fill all sample bottles completely to maximize sample volume and minimize the variability in method reporting limits. Laboratory decisions that impact the method reporting limit of a result are made on a quarterly basis to achieve the best sensitivity during every sampling event. Results between the method detection limit and the method reporting limit are reported as detected estimated (J-flagged) to provide some additional sensitivity. Non-detect radiochemistry results that did not meet the required project detection limit are identified in the validation reports and were qualified as “UJ” per Multi-Agency Radiological Laboratory Analytical Protocol guidance (USEPA 2004). ERM will continue to monitor laboratory reporting limits closely.

As shown in Tables 14a through 14d, detections in field QC blanks for non-radiochemistry analytes were typically trace detections below the reporting limit, with some exceptions. Table 3-3 shows the relative frequency of analytes detected in each type of blank collected in the field above the reporting limit or minimum detectable concentration (MDC) during the reporting period. Trip blanks are not included in Table 3-3 since no analytes were detected above the reporting limit during the reporting period.

Table 3-3: Frequency of Detections in Field Collected Blanks above the Reporting Limit or Minimum Detectable Concentration

Quarter	Q1			Q2			Q3		
Blank Type	EB	FB	Filter	EB	FB	Filter	EB	FB	Filter
Fraction	Total	Total	Dissolved	Total	Total	Dissolved	Total	Total	Dissolved
Sample Count	7	5	1	9	7	1	8	7	1
Analyte									
Methane	3	1	-	1	3	-	0	1	-
Carbon dioxide	0	0	-	1	0	-	0	0	-
Total dissolved solids	0	0	-	1	0	-	0	0	-
Iron	0	0	0	0	1	0	0	0	0
Silicone	0	0	0	0	0	0	0	1	0
Hardness	0	0	-	0	0	-	1	0	-
C12-C28 Total	0	0	-	1	0	-	2	0	-
C16-C21 Aromatics	0	0	-	0	0	-	2	0	-
C28-C35 Total	0	0	-	1	0	-	0	0	-
C6-C35 Total	0	0	-	2	0	-	2	0	-

Quarter	Q1			Q2			Q3		
Blank Type	EB	FB	Filter	EB	FB	Filter	EB	FB	Filter
Fraction	Total	Total	Dissolved	Total	Total	Dissolved	Total	Total	Dissolved
Sample Count	7	5	1	9	7	1	8	7	1
Analyte									
Radium-228	2	0	0	1	0	0	0	2	0
Thorium-228	0	1	0	0	0	0	2	1	1
Uranium-234	6	3	1	1	0	0	3	0	0
Uranium-235	6	2	1	1	1	0	3	0	0
Uranium-236	5	3	0	1	2	0	3	0	0

Trace detections of carbon dioxide are routinely detected in EB and FB samples; however, sample EB-008-WQ-20210519 from Q2 2021 had an uncharacteristically high carbon dioxide concentration of 19,100 µg/L. The concentrations of carbon dioxide in monitoring wells and LCS samples are significantly higher than any detection in the blank samples, even in the samples associated to EB-008-WQ-20210519, and no data has required qualification due to carbon dioxide blank sample detections. None of the eight non-radiochemistry COPCs selected to be shown on figures were detected in any of the equipment, field, filter, or trip blank samples. Radium-228 was detected in three EB samples and two FB samples during the reporting period at activities above the MDC, but significantly below the project required detection limit. Two of these blank sample detections were associated with high laboratory control sample recoveries and are likely biased high. A total of 13 radium-228 results were conservatively qualified as estimated with a potential high bias (J+) due to potential equipment and/or FB contamination. No monitoring well samples required qualification more than once during the reporting period due to radium-228 EB and/or FB contamination. Associated combined radium-226/228 results were also qualified as estimated with a potential high bias. No radium-226 was detected in any of the blanks collected in the field.

In accordance with the QAPP, sample results were rejected during validation if there were serious deficiencies in meeting QC criteria and if the presence or absence of the analyte in the sample could not be verified. Rejected values have been flagged with an “R” qualifier and included in the summary tables. Rejected data have not been (and will not be) used to meet the objectives of the RI/FS or for other data interpretation purposes. A total of 132 results were rejected out of over 113,000 reportable results from monitoring well and LCS samples collected during the reporting period, for a completeness rate of 99.9 percent. Forty-eight of the 132 rejections were due to laboratory control spike recoveries of less than 10 percent for semi-volatile organic compounds hexachloroethane and hexachlorocyclopentadiene in 5 (of 40) analytical batches. While the laboratory’s SOP does not require reanalysis for low recoveries for these compounds due to their marginal exceedance rules, ERM has requested to be notified for all low recoveries in the future to assess the need for reanalysis or resampling to prevent extended data gaps. The rejection rate complies with the 95 percent completeness objective detailed in the QAPP. The OU-3 Respondents expect to generate enough usable data for these compounds at these locations over the entire sampling program to adequately assess the project’s principal study questions. ERM will continue to closely review rejected data and consider alternative analytical methods, as needed, if the project data quality objectives are routinely not being met.

Additional notes related to analytical data quality for the reporting period sampling events are detailed below:

- Issues with low laboratory control spike recoveries and calibration outliers for 1,4-dioxane analyzed by USEPA Method 8270C observed in Q4 2020 were also observed in Q1 and Q2 2021. However, starting in Q3 2021, 1,4-dioxane was analyzed by USEPA Method 8270-SIM and the method change caused a significant improvement in data quality. No laboratory control spike outliers were observed in Q3 2021 and one continuing calibration verification sample was outside of validation criteria. Sensitivity also significantly improved with the reporting limit lowering from 100 µg/L to 3 µg/L.
- Starting in Q3 2021, validation was performed in accordance with the latest 2020 National Functional Guidelines (USEPA 2020b and USEPA 2020c) documents. All relevant reference documents used during validation are documented in each validation report in Appendix D.
- During 2021, ERM continued to see low uranium activities in blanks collected in the field; however, thorium isotope activities were less frequent than in Q4 2020. The thorium and uranium activity levels being reported for this project are considerably lower than the laboratory's routine reporting limits. Source deionized water used for all field QC samples is provided by Pace Indianapolis in high density polyethylene carboys at the start of each sampling event and each blank sample was collected following the procedures in the FSP. Similar to 2020, associated sample data were conservatively qualified as estimated with a potential high bias (J+) and these qualifiers will be considered appropriately during future data assessments. After the Q1 2021 sampling event, where the majority of blanks collected in the field had activities above the MDC for uranium isotopes (see Table 3-3 above), ERM inquired with the laboratory about possible reasons for the detections. The laboratory identified that the low-level activities of uranium-234 and uranium-235 in blank samples collected in the field could be from the radio-tracer used for thorium analysis. Isotopic uranium and thorium are run sequentially from one sample fraction and radio-tracers uranium-232 for uranium and thorium-234 for thorium analyses are added to the sample and used to determine sample-specific recovery factors. The thorium-234 tracer contains low levels of uranium-234 and uranium-235 that could be contributing to the positive detections in the blank samples collected in the field. The laboratory prepares a new thorium-234 tracer once every 2 months, or sooner depending on work in house. Therefore, possible tracer interference should not carry over from one quarter to the next. In Q2 2021, there was a decrease in uranium detections in blanks collected in the field relative to Q4 2020 and Q1 2021. However, in Q3 2021 there was an increase in EB sample uranium detections as compared to Q2 2021. All thorium and uranium isotope activities in method blanks in Q1 through Q3 2021 met the Multi-Agency Radiological Laboratory Analytical Protocol control limits using the required method uncertainty for each isotope in QAPP Table 3-1a-ii. The method blank samples will continue to provide information on possible tracer contamination.
- In Q3 2021, 18 carbon dioxide samples and 12 methane samples were analyzed 1 to 3 days past the 14-day holding time due to a power outage at Pace National in Baton Rouge, Louisiana caused by Hurricane Ida (see detailed discussion in Section 2.7). These results were qualified as estimated during validation. No data required rejection due to the holding time exceedance and the use of the sample volume from unpreserved 100 mL amber glass vials as opposed to the unpreserved 40mL clear glass vials specified in the FSP for methane analysis is not expected to have an impact on data quality. The methane results reported by Pace Indianapolis have a reporting limit of 10 µg/L and a method detection limit of 5.5 µg/L compared to the QAPP reporting limit of 2.0 µg/L and a method detection limit of 0.44 µg/L. There is no screening level for methane in monitoring well or LCS samples in the QAPP.
- In Q3 2021, 30 samples analyzed for polycyclic aromatic hydrocarbons by USEPA Method 8270C-SIM had to be analyzed at a 10 times dilution due to sediment in the sample vials following preparation. All non-detect values for these samples had elevated reporting limits above the approved reporting limits in the QAPP. Turbidity readings during well stabilization for all diluted samples were within the required limits and total suspended solid results were consistent with

previous quarters where sedimentation was not an issue, and no dilutions were necessary. The laboratory has been instructed to notify ERM immediately after sample preparation if sedimentation continues to be an issue in future quarters.

3.9 Vapor Intrusion Sampling Results

VOC and methane results for the IA/AA samples can be found in Table 15. Radon sample results can be found in Table 16. VOCs, methane, and fixed gases (oxygen gas and carbon dioxide) results for SSV samples are shown in Table 17. Analytical data from Q4 2021 are included in Tables 15 and 17 and results are discussed below because they were validated in time to be submitted with the initial version of the 2021 Annual Report. Additional details on the Q4 2021 VI sampling event will be discussed in the forthcoming 2022 Annual Report.

All laboratory analytical data underwent a Stage 2B validation and the validation reports are included in Appendix D-3. Validation qualifiers are included with the results in the aforementioned tables. No VI data collected in 2021 were qualified as rejected during validation. Taking into account the five AA LT radon results that could not be analyzed due to moisture contamination, the 95 percent data completeness goal for VI sampling was met.

For some samples, the laboratory reporting limit / maximum detection limit of acrolein and/or 1,2-dibromo-3-chloropropane exceeded the USEPA SSV VI screening level (VISL) or IA VISL. When this occurred, the concentration was marked as an exceedance although the concentrations were below laboratory detection limits. Variations in reporting limits were the result of two reasons:

1. Sample dilutions were necessary because of the higher concentrations of other analytes in the sample, which occurred with the Engineering Building samples.
2. Laboratory correcting for the helium dilution. The analytical method was modified by the laboratory to include the use of helium as a diluent gas in place of zero-grade air, which is included on the laboratory's National Environmental Laboratory Accreditation Program scope of accreditation. When necessary, analytical sample volumes were adjusted by a correction factor for containers pressurized with helium; this occurred with the Scale House, Pump House, Pretreatment Office Building, and Asphalt Plant Building samples.

Radon samples collected indoors (IA ST and IA LT) and outdoors (AA ST) were below the USEPA action level of 4.0 pCi/L and the QAPP screening level of 2.0 pCi/L for each of the five buildings. IA and SSV concentrations that were detected above their respective action/screening levels are presented below. AA concentrations do not have a screening level but are presented in Table 15 for comparison purposes to IA results.

VOCs detected above IA or SSV VISLs are listed by building in the summary below. Note that VOCs detected in each building above IA VISLs were also detected above the laboratory method detection limit in their respective outdoor AA samples, with the exception of 1,2-dibromo-3-chloropropane. In the case of acrolein, concentrations in each of the outdoor AA samples were also above the IA VISL. A discussion of the VI assessment is presented in Section 3.12.

Engineering Building

- IA: acrolein, ethyl acetate, nonane, naphthalene, tetrachloroethene, ethylbenzene, and 1,2-dibromo-3-chloropropane were detected at concentrations exceeding their respective USEPA IA commercial VISLs in one or more sampling event.
- SSV: acrolein was detected at a concentration exceeding its USEPA SSV commercial VISL (or the reporting limited exceeded the VISL) at each sampling location during each event, and methane

exceeded the Site-specific screening level in at least one sampling location during each sampling event.[7]

Scale House

- IA: acrolein, and isopropyl alcohol were detected at concentrations exceeding their respective USEPA IA commercial VISLs in one or more sampling event.
- SSV: acrolein was detected at a concentration exceeding its USEPA SSV commercial VISL during one sampling event.

Pump House

- IA: acrolein was detected at a concentration exceeding its USEPA IA commercial VISL in each of the four sampling events.
- SSV: acrolein was detected at a concentration exceeding its USEPA SSV commercial VISL (or the reporting limited exceeded the VISL) during each sampling event.

Pretreatment Office Building

- IA: acrolein was detected at concentrations exceeding the USEPA IA commercial VISL during each sampling event.
- SSV: acrolein was detected at a concentration exceeding its USEPA SSV commercial VISL (or the reporting limited exceeded the VISL) during each sampling event.

Asphalt Plant Building

- IA: acrolein was detected at concentrations exceeding the USEPA IA commercial VISL during each sampling event.
- SSV: acrolein was detected at a concentration exceeding its USEPA SSV commercial VISL (or the reporting limited exceeded the VISL) during each sampling event.

3.10 OU-1 Soil Boring Methane Results

Methane field measurements were collected by the OU-3 project team from the OU-1 soil borings located along the northern boundary of Area 1. The field measurements are presented in Table 18. The results show methane concentrations above the Site-specific screening level in five of the seven borings completed. A discussion of on-Site methane as it relates to addressing OU-3's RI Work Plan is presented in Section 3.12.1.2. The presence of methane along the margin of Area 1, or along other portions of the OU-1 area boundaries, will be addressed as part of the OU-1 remedial design/remedial action.

3.11 OU-1 and OU-2 Landfill Gas Monitoring

The OU-2 project team began landfill gas monitoring on the western boundary of the ISL on 30 September 2021 as part of their remedial design. This monitoring started at the end of the reporting period and will be discussed further in the 2022 Annual Report.

The OU-1 project team submitted a Methane Gas Monitoring Plan in December 2020 that had not been approved as of the end of the reporting period.

[7] Based on formal laboratory reporting, methane was reported for the Q1 event as a percent volume by volume and during the remaining quarterly events in parts per million by volume. Q1 percent volume by volume values have been manually converted to parts per million by volume for Table 17.

3.12 Vapor Intrusion Assessment Summary

The purpose of the VI evaluation work described in the USEPA-approved RI Work Plan was to evaluate the following three areas:

- VI impacts from chemical occurrence in groundwater beneath the off-Site areas
- Migration of landfill gas or other vapors from the landfills into the off-Site areas[8]
- Migration of landfill gas or other vapors into the on-Site occupied buildings

Evaluation of vapor intrusion is ongoing. Groundwater VOC concentrations will be compared to groundwater VISLs after all proposed monitoring wells have been installed and sampled. Landfill gas data collected by Bridgeton Landfill, OU-1, and OU-2 along relevant portions of the Site boundary (i.e., in areas where refuse was disposed near the boundary where there are no surface water bodies that would act as barriers to soil gas migration) will also be evaluated as those data become available.

3.12.1 Preliminary On-Site Vapor Intrusion Evaluation

The following preliminary VI assessment applies to the evaluation of landfill gas, radon, and VOC vapors into the on-Site occupied buildings. The VI assessment completed by the OU-3 project team to date does not indicate that VI is currently occurring on Site, and the SSV concentrations do not indicate the potential for future VI under investigated Site buildings. Except for acrolein and methane that are discussed in more detail below, the compounds detected in SSV did not exceed VISLs or Site-specific screening levels. In addition to a VI assessment, IA concentrations were reviewed to understand current IA quality. VOCs detected in IA above target IA concentrations were infrequent (except for acrolein, as discussed below) and likely caused by outdoor ambient air and/or background chemicals used or stored within the buildings as discussed below.

3.12.1.1 Acrolein

Over the four quarterly sampling events in the Engineering Building, Scale House, Pump House, and Pretreatment Office Building and the three quarterly sampling events for the Asphalt Plant Building, only acrolein was consistently detected in IA, AA, and SSV samples at concentrations in exceedance of applicable VISLs (0.00876 micrograms per cubic meter [µg/m^3] and 0.292 µg/m^3 for IA and soil vapor, respectively). Several reasons presented below support the conclusion that the presence of acrolein is attributable to background anthropogenic sources, and therefore further VI assessment of acrolein is not warranted. Acrolein is a common background compound (Weisel et al. 2005; ATSDR 2007; USEPA 2011; MDEQ 2012; USEPA 2012) that was also detected in each of the ambient air samples collected as part of this evaluation at the Site. Due to a low VISL, acrolein is commonly found at concentrations exceeding both the IA and SSV VISLs.

- Across the Site, the ranges of detections in AA (0.084J[9] to 3.1 µg/m^3), IA (0.17J to 3.6 µg/m^3), and SSV samples (less than 0.53 to 3.8J µg/m^3) are all similar. Detecting acrolein at similar concentrations in all three media indicates there is a background anthropogenic source of acrolein, rather than VI.
- Acrolein is commonly used and produced in everyday commercial, industrial, and residential settings. The public is primarily exposed to acrolein through vehicle exhaust, tobacco smoke (either first or second hand), and wood combustion (e.g., residential wood combustion for heating). In commercial

[8] The Bridgeton Landfill has historically operated and continues to operate a landfill gas extraction system to prevent off-Site migration of landfill gas, minimizing the potential for and conducts regular monitoring of off--Site migration of landfill gas in the vadose zone.

[9] "J" qualified with estimated values below the laboratory reporting limit.

applications, acrolein is primarily used as a chemical intermediary or as a biocide in agricultural and industrial water supplies. Several studies have been performed in both residential and commercial areas and in various states to understand typical background levels of acrolein for both IA and AA (Weisel et al. 2005; ATSDR 2007; USEPA 2011; MDEQ 2012; USEPA 2012). Detections across Site IA, AA, and SSV samples are generally consistent and within background levels presented in these literature sources. The Site is adjacent to two major highways and is proximal to a large airport, all of which may represent background sources of acrolein.

- To further evaluate acrolein, attenuation factors (AFs) were calculated for acrolein by dividing the acrolein IA concentration by the acrolein SSV concentration for each IA/SSV co-located sampling pair for each sampling event. The calculated AFs ranged between 0.1 and 4.09. USEPA empirically derived AFs for buildings not influenced by background indoor air sources with a default AF of 0.03, but values as low as 0.0003 were noted (USEPA 2012).[10] The acrolein AFs that approach or exceed 1 therefore indicate that IA concentrations are similar to, or exceed, SSV concentrations. Under these conditions, the SSV is unlikely to be—and, when the AF exceeds 1, cannot be—the source of the IA detections.

3.12.1.2 Methane

Methane exceedances observed at the Engineering Building in SSV are summarized in Section 3.9 and are presented in Table 17. The lower explosive limit (LEL) and upper explosive limit (UEL) for methane are 5.3 and 14 percent by volume or 53,000 and 140,000 parts per million by volume (ppmv), respectively (NIH 2022). SSV methane concentrations in the foyer area sample beneath the Engineering building (GB-001) ranged from 490 to 78,000 ppmv, with two samples exceeding the LEL for methane. SSV methane concentrations in the conference room sample beneath the Engineering Building (GB-002) ranged from 130,000 to 240,000 ppmv, with one sample falling between the LEL and UEL for methane. Based on the results of methane from the building evaluations (i.e., SSV and IA samples), methane was not determined to be a concern for VI because although SSV concentrations exceeded Site-specific screening levels in samples collected from the Engineering Building, concentrations of methane in IA samples were significantly below the screening level of 10,000 ppmv. As a safety measure, Bridgeton Landfill continuously monitors methane inside the Engineering Building as part of their landfill methane management program. The landfill methane management program utilizes SAFE-T-ALERT® propane alarms in the Engineering Building[11], which trigger at 25 percent of the lower explosive limit (LEL) for both methane and propane.

Methane has the potential to pose a safety hazard due to its ability to explode and burn if present in air at concentrations within the flammability range and in the presence of an ignition source. Further exploration into the nature and extent of methane in soil vapor near the Engineering Building was initiated in collaboration with OU-1 and Bridgeton Landfill. The OU-3 team took advantage of ongoing OU-1 field work and collected field measurements of methane in selected OU-1 soil borings along the northern perimeter of OU-1 Area 1. Concentrations of methane were detected both at the top of the borehole and at depth in five of the borings sampled. The OU-1 team is expected to incorporate landfill gas migration into its Remedial Design, including as it relates to the Engineering Building, and will report on this topic to USEPA under separate cover. The OU-1 project team will be planning remediation for Area 1 and, therefore, it will be necessary for the OU-1 team to determine how to manage methane during their

[10] Empirical studies for attenuation factors in commercial/industrial buildings in California completed by Ettinger et al. (2018) and Lahvis and Ettinger (2021) identified 95th percentile attenuation factors of 0.0025 and 0.0008, respectively. In addition, other empirical studies for industrial buildings outside of California (one on large industrial buildings and one evaluating radon attenuation factors as a surrogate for VOC attenuation factors) found 95th percentile attenuation factors of 0.0002 and 0.007, respectively (Eklund et al. 2021 and Nawikas 2021).

[11] SAFE-T-ALERT® systems are also operating in the Scale House, Pretreatment Building Office, and Asphalt Plant.

remediation process. The OU-1 project team submitted a Methane Gas Monitoring Plan in December 2020 that had not been approved as of the end of the reporting period.

3.12.1.3 Trace Volatile Organic Compounds in Indoor Air

In addition to looking at the full data set to assess the potential for VI, ERM also reviewed the IA sample exceedances data to further evaluate those samples relative to their respective VISLs. Nonane, naphthalene, isopropyl alcohol, ethyl acetate, ethylbenzene, tetrachloroethene, and 1,2-dibromo-3-chloropropane were detected in IA samples at concentrations above VISLs in an insignificant number of samples (i.e., each compound was detected at fewer than two sample locations during one or two sampling events over the course of 2021). These compounds were not detected in the companion SSV samples at concentrations above their respective USEPA VISLs and in each case were detected at higher concentrations in the IA than in the SSV. With the exception of 1,2-dibromo-3-chloropropane, these compounds were also detected above laboratory method detection limits in outdoor ambient air as measured in the AA samples. These compounds are attributable to the use and/or storage of products containing VOCs by individuals working in or visiting the buildings that were sampled. Although ERM removed identified VOC-containing products from the buildings prior to the sampling events, previous product storage and use, employee occupancy, visitors to the buildings, personal activities, and unlabeled or non-VOC-labeled products may have been present, resulting in ongoing sources of VOCs to IA within the buildings.

3.12.1.4 Radon

OU-3's assessment of radon VI has not yet been finalized as ST soil vapor radon readings will be collected in Q1 2022. It is unlikely that radon VI is occurring as ST IA and LT IA radon concentrations were below the USEPA action level and below the Site-specific screening levels for samples collected in each building. As discussed in Section 2.11.2, the LT AA radon monitors were unable to be analyzed due to exposure to moisture during deployment; however, based on the indoor air radon data collected by the OU-3 project team as well as extensive past and ongoing perimeter radon monitoring completed by the OU-1 project team (Auxier and Associates 2016a through 2020, Parsons 2021), collection of additional LT AA radon samples is not necessary to evaluate the potential for radon VI. The purpose of the LT AA sampling was to understand if AA radon concentrations, if present, were influencing IA radon concentrations. Because both the ST and LT IA results were below action levels, the damaged LT AA radon samples are not needed. Therefore, the only radon samples to be collected in 2022 will be the ST soil vapor radon samples. One sampling event to collect ST SSV radon samples will be completed in each of the five buildings during Q1 2022.

4. CONCEPTUAL SITE MODEL UPDATE

4.1 Overview

Data collected during the reporting period were evaluated to begin refining the initial CSM presented in the RI/FS Work Plan (ERM 2020). The monthly gauging, WATERLOO APS™, geophysical logging, hydraulic testing, and groundwater monitoring well data collected during the reporting period were interpreted to prepare the updated CSM presented below. However, as of the end of the reporting period, significant investigative tasks remain to address data gaps, including installing, testing, and sampling many additional monitoring wells; collecting data; evaluating the Bridgeton Landfill LCSs as data become available, and evaluating the relationship between groundwater, temporal variations in river stages, and the ECLD stormwater pond. The CSM will continue to evolve as additional data are collected and as the collective dataset continues to be interpreted. The final CSM will be presented in the RI Report.

4.2 Geology

4.2.1 Bedrock

Based on data acquired during the reporting period, a greater understanding of the bedrock stratigraphy, geographic occurrence, and hydrogeologic properties has been developed. The primary bedrock formations of interest to this investigation include (from oldest to youngest) the Warsaw Formation, the Salem Formation, and the St. Louis Formation (Figure 4-1). All three formations are primarily composed of carbonate limestone, dolomite, and mudstone/shale rock types deposited in a shallow inland sea environment during the early to mid-Mississippian geologic time period. Previous investigations have also included limited characterization of the Keokuk Formation underlying the Warsaw, but additional characterization of the Keokuk was not included in the RI/FS Work Plan.

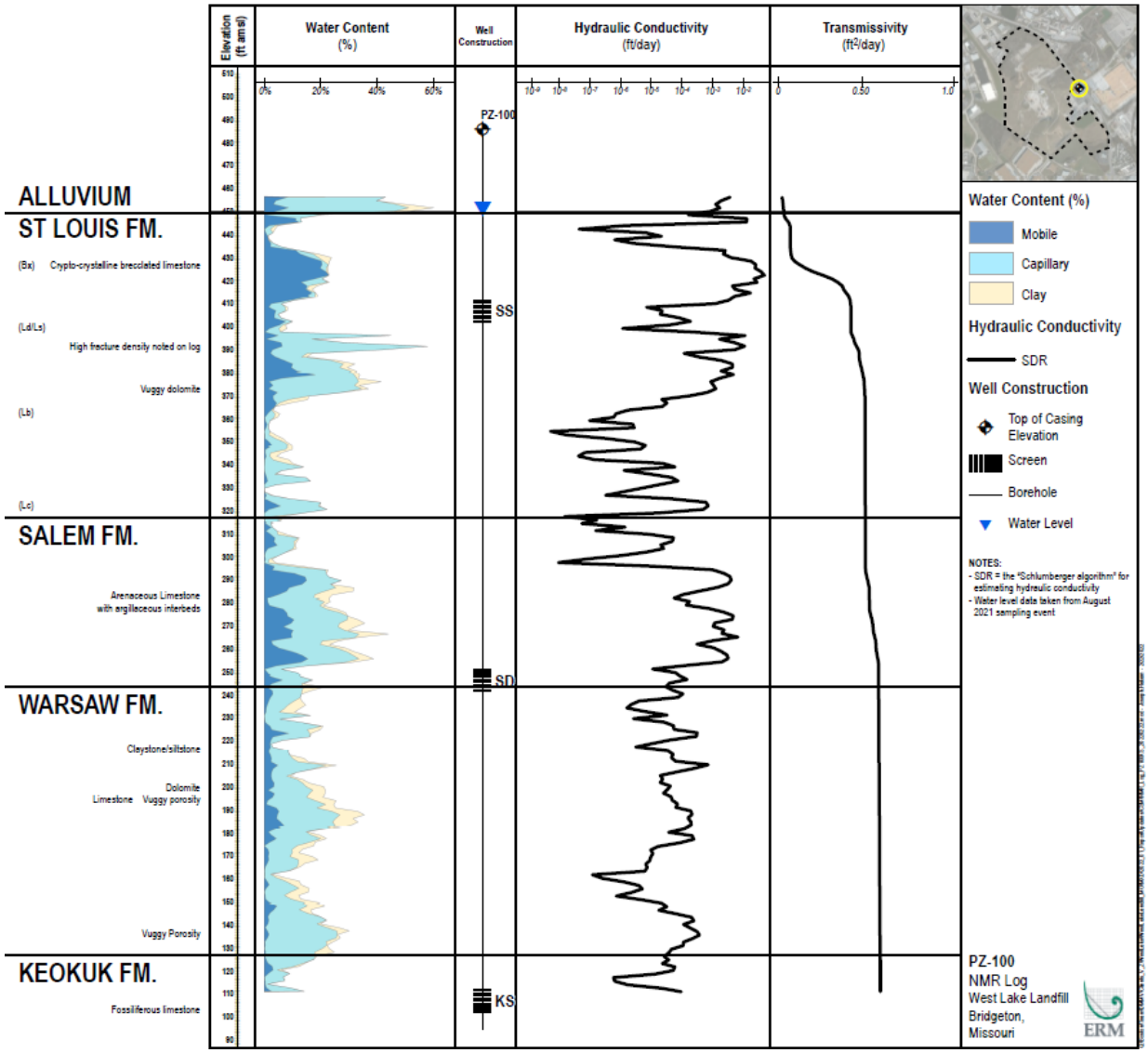


Figure 4-1: Bedrock Type Section Based on NMR Geophysical Logging and Core Sample Descriptions for PZ-100KS

Prior to the RI, the contact depths between the St. Louis and Salem Formations and the Salem and Warsaw Formations were unknown in the northern and western areas of the Site. There were few bedrock wells in areas underlain by alluvial valley sediments and those that existed were relatively close to the alluvial valley margin. Because alluvial processes incised into and removed bedrock material, it was unclear where within the stratigraphic column that bedrock would first be encountered. Following installation of MW-400, MW-404, and MW-304 (Figure 4-2) and correlation of the geophysical logs with logs that were available for existing wells in upland areas of the Site, it was determined that the St. Louis Formation and the upper portion of the Salem Formation were absent in the northern and western areas of the Site and that alluvium is in direct contact with the Salem Formation in these areas. Due to the uncertainty regarding the depth of the various bedrock units and the fact that the St. Louis Formation was completely absent beneath the northern portion of the Site, these three initial wells were drilled into the Warsaw Formation and the deepest screen interval was installed in the Warsaw Formation, despite the

fact that the Work Plan specified that no monitoring wells would be installed in the Warsaw Formation. This deviation was documented in Tech Memo 15.

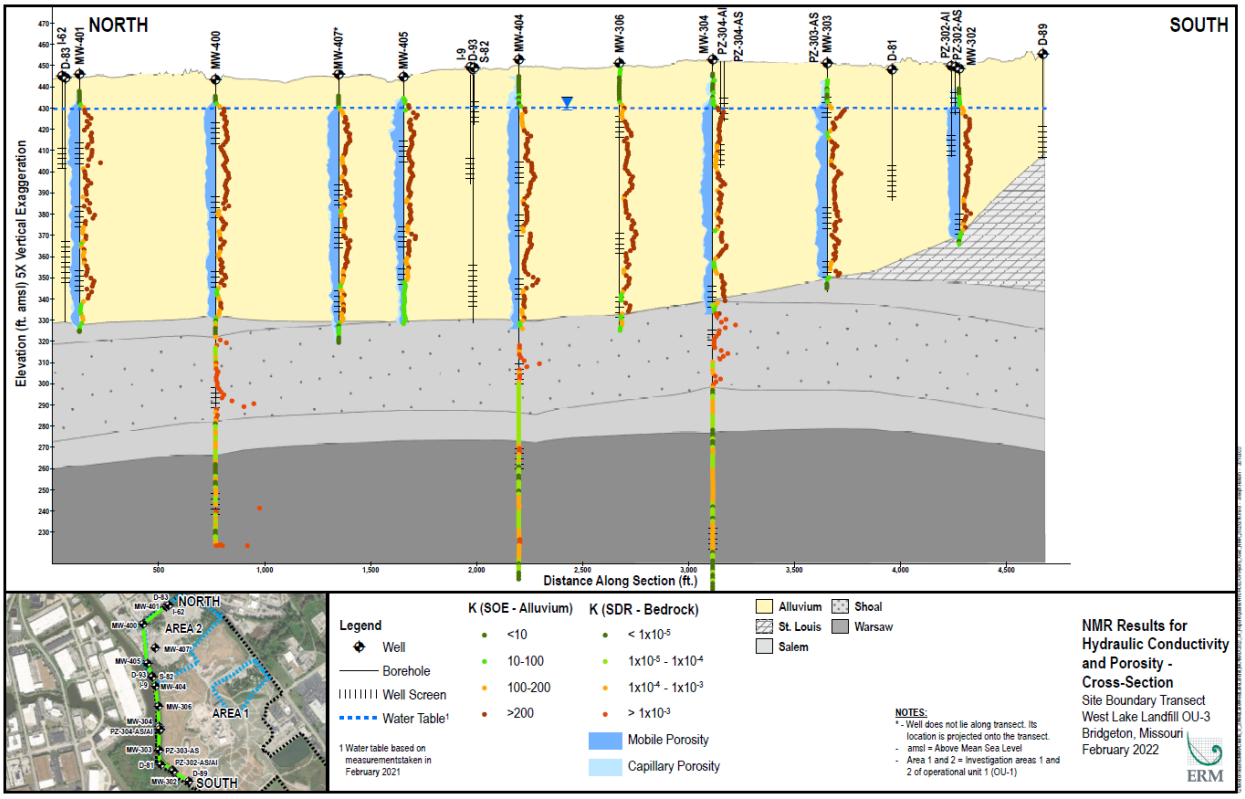


Figure 4-2: Cross Section A-A' Showing the Relationship Between Alluvium and Bedrock Formations from Upland Areas to the Alluvial Valley

4.2.1.1 Warsaw Formation

The Warsaw Formation is present beneath the entire investigation area (i.e., the Site proper and those off-Site locations where background-well borings have been completed). The contact between the Salem and Warsaw formations is marked by a distinct layer of shale or mudstone that is generally 5 to 10 feet thick. This layer is easily identified on borehole geophysical logs due to the increased clay mineral content resulting in increased gamma activity and electrical conductance as observed on natural gamma and induction logs. The example log from MW-205 shown below on Figure 4-3 illustrates the high density of open, low-angle fractures in the St. Louis Formation (acoustic televiewer log, far right); the elevated mobile matrix porosity and hydraulic conductivity within the Salem Shoal Sequence (fourth and fifth column from the right); and the increased gamma counts and bulk conductivity associated with the Warsaw Formation (first and second column from the left).

Initially, this contact was not easily identified during field logging because the shale or mudstone observed at the contact varies in thickness and is generally not visually discernible. NMR geophysical logs also show an overall decrease in total porosity that is characterized by predominately capillary and clay-bound water within the bedrock matrix and lesser amounts of mobile water generally associated with fractures within the Warsaw Formation. Acoustic televiewer data show a reduction in the frequency of open fractures in the Warsaw Formation. Based on NMR results, the estimated bulk hydraulic conductivity

of the Warsaw Formation is approximately $1x10^{-4}$ to $1x10^{-6}$ feet per day with a maximum hydraulic conductivity of $8x10^{-2}$ in fractured intervals where present (see Table 3-2). The bulk hydraulic conductivity is approximately one to two orders of magnitude lower than the hydraulic conductivity of the more highly conductive intervals of the Salem and St. Louis Formations. Based on correlations with the new and existing wells, the top of the Warsaw Formation dips to the southeast at a rate of approximately 0.015 ft/ft (80 feet per mile) (Figure 4-4).

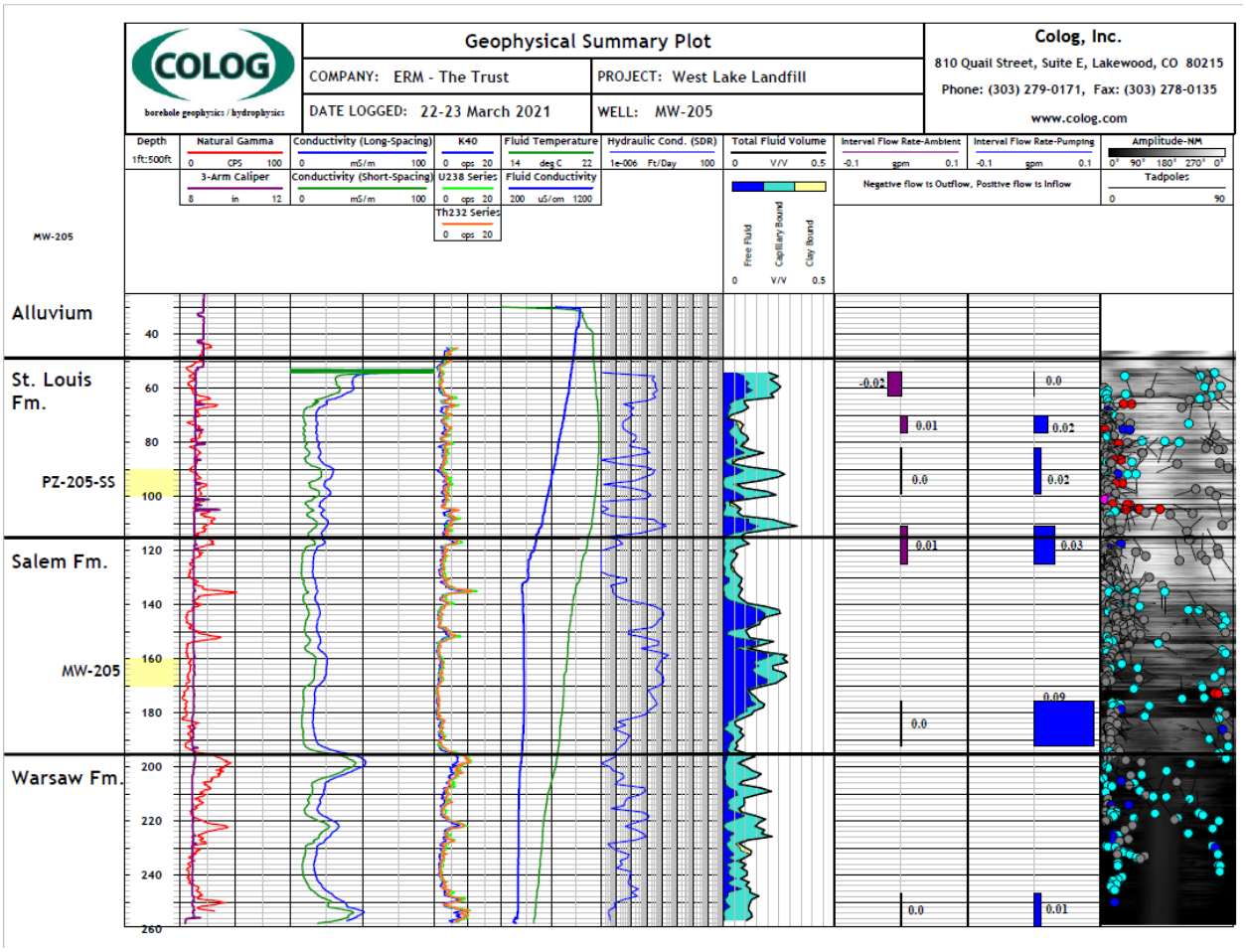


Figure 4-3: Geophysical Logging Results at MW-205.

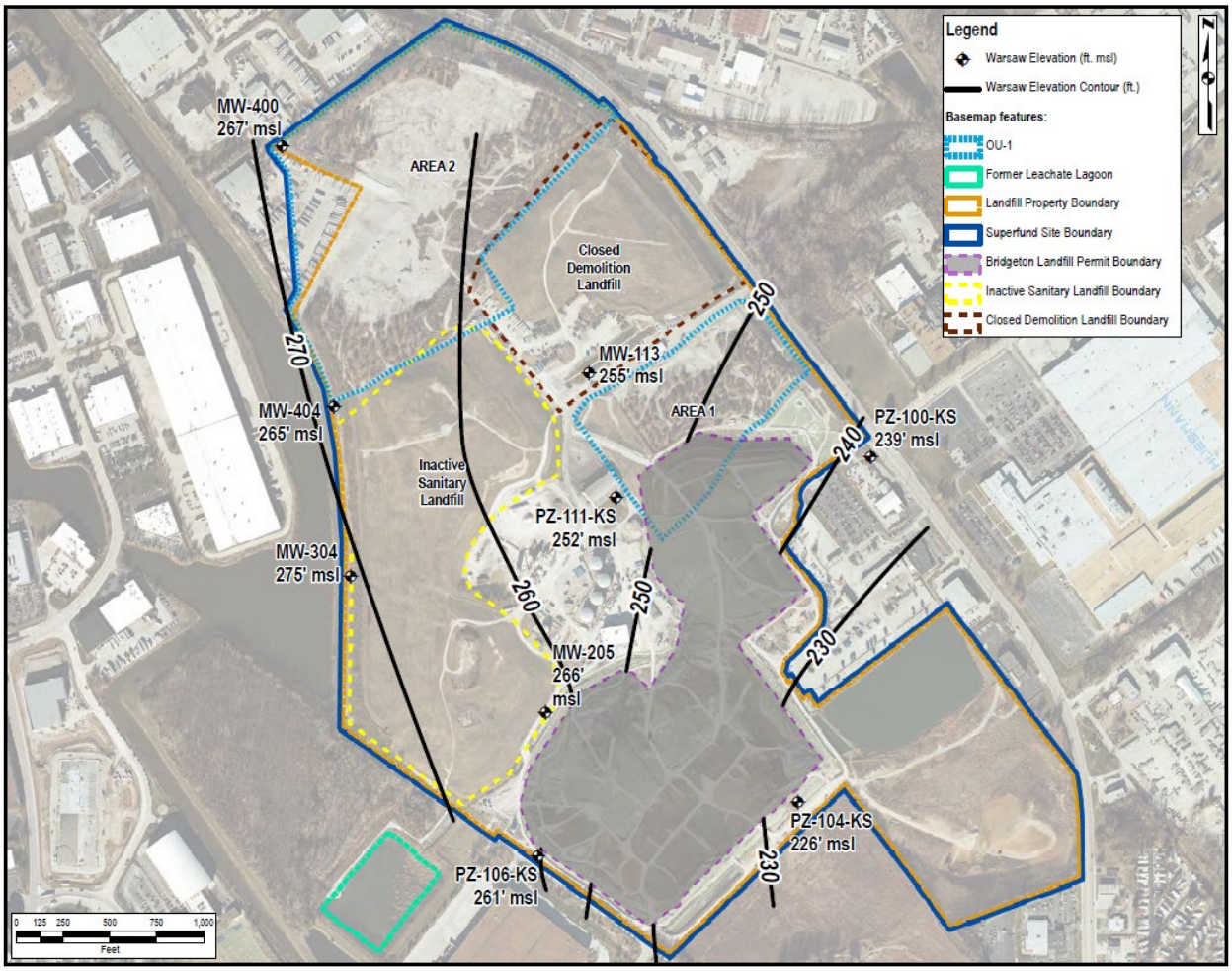


Figure 4-4: Top of the Warsaw Formation Structure Map

4.2.1.2 Salem Formation

The Salem Formation is present beneath the entire investigation area, although the upper portions of it have been incised by alluvial processes within the Missouri River alluvial valley. The Salem Formation is fully intact in the upland portion of the investigation area and is overlain by the St. Louis Formation. The Salem Formation is composed primarily of arenaceous limestone with argillaceous interbeds. Within the Salem Formation, an approximately 40- to 50-foot-thick interval has been identified by ERM with elevated mobile porosity and hydraulic conductivity and is referred to in the CSM as the Salem Shoal Sequence. The elevated matrix porosity, as observed on NMR logs, suggests that this is an arenaceous lime sand, typical of shoal sediments in carbonate depositional environments (Figure 4-5). NMR data show that hydraulic conductivities in the Salem Formation range from a high of $1x10^{-2}$ feet per day in Salem Shoal sediments to a low of $1x10^{-7}$ feet per day in Salem sediments above and below the Shoal Sequence (Figure 4-6). The overall average hydraulic conductivity in the Salem Shoal Sequence was approximately two orders of magnitude greater than the Salem sediments above and below the Shoal. Acoustic televiewer data show few open fractures in the Salem Formation (Figure 4-3); most open fractures within the Salem Formation occur near the alluvium/bedrock contact. The Salem Shoal Sequence was observed to be in direct contact and hydraulic communication with alluvium along the western margin of the Site where new bedrock wells have been installed. The aerial extent where the Salem Shoal Sequence is in

contact with alluvium cannot be established at this time. Similar to the Warsaw Formation, the Salem Formation dips to the southeast at a rate of approximately 0.015 ft/ft (80 feet per mile), although a mound in the upper surface of the Salem Formation is observed beneath the central portion of the Site where Salem Shoal sediments are thickest (Figure 4-7).

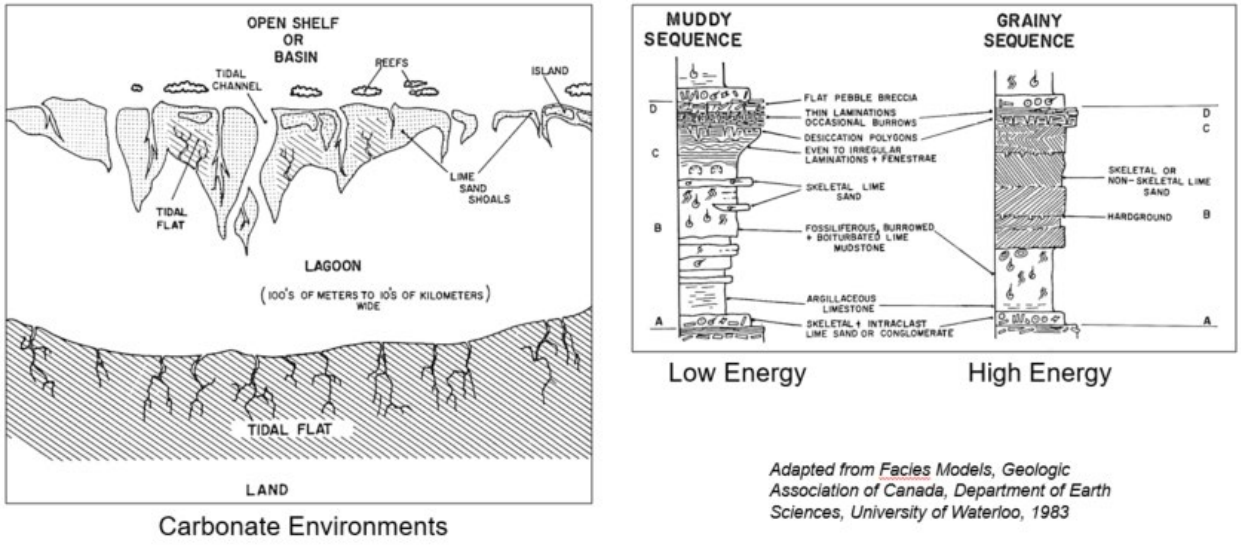


Figure 4-5: Carbonate Depositional Environments of Lime Sand Shoals

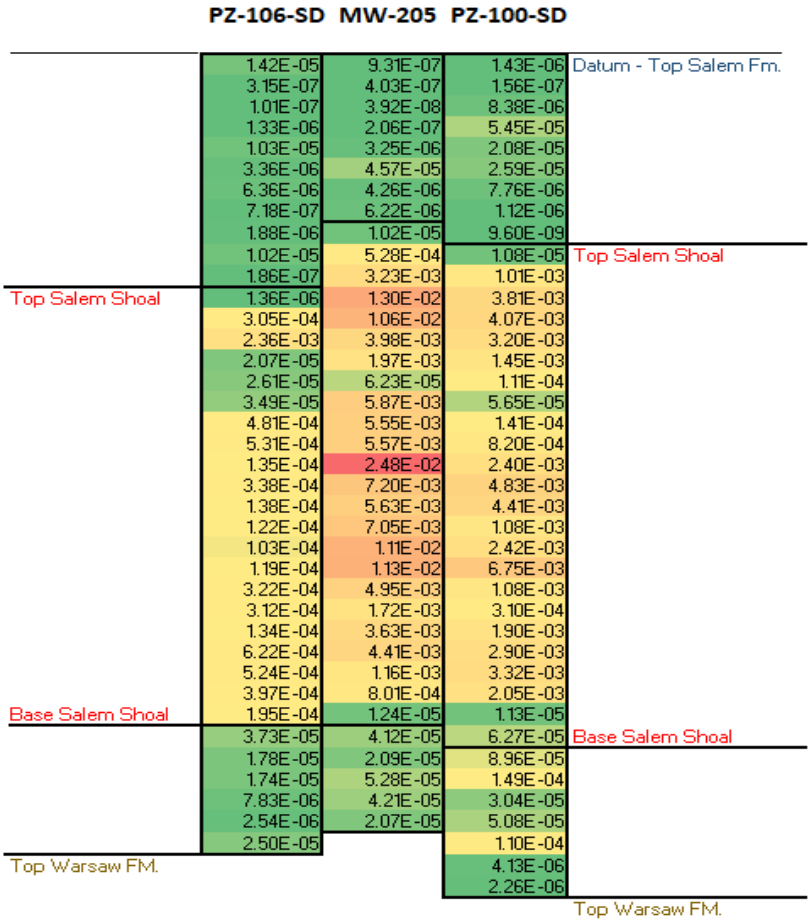


Figure 4-6: High-Resolution NMR-Derived Hydraulic Conductivity Data (feet per day) in the Salem Formation at Three Separate Well Locations.

The arenitic limestone (lime sands) of the Salem Shoal Sequence is easily identified by increased hydraulic conductivity but is constrained above and below by lower conductivity Salem Formation bedrock with few open fractures. The overlying St. Louis Formation contains numerous low-angle fractures, based on Site-specific geophysical borehole logging results. The Salem Shoal Sequence has been observed to be in direct contact with the overlying alluvium at new bedrock well locations along the western boundary of the Site (MW-304, MW-404, and MW-400).

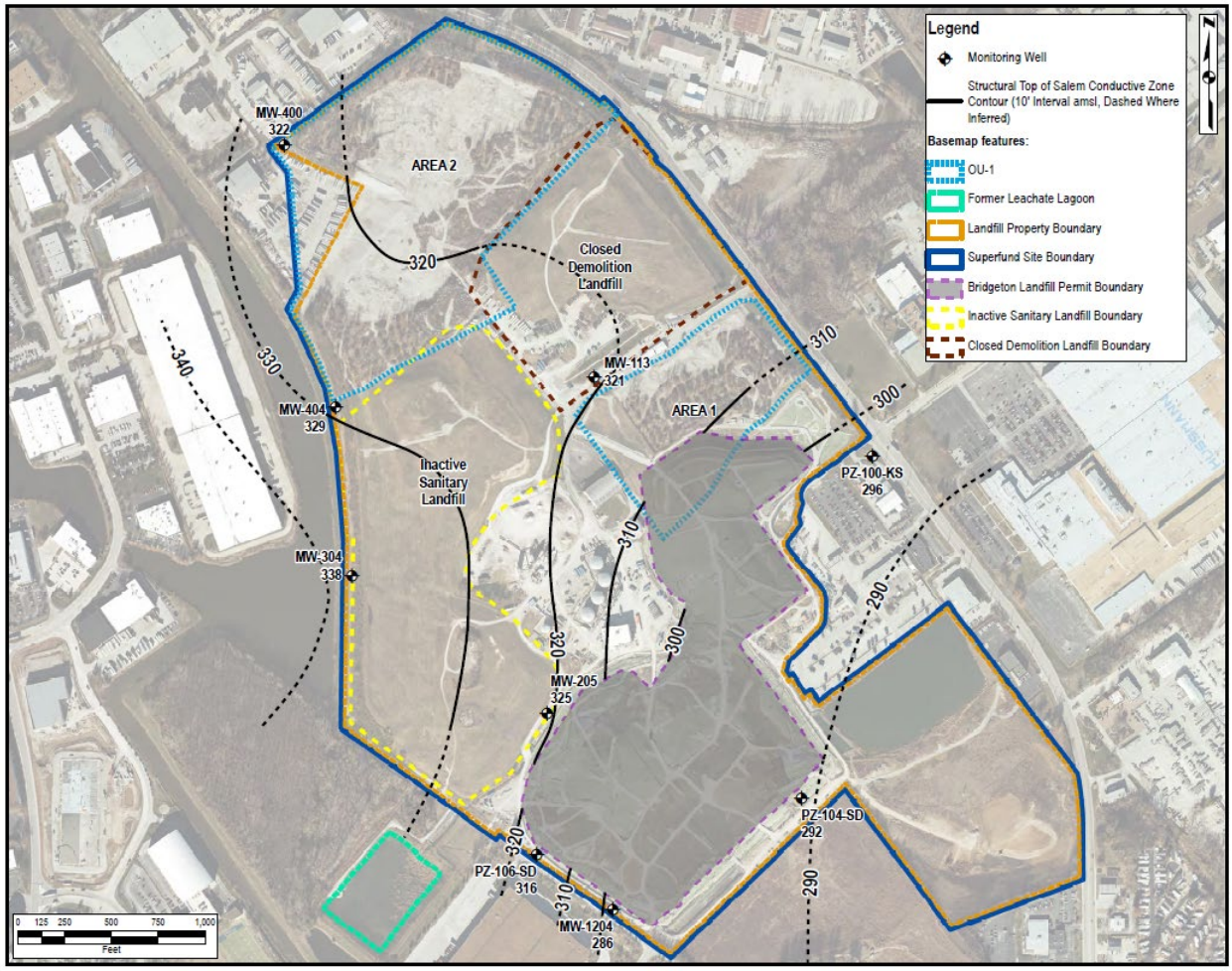


Figure 4-7: Top of the Salem Shoal Sequence Structure Map

4.2.1.3 St. Louis Formation

The St. Louis Formation is present in the southern upland area of the Site but is absent beneath the Missouri River alluvial valley. The alluvial valley margin is approximated by the 410-foot contour line shown on Figure 4-8. The St. Louis Formation is composed of a mixture of fossiliferous and argillaceous limestone and dolomite. The contact between the St. Louis Formation and underlying Salem Formation is somewhat gradational. For the purpose of this investigation, the contact was defined by historical boring logs and rock descriptions that were compared to newly acquired geophysical logs and then correlated across the Site where the St. Louis Formation is present. Acoustic televiewer and NMR data indicate that porosity and hydraulic conductivity within the St. Louis Formation is primarily controlled by open fractures that are typically low angle, although some high-angle fractures are also observed (Figure 4-3). Intervals of elevated mobile porosity observed on the NMR logs appear to be associated with fractures rather than matrix porosity. NMR data indicate that hydraulic conductivities in the St. Louis Formation range from $1x10^{-2}$ to $1x10^{-7}$ feet per day; however, NMR typically underestimates hydraulic conductivity in fractured bedrock because it averages data over approximately 1.5-foot intervals and cannot measure the hydraulic conductivity of individual fractures (see discussion in Section 3.3.2). As such, the NMR data likely underestimate hydraulic conductivity within intervals containing a limited number of transmissive fractures.

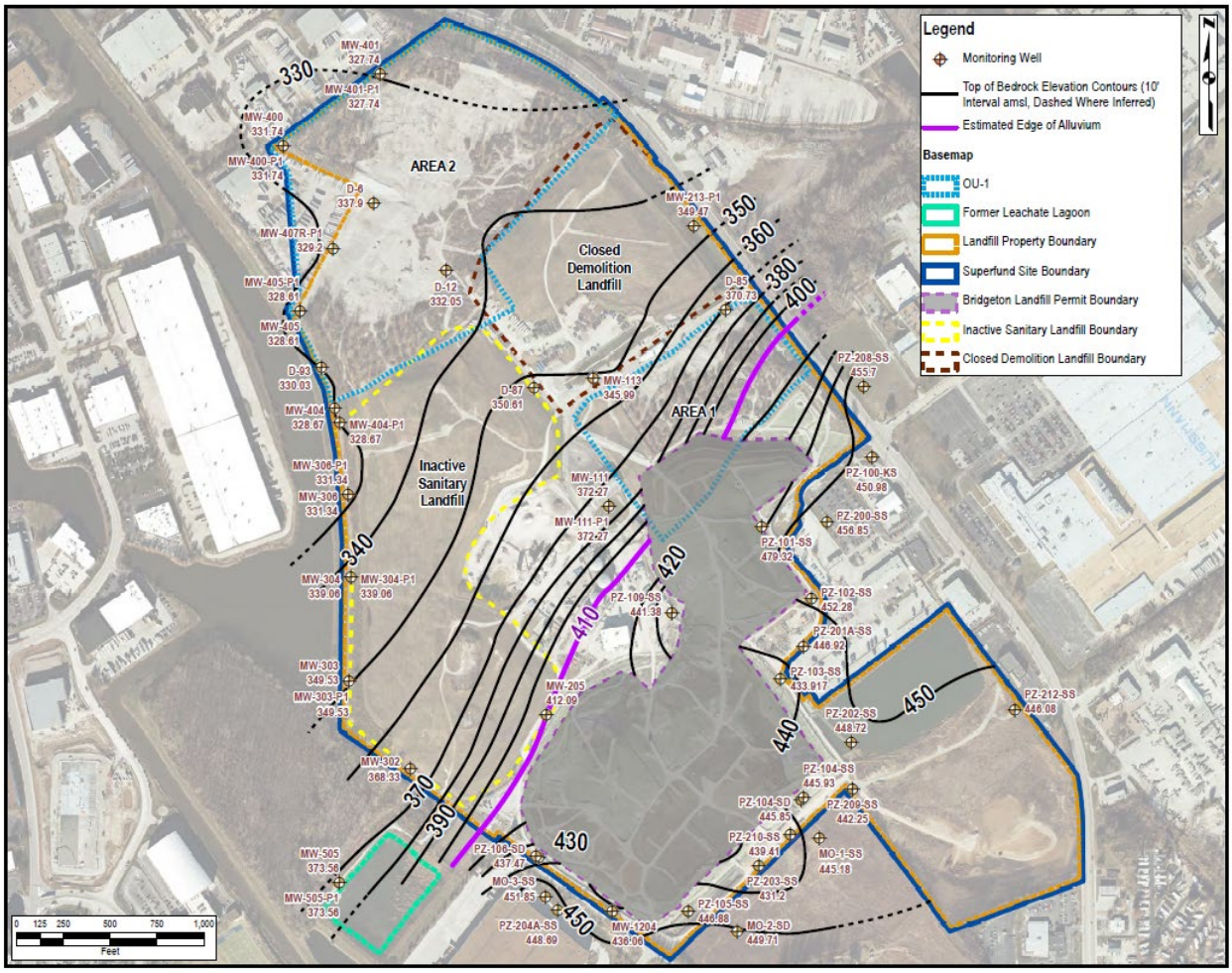


Figure 4-8: Top of Bedrock (undifferentiated) Structural Map

The 410-foot contour is used to approximate the lateral edge of the alluvial valley sediments. The lateral extent of the St. Louis Formation beyond which it has been fully eroded by the alluvial valley occurs at an elevation of approximately 340 feet to 350 feet.

4.2.2 Alluvium

The alluvium has historically been divided into three separate units (Golder Associates 1995; Trihydro 2020):

- Shallow alluvium ranging from predominantly medium sand to clay with lenses of gravel and coarse sand.
- Intermediate alluvium consisting of fining-upward point-bar sequences of coarse gravel through fine sand with some overbank flood-plain deposits of silt and clay at the edge of the alluvial valley.
- Deep alluvium consisting of fining-upward sequences of coarse gravel to coarse sand with little-to-no fines, likely deposited during the rapid channel infill of the Missouri River Valley.

The previous CSM assumed the historical depositional environment was that of a meandering river system characterized by channel, point-bar, levee, and overbank deposits. Such deposits are typically defined by lower energy, fining-upward textural sequences deposited by lateral accretion and capped by

levee and overbank deposits following channel avulsion (Shultz et al 2017). These meandering river deposits tend to occur in areas with low gradients and are generally distal to sediment sources. Conversely, the geophysical data collected during this investigation showed sequences of upward-coarsening sediments primarily described as fine to coarse sands and gravels that are atypical of meandering river system depositional environments. Review of the geological literature revealed that the depositional environment responsible for these deposits was very different than the current Missouri River meandering river system depositional environment.

As described in Anderson et al. (2021), highly variable water and sediment input related to climate extremes during the last glacial cycle (Pleistocene) resulted in both incision and sediment aggradation at rates much different than today (Holocene). The Missouri River rapidly incised and aggraded up to 90 feet in two climate-driven cycles over a period of about 15,000 years from the Last Glacial Maximum to about 8,000 years ago. Stabilization after each incision and aggradation event promoted lateral migration of the river and construction of a fluvial surface above a corresponding alluvial deposit with the same name, as shown on Figure 4-9.[12] These fluvial surfaces typically consist of finer-grained sand deposits as compared to the coarser-grained sand and gravel alluvial deposits.

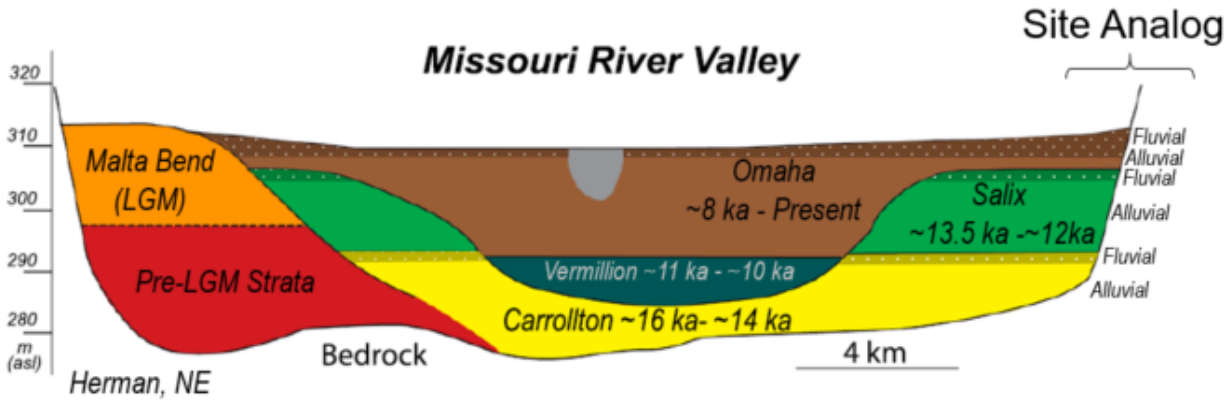


Figure 4-9: Conceptual Model of Cyclic Incision and Sediment Aggradation Associated with Pleistocene Glaciation in the Missouri River Valley

The updated CSM identifies a series of stacked, coarsening-upward sequences of sediments associated with high-energy systems deposited during retreat of the Pleistocene ice sheet.

[12] Though this cross section represents geologic conditions upstream of the Site, the depositional environment is analogous to that present at the Site location during the same time period.

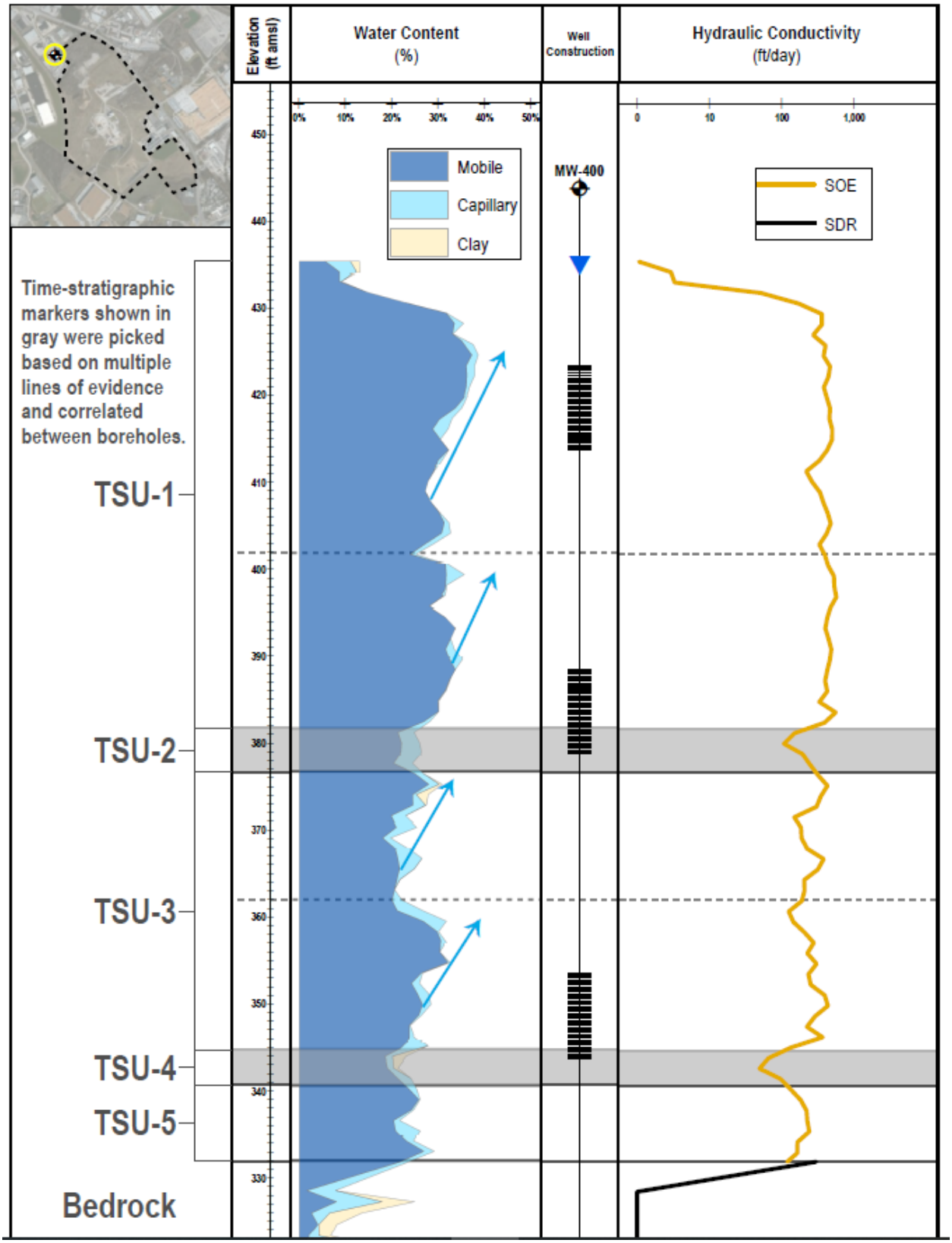


Figure 4-10: MW-400 NMR Geophysical Data

NMR geophysical data showing stacked sequences of upward coarsening alluvial deposits described by increasing total and mobile porosity and separated by thin fluvial interbeds of reduced porosity that define time-stratigraphic markers. These trends were generally consistent across the western boundary of Site for correlation purposes. Once the remaining borings have been drilled and additional monitoring wells have been installed on the east side of the Site and in the off-Site area west of the Site, these correlations will be re-evaluated.

Geophysical data collected as part of this investigation demonstrate that the high-energy, coarsening-upward sequences are laterally extensive, and can be correlated across the Site where NMR data have been collected. The less permeable fluvial layers represent time-stratigraphic markers that were correlated across the Site, contribute to vertical anisotropy, and form the basis for the establishment of potential TSUs within alluvium. As a result, ERM has identified five potential TSUs within the alluvial stratigraphic sequence. These include upward coarsening sand and gravel sequences capped by thin intervals of finer-grained, lower-hydraulic conductivity material. ERM has identified three high-hydraulic conductivity, coarsening-upward sequences of sand and gravel defined as TSU-1, TSU-3, and TSU-5, separated by thin layers of finer-grained, lower-conductive materials defined as TSU-2 and TSU-4 (Figure 4-10). A sixth TSU, (TSU-0), which is not currently included on Site figures but will be added in 2022, is present in some areas above TSU-1 in the alluvium. TSU-0 consists of finer-grained sediments deposited subsequent to the Pleistocene glacial deposits. TSU-0 is mostly unsaturated except at the base of the unit in some areas of the Site. This layer is considered to be a separate TSU in those areas where it is saturated.

Figure 4-11 shows a frequency distribution of NMR-derived hydraulic conductivity data for each identified TSU. TSUs-2, 4, and 5 represent thinner intervals and therefore have fewer data points on those plots. Most notable are differences in the range of the data between TSUs-1, 3, and 5, collectively, and TSUs-2, and 4, collectively. This indicates that the sediments in TSUs-1, 3, and 5 are highly variable and poorly sorted, whereas sediments in TSUs-2 and 4 are well sorted. In addition, the highest hydraulic conductivities in TSUs-2 and 4 are less than 400 feet per day, with an average of around 200 feet per day. The hydraulic conductivities in TSUs-1, 3, and 5 often exceed 600 to 700 feet per day and average around 400 feet per day, except for TSU-5 which shows a wide range but has an overall lower average hydraulic conductivity. The analysis supports the hypothesis that TSUs-2 and 4 were deposited under a different, lower-energy flow regime than the other TSUs.

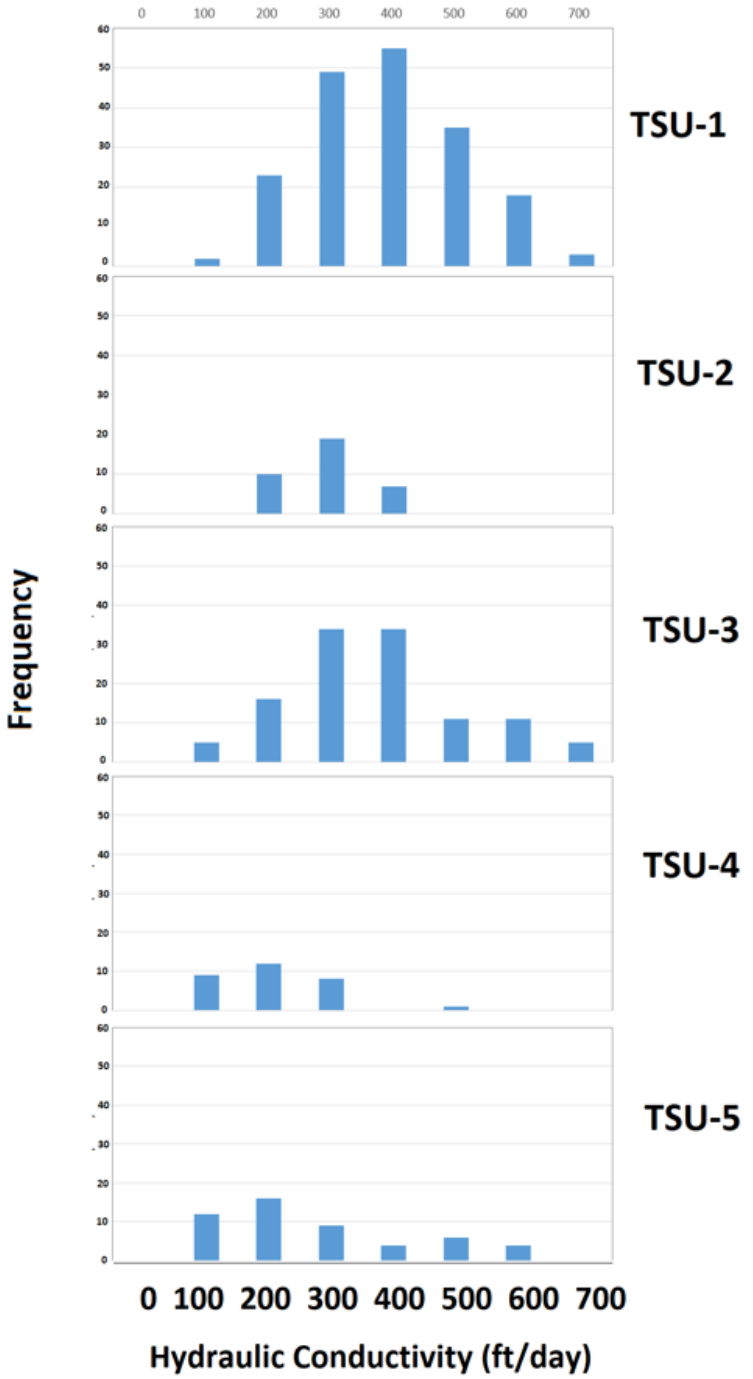


Figure 4-11: Frequency Distribution of NMR-Derived Hydraulic Conductivity Data in Alluvial Sediments by TSU for Newly Installed Wells

Saturated alluvium is thickest (approximately 100 feet) along the northwestern and northern boundary of the Site and thins rapidly along the alluvial valley contact with bedrock to the south where the alluvium pinches out. Figure 4-12 shows the saturated thickness of alluvium based on the morphology of the alluvial valley.

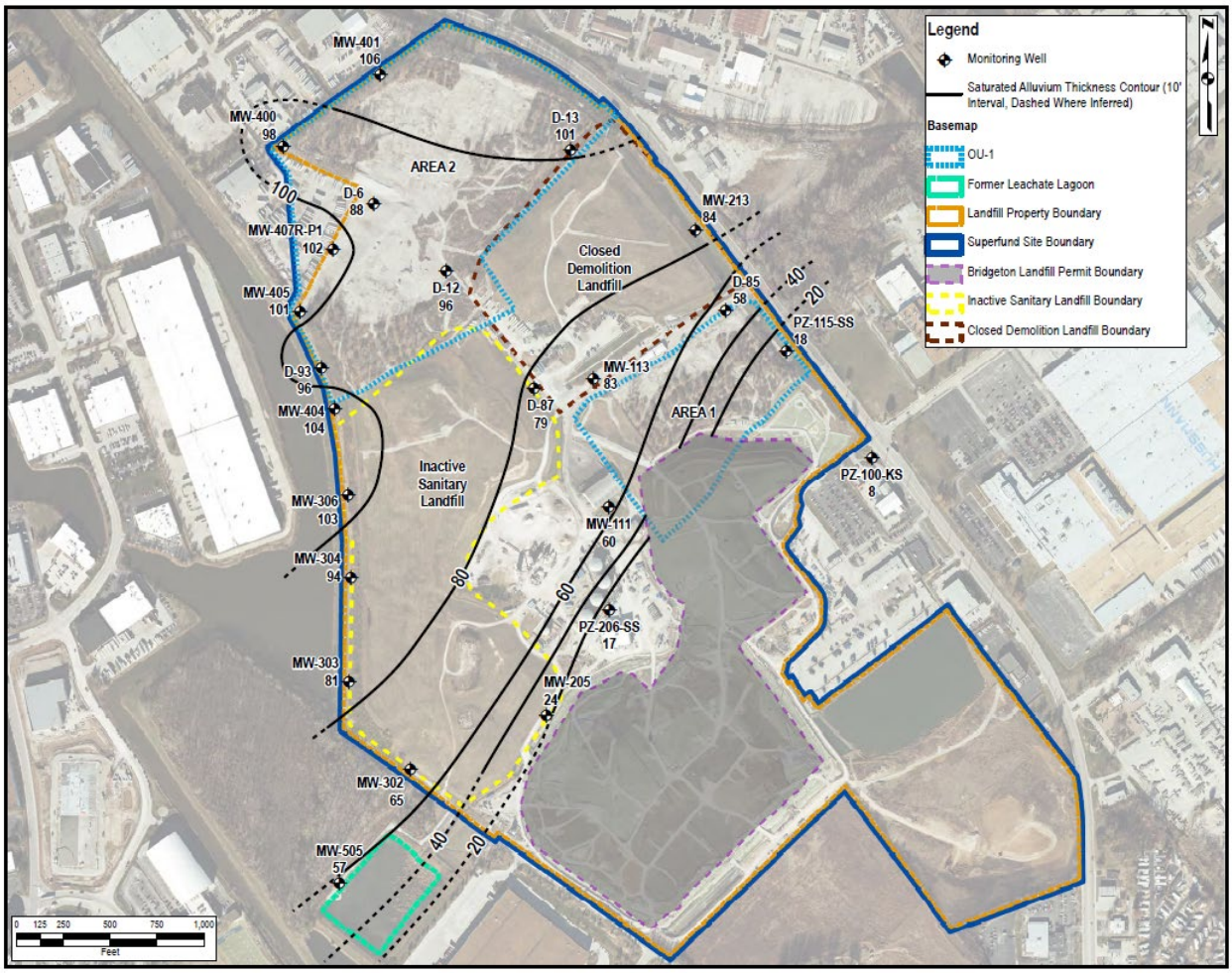


Figure 4-12: Saturated Thickness of Unconsolidated Sediments

4.3 Hydrogeology

4.3.1 Alluvial Aquifer

As noted in the previous section, the alluvial aquifer has been divided into potential TSUs[13] based on their geologic characteristics (i.e., based on interpretation of environmental sequence stratigraphy and hydraulic properties). The five alluvial TSUs (i.e., TSUs 1 through 5) all consist of relatively high -permeability sand and gravel deposits. However, three of the TSUs (TSUs 1, 3, and 5) are thicker and exhibit, on average, higher-permeability values than do the two thinner, lower-permeability zones (TSUs 2 and 4). The presence of relatively lower -permeability zones may impede vertical groundwater flow between the higher-permeability zones due to the contrast in horizontal versus vertical hydraulic conductivity, which would favor horizontal over vertical groundwater flow (Figure 4-13).

For most sedimentary depositional environments, coarse-grained sediments (sands and gravels) are deposited by lateral accretion, whereas fine-grained sediments (silts and clays) are deposited by vertical

[13] Evaluation of the hydraulic characteristics of, and between, these geologic horizons is ongoing. Therefore, they are currently being referred to as potential TSUs. However, for simplicity's sake, in the remainder of this document they will be referred to as TSUs.

accretion. The bedded character of fluvial-deposited sediments further imparts anisotropy within the materials and can result in horizontal to vertical anisotropy ratios of as high as 10:1 (Freeze and Cherry, 1979). In the absence of aquifer stresses that induce vertical flow, these contrasts within individual facies and in vertical facies sequences with variable hydraulic conductivities naturally create a stronger horizontal component to groundwater flow relative to the vertical component.

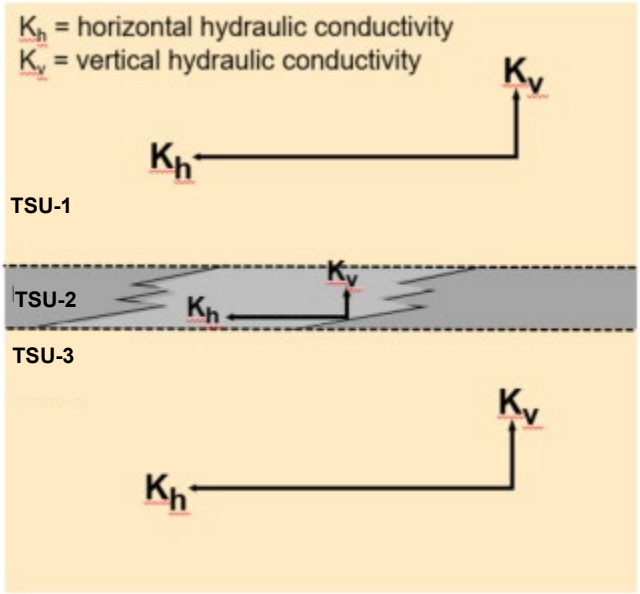


Figure 4-13: Hypothetical Illustration of Horizontal and Vertical Hydraulic Conductivity

Figure 4-13 presents a hypothetical illustration of how variability in hydraulic conductivity values across the five TSUs may result in vertical anisotropy favoring horizontal over vertical groundwater flow within the alluvial flow system. Figure 4-13 is not drawn to scale and does not reflect actual Site conditions. In the absence of Site-specific data, a horizontal to vertical anisotropy ratio of up to 10:1 may be assumed for most alluvial depositional environments.

Based on NMR data, TSUs 1 and 3 exhibit the highest mobile porosity, and hydraulic conductivity and TSU 5 exhibits relatively lower mobile porosity (Figure 4-11). Figure 4-11 also shows that TSUs 2 and 4 have both a lower range of hydraulic conductivities as well as an overall lower average hydraulic conductivity. Maximum hydraulic conductivities in TSUs 1, 3, and 5 are higher than in TSUs 2 and 4. These variations suggest a difference in the depositional cycle for TSU-2 and 4 characterized by finer-grained and more well-sorted sediments. This variability results in vertical anisotropy that would favor horizontal over vertical groundwater flow. However, while the hydraulic conductivity in TSU-2 and TSU-4 are as much as an order of magnitude lower than the other TSUs, the material is still considered permeable and can be transmissive under conditions that drive vertical gradients. Though these TSUs have been defined based on environmental sequence stratigraphy, evaluation of how these units affect groundwater flow is still in progress. Therefore, potentiometric surface maps for the alluvium are still being presented as a single unit. For the purpose of groundwater contouring, the lowest head value for well clusters in the alluvium was selected for contouring, as lower head values are associated with higher transmissivity zones.

Hydraulic conductivity values derived using NMR vary by an order of magnitude within alluvium (approximately 50 to 500 feet per day) and are generally two to four orders of magnitude (sometimes more) greater than those measured in bedrock.

Given that groundwater elevations vary seasonally, resulting in some variability in the orientation and magnitude of the horizontal hydraulic gradient, and because transducer data are not available for all Site wells for the entire reporting period, and because surface water elevations in the adjacent surface water body west of the Site are unknown due to access limitations, a detailed evaluation of the groundwater flow system was not completed for the 2021 reporting period. Further evaluation of the horizontal, vertical, and temporal nature of the groundwater flow system is ongoing and will be presented in the 2022 Annual Report, and in more detail in the OU-3 RI Report.

As observed in both alluvial transducer data (Appendix G) and river stage data (Appendix H), groundwater elevations in the alluvium and surface water elevations in the Missouri River fluctuate similarly throughout the year, with the lowest levels occurring in late January and the highest levels in mid-July (Figure 4-14). Groundwater elevations vary by as much as 5 feet annually in concert with river stage trends. Fluctuations in groundwater elevation tend to occur simultaneously across the Site, which results in minimal impact on the predominant magnitude of the horizontal groundwater gradient, although the gradient direction is observed to vary seasonally in accordance with the river stage trends, with small-scale changes. As shown on Figures 7a through 7l, groundwater in the alluvium generally flows from east to west, although the horizontal hydraulic gradient across the Site is very low (0.0001 to 0.0003) and the orientation of the gradient can vary from southwesterly to northwesterly in different portions of the Site and during different seasons.

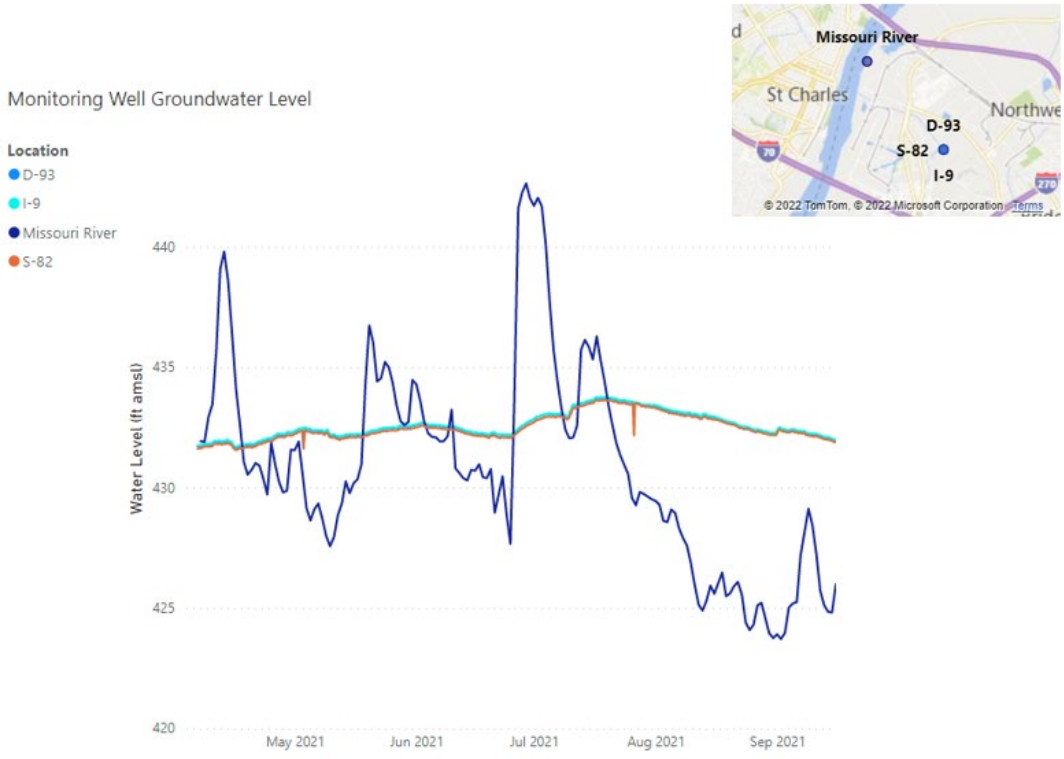


Figure 4-14: Comparison of Missouri River Elevation Data Collected at the St. Charles Gauge Versus Groundwater Elevation Data for an Alluvial Well Cluster (S-82, I-9, D-93).

As of the end of the reporting period, the majority of investigation data generated were from within the Site boundary. The following investigation tasks had not yet started, or were in progress, and the results will inform interpretation of hydrogeologic conditions at and around the Site:

- Evaluation of the ECLD engineered water body west of the Site, including its operation, depth, construction details, and surface water levels.
- Evaluation of the leachate recovery systems within the Bridgeton Landfill and their potential influence impacts on the adjacent alluvial and bedrock aquifers.
- Evaluation of river stage data, and interactions between Missouri River and Mississippi River water levels, and bedrock and alluvial aquifer groundwater elevations throughout a 12-month period, and the potential impacts of these interactions on the groundwater flow system at and near the Site.
- Installation of additional bedrock and alluvium monitoring wells, primarily in off-Site areas, including upgradient and background wells.

4.3.2 Bedrock Aquifer

The majority of bedrock monitoring wells are in the southern portion of the Site, south of the alluvial valley margin (Figure 3). In this area, the horizontal hydraulic gradient is to the northwest within the St. Louis, Salem, and Keokuk Formations and is relatively high (approximately 0.04; Figures 8a through 8l and 9a through 9l). The newly installed Salem Formation wells beneath the alluvial valley show that the horizontal hydraulic gradient in the Salem Formation flattens and approaches that of the alluvium (approximately 0.0002) in the area where the Salem Formation is in direct contact with the overlying alluvium.

As observed in both bedrock transducer data (Appendix G) and river stage data (Appendix H), groundwater elevations in bedrock and surface water elevations in the Missouri River fluctuate similarly throughout the year, with the lowest levels occurring in late January and the highest levels in mid-July (Figures 4-15 and 4-16). Groundwater elevations vary by as much as 5 feet annually in concert with river stage trends. The effects of river stage changes on bedrock water levels appear to be fairly instantaneous except in bedrock wells upgradient of the Site, where water-level changes are somewhat dampened and show a greater lag (1 to 2 days). Vertical gradients between the various bedrock units are currently being evaluated and appear to show some seasonal variability similar to alluvium, but a full year of data is needed to develop conclusions. Results of the vertical gradient analysis in bedrock will be reported once the assessment is complete.

As shown on Figure 4-6 and Table 3-2, the highest hydraulic conductivity values (approximately $1x10^{2}$ feet per day) generally occur in the Salem Shoal Sequence. Highly fractured zones within the St. Louis Formation exhibit similar hydraulic conductivity values, but the absolute values are not accurately reported by the NMR dataset, as discussed in Section 3.3.2. Lower hydraulic conductivity values are characteristic of the rock matrix of both formations (i.e., approximately $1x10^{-5}$ to $1x10^{-7}$ feet per day), except for the Salem Shoal Sequence, which was previously discussed and is shown on Figure 4-6.

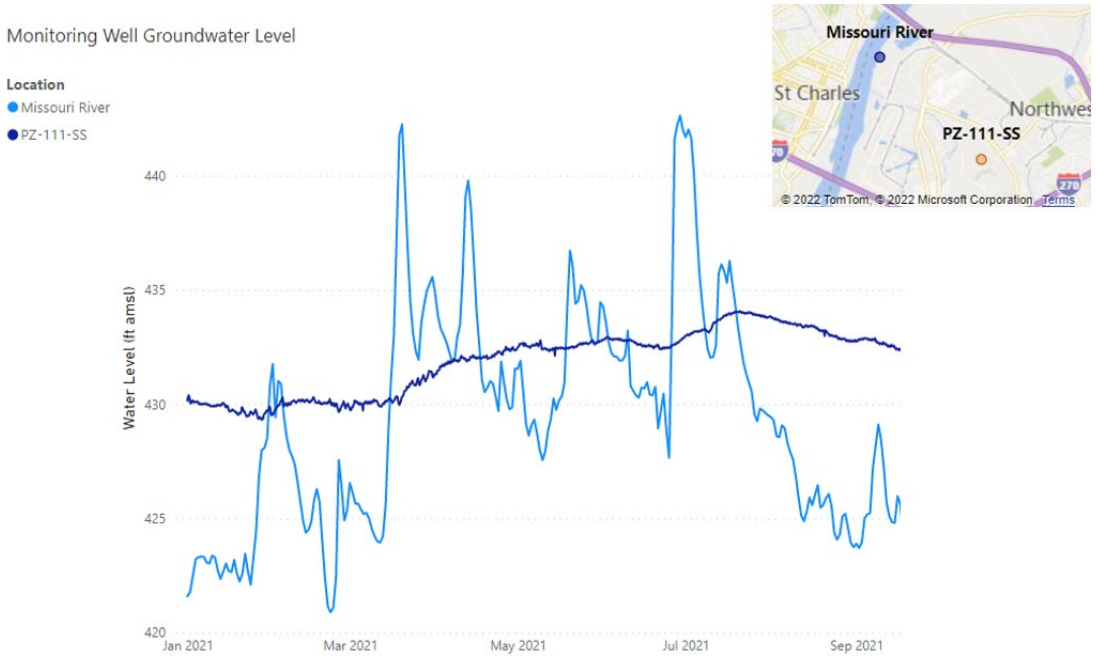


Figure 4-15: Comparison of Missouri River Elevation Data Collected at the St. Charles Gauge Versus Groundwater Elevation Data for a Bedrock Well PZ-111-SS (St. Louis Formation).

Figure 4-16: Comparison of Missouri River Elevation Data Collected at the St. Charles Gauge Versus Groundwater Elevation Data for a Bedrock Well PZ-100-SD (Salem Formation)

4.4 Groundwater Constituents of Potential Concern

Based on the data collected during the reporting period, ERM has evaluated the distribution of arsenic, three radionuclides (radium, uranium, and thorium), and seven organic COPCs (benzene, 1,4-dioxane, vinyl chloride, *cis*-1,2-dichloroethene, 2-methylnaphthalene, THF, and 1,2,4-trimethylbenzene). Evaluation of potential natural and anthropogenic sources of these COPCs is ongoing, background evaluations for naturally occurring elements and compounds will be completed in the future, and delineation of solutes in groundwater is ongoing. Therefore, these issues are not addressed in this report. Off-Site wells will be installed in 2022 and available results will be discussed in the 2022 Annual Report with a comprehensive assessment of COPCs and their sources included in the RI Report. The following subsections focus on presenting basic information regarding the horizontal and vertical distribution of ten COPCs and thorium isotopes (at USEPA's request) in groundwater, and the concentrations detected. More detailed discussions of groundwater geochemistry and other related issues will be included in the RI Report.

4.4.1 Nature and Extent of Arsenic in Groundwater

Arsenic is known to naturally occur in soils and bedrock and has been reported in groundwater from several Midwest states at sites with no history of arsenic use (Korte 1991). Anthropogenic sources of arsenic include pressure-treated wood, pesticides, and lead-acid batteries (ATSDR 2007). Arsenic concentration data are shown in plan view on Figures 10a, 10b, and 10c, and in cross section on Figures 11a, 11b, and 11c.

During Q3 2021 (i.e., the most extensive sampling round presented in this report), arsenic was detected in all alluvium groundwater samples, with the highest concentrations detected in the shallowest wells. Nearly all of the arsenic concentrations in groundwater that exceeded the MCL were present within 30 feet of the water table (Figure 11c). These data suggest that arsenic is being derived from a shallow source, which may include materials present in the landfills, migration of arsenic present in groundwater on the adjacent upgradient PM Resources site, and/or naturally occurring arsenic. Evaluation of the arsenic source is ongoing and will be supported by a future evaluation of background arsenic concentrations in groundwater in the vicinity of the Site.

Arsenic was detected in 33 of 37 soil samples reported in the OU-1 Remedial Investigation report (Engineering Management Support 2000) at concentrations ranging from 0.7 to 220 milligrams per kilogram. Arsenic was detected in 15 soil samples collected from various depths across the adjacent PM Resources site (Figures 3 and 4) at concentrations ranging from 4.2 to 47.1 milligrams per kilogram (RAM Group 2018). Arsenic was also detected in 94 percent of groundwater samples collected on the PM Resources site in November 2017 at concentrations ranging from 0.68 to 231 µg/L, with 27 percent of these concentrations exceeding the MCL (RAM Group 2018). These data are consistent with alluvial groundwater concentrations from the Site, where arsenic concentrations range from 0.12J to 526 µg/L with 25.4 percent of sample concentrations exceeding the MCL.

Arsenic concentrations in bedrock monitoring well samples were, on average, an order of magnitude lower than those detected in alluvium monitoring wells (i.e., the average bedrock groundwater concentration was 4.74 µg/L [range from 0.16 to 68.5 µg/L] while the average alluvium concentration was 40.5 µg/L [range from 0.12 to 526 µg/L]). Approximately one third (34.8 percent) of the alluvial groundwater monitoring wells displayed arsenic concentrations greater than its MCL (10 µg/L). In contrast, only 11.7 percent of bedrock samples contained arsenic at concentrations exceeding the MCL.

4.4.2 Nature and Extent of Radionuclides in Groundwater

- Radium (Figures 20a through 20c and 21a through 21c) is a naturally occurring element in soils and bedrock, which has been reported in groundwater from several Midwest states (Szabo et al. 2012; Sturchio et al. 2001). It is also present within radiologically impacted material present within some of the landfills at the Site (EMSI 2018b). Delineation of this material is ongoing, and the results will be reported by the OU-1 team at a later date.

  During Q3 2021 (i.e., the most extensive sampling round presented in this report), radium isotopes (radium-226 and radium-228) were detected in nearly all alluvium groundwater samples, with the highest activity levels generally detected along the western Site boundary (Figure 20c) in the deeper alluvium groundwater samples (Figure 21c). Radium was not detected in the majority of groundwater samples collected along the northeastern Site boundary (Figure 20c). The maximum detected combined radium-226/228 activity levels in unfiltered (total) and filtered (dissolved) alluvium groundwater during 2021 were 11.8 and 10.5pCi/L, respectively. The maximum detected combined radium-226/228 activity levels in unfiltered (total) and filtered (dissolved) bedrock groundwater during 2021 were 57.4 and 43.3 pCi/L, respectively. Radium activity levels were generally higher in bedrock groundwater than in alluvium groundwater, with the highest activity levels detected in wells screened within the St. Louis and/or Salem Formations (Figures 20a, 20b, and 20c). The average bedrock groundwater activity levels were 4.57 and 4.34 pCi/L in unfiltered (total) and filtered (dissolved) samples, respectively, whereas the average alluvium groundwater activity levels were 3.28 and 3.41 in unfiltered (total) and filtered (dissolved) samples, respectively. In alluvial and bedrock groundwater monitoring wells, 24.4 percent and 19.7 percent contained total combined radium-226/228 activity levels above the MCL of 5 pCi/L, respectively. Along the western Site boundary, the lowest combined radium-226/228 activities in alluvium were measured in the shallow alluvium with higher concentrations measured at depth (Figure 21c).

  The radium isotope ratios in groundwater (Figure 20a, 20b, and 20c) show a higher proportion of radium-228 relative to radium-226 in alluvium and a higher proportion of radium-226 relative to radium-228 in St. Louis and Salem Formation bedrock. These isotope ratios suggest radium derived from natural sources. Alluvial sands, such as those found at the Site, are enriched in radium-228 relative to radium-226 because uranium is more soluble than thorium and the uranium will preferentially flush out (Szabo et al. 2012). Soil containing RIM has a different isotopic ratio than the alluvial sands (i.e., it is enriched in radium-226 relative to radium-228 due to uranium-238 within the source material [EMSI 2018a; Tables 2, 3, and 4]). Carbonate bedrock, such as the St. Louis and Salem Formations, is typically enriched in radium-226 relative to radium-228 because carbonate rock contains more uranium-238 relative to thorium-232 (Szabo et al. 2012). This preliminary assessment of isotopic ratios suggests that radium in groundwater is derived from naturally-occurring parent materials, but additional assessment is ongoing.

- Uranium (Figures 26a through 26c and 27a through 27c) is presented as an element for this report, because the MCL is specific to total uranium concentrations. Uranium is naturally occurring in soils and bedrock and may also be present in RIM present within some of the landfills at the Site.

  During Q3 2021 (the most extensive sampling round presented in this report), uranium was detected in nearly all alluvium and bedrock groundwater samples, with the highest concentrations generally detected in shallow alluvium (Figure 27c). The maximum detected uranium concentrations in alluvium and bedrock groundwater during 2021 were 11.6 µg/L and 6.3 µg/L, respectively, both of which are below the MCL of 30 µg/L.

- Thorium isotopes (Figures 30a, 30b, and 30c through 33a, 33b, and 33c) are naturally occurring radionuclides. Activities of thorium-232, the parent material that radioactively degrades to form radium-228, and thorium-230, a decay product of uranium-238 and parent material of radium-226,

are presented in this report. There is no MCL or RSL that directly applies to either of these thorium isotopes, but they are components of gross alpha radiation, which has an MCL of 15 pCi/L.

During Q3 2021 (i.e., the most extensive sampling round presented in this report), very few groundwater samples contained detectable thorium-230 or thorium-232 and the horizontal and vertical distribution of these few detections appeared to be random. The maximum detected thorium-232 activity levels in alluvium and bedrock groundwater during 2021 were 0.09 pCi/L and 0.40 pCi/L, respectively. The maximum detected thorium-230 activity levels in alluvium and bedrock groundwater during 2021 were 0.91 pCi/L and 0.39 pCi/L, respectively. The sums of these maximum activities are well below the gross alpha radiation MCL. Based on the low activities and infrequent detections of thorium isotopes, future reports will not include maps or cross sections of thorium isotopes.

4.4.3 Nature and Extent of Organic Compounds of Potential Concern

VOCs and other organic compounds are known to be present in landfill leachate and gases, typically from disposal of household and commercial products (Kjeldsen, et al. 2002; Klett et al. 2005), as well as other industrial sources (e.g., the adjacent PM Resources site and the asphalt plant located on the landfill property). This section describes the nature and extent of those organic compounds identified as COPCs (in alphabetical order): benzene, *cis*-1,2-dichloroethene, 1,4-dioxane, 2-methylnaphthalene, THF, 1,2,4-trimethylbenzene, and vinyl chloride. Additional analysis of potential sources of organic COPCs is ongoing. An assessment of potential sources will be completed after the full groundwater monitoring well network is installed and sampled.

- Benzene (Figures 12a through 12c and 13a through 13c): though benzene can occur naturally, it is typically derived from anthropogenic sources such as fuels, petroleum products, and household products. During Q3 2021 (i.e., the most extensive sampling round presented in this report), benzene was detected in groundwater within many alluvium and bedrock wells in the southern half of the Site but was not detected in groundwater in the northern half of the Site and in the northern portion of the ISL, the Construction Debris Landfill, or Area 2. Benzene occurrences at concentrations above the MCL were only identified in bedrock along the east side of the South Quarry portion of the Bridgeton Landfill and in alluvium in the south/southeast and west margins of the ISL.
- *cis*-1,2-Dichloroethene (Figures 14a through 14c and 15a through 15c): this compound is typically a byproduct of biological degradation of trichloroethene, a common degreasing solvent that has historically been used in numerous commercial cleaning products, among other potential commercial and industrial uses. During Q3 2021 (the most extensive sampling round presented in this report), *cis*-1,2-dichloroethene was detected in groundwater almost solely in alluvium wells along the western Site boundary, but was not detected in the northern, central, and eastern portions of the Site. All detections of *cis*-1,2-dichloroethene were below the MCL of 70 µg/L.
- 1,4-dioxane (Figures 16a through 16c and 17a through 17c): this compound is commonly used in a wide variety of household products, among other potential commercial and industrial uses. During Q3 2021 (the only sampling round with lower detection limits[14] presented in this report), 1,4-dioxane was widespread in groundwater in both alluvium and bedrock wells across the Site, with the exception of the northeastern Site boundary in alluvium and the southeastern Site boundary in bedrock where this compound was minimally detected. During Q3, 1,4-dioxane was detected above the RSL of 0.46 µg/L in 87 of the 132 monitoring wells sampled.

[14] Prior analyses were performed with a detection limit of 100 µg/L.

- 2-methylnaphthalene (Figures 18a through 18c and 19a through 19c): this compound is used as a feedstock chemical and is present in materials including but not limited to tar and asphalt. During Q3 2021 (the most extensive sampling round presented in this report), 2-methylnaphthalene was only detected above the RSL of 3.6 µg/L in a single alluvium groundwater well along the western Site boundary. Due to the limited distribution of 2-methylnaphthalene at the Site, future reports will not include maps or cross sections of 2-methylnaphthalene.
- THF (Figures 22a, 22b, 23a, and 23b): this compound is used primarily as a solvent and as a feedstock chemical, among other potential commercial and industrial uses. During Q3 2021 (the most extensive sampling round presented in this report), THF was widely detected in groundwater in both alluvium and bedrock in the western and southern portions of the Site but was detected in one well located along the northern and eastern Site boundaries. This compound was also detected in bedrock groundwater in the southern portion of the Site and along the eastern Site boundary. During Q3, THF was detected at concentrations greater than the RSL of 340 µg/L in groundwater samples from 7 of the 120 monitoring wells sampled.
- 1,2,4-trimethylbenzene (Figures 24a through 24c and 25a through 25c): this compound is used as a gasoline additive, solvent, and in paint/lacquer thinners, among other uses. During Q3 2021 (the most extensive sampling round presented in this report), 1,2,4-trimethylbenzene was minimally detected in alluvium and bedrock groundwater in the southwestern portion of the Site. During Q3, 1,2,4-trimethylbenzene was detected at concentrations greater than the RSL of 5.6 µg/L in only two of the 120 monitoring wells sampled. Due to the limited distribution of 1,2,4-trimethylbenzene at the Site, future reports will not include maps or cross sections of 1,2,4-trimethylbenzene.
- Vinyl chloride (Figures 28a through 28c and 29a through 29c): this compound is a byproduct of biological degradation of dichloroethene monomers, including cis-1,2-dichloroethene, which is discussed above. During Q3 2021 (the most extensive sampling round presented in this report), vinyl chloride was generally co-located with cis-dichloroethene and was detected in groundwater almost solely in alluvium wells along the western Site boundary, but was not detected in the northern, central, and eastern portions of the Site. During Q3, vinyl chloride was detected at concentrations greater than the RSL of 0.019 µg/L in only 13 of the 120 monitoring wells sampled.

5. NEXT STEPS

RI/FS investigation activities are ongoing, following the schedule outlined in Figure 8-1 of the FSP. This Annual Report describes only those activities conducted during the reporting period.

Remaining scheduled investigative activities for OU-3 include the following:

- Completion of WATERLOO APS™ at off-Site locations APS-009, APS-010, APS-014, APS-015, APS-016, and APS-017.
- Completion of drilling, borehole geophysics, well construction, and well development at off-Site locations MW-402, MW-403, MW-406, MW-500, MW-501, MW-502, MW-503, MW-504, MW-600, MW-601, MW-602, MW-603, and MW-604.
- Installation of stilling wells at off-Site locations SG-500, SG-501, SG-502, and SG-503.
- Installation of piezometers at off-Site locations PZ-700, PZ-701, and PZ-704. Locations PZ-702 and PZ-703 are not currently proposed for installation, pending approval of Tech Memo 15, as described in Section 2.8.
- Installation of LCS sampling ports at locations that are currently not able to be sampled, if and where possible.
- Completion of one VI monitoring event at the Asphalt Plant Building.
- Completion of monthly gauging and quarterly monitoring events.
- Abandonment of select monitoring wells, pending approval of the *Revised Well Inventory Summary Report* and Addenda.
- Ongoing updates to and refinement of the CSM.

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TABLES

Table 1: Summary of WATERLOO APS™ Locations—Survey Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Location ID	Date Profile Completed	Northing (ft)	Easting (ft)	Ground Surface Elevation (ft amsl)	Survey Source
APS-001	21-12-20	1067224.319	834918.723	448.244	Weaver 14 January 2021
APS-002	18-12-20	1067690.223	834590.228	451.771	Weaver 14 January 2021
APS-003	16-12-20	1068247.657	834599.989	452.461	Weaver 14 January 2021
APS-004	09-12-20	1068687.105	834585.027	450.29	Weaver 14 January 2021
APS-004B	02-03-21	1068687.31	834578.88	451.04	Weaver 7-8 June 2021
APS-005	06-12-20	1069071.682	834541.311	451.215	Weaver 14 January 2021
APS-006	11-01-21	1069663.569	834339.521	443.521	Weaver 14 January 2021
APS-007	13-01-21	1070541.665	834234.11	443.041	Weaver 14 January 2021
APS-008	20-01-21	1070933.76	834754.06	445.35	Weaver 7-8 June 2021
APS-011	08-03-21	1070685.37	836186.11	451.36	Weaver 7-8 June 2021
APS-012	19-03-21	1070125.75	836427.9	440.18	Weaver 7-8 June 2021
APS-013	22-01-21	1066601.65	834529.11	450.05	Weaver 7-8 June 2021
APS-018	06-03-21	1072585.29	836539.24	441.77	Weaver 7-8 June 2021
APS-019	08-01-21	1069982.869	834495.229	445.554	Weaver 14 January 2021
APS-020	26-01-21	1068624.04	835983.34	461.74	Weaver 7-8 June 2021
APS-021	21-03-21	1068846.16	835721.05	458.99	Weaver 7-8 June 2021

Notes:
Survey datum is NAD83 State Plane Missouri East.
APS = Advanced Profiling System
ft = feet
amsl = above mean sea level

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-004B	APS-004B	APS-004B	APS-004B	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		105 - 105.1	110 - 110.1	115 - 115.1	118.5 - 118.6	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-02-2021	03-02-2021	03-02-2021	03-02-2021	01-08-2021	01-08-2021	01-09-2021	01-09-2021	01-09-2021	01-09-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**1.7**	**1.4**	**7.12**	**4.97**	**1.49**	**1.21**	**0.99**	**7.1**	**0.93**	**0.75**
Oxidation-Reduction Potential, Field	mV	**-68**	**-145**	**-211**	**-135**	**-72**	**-81**	**27**	**6**	**-108**	**-176**
pH, Field	SU	**6.31**	**6.38**	**7.18**	**6.47**	**6.41**	**6.43**	**6.44**	**6.93**	**6.35**	**6.31**
Specific Conductivity	uS/cm	**3,790**	**3,820**	**3,710**	**1,400**	**949**	**980**	**1,540**	**2,400**	**2,960**	**3,080**
Cumulative Volume Purged	ml	**900**	**1,000**	**1,000**	**700**	**800**	**1,000**	**1,300**	**600**	**1,100**	**900**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**1,170**	**1,120**	**1,150**	**1,060**	**363**	**388**	**574**	**688**	**766**	**925**
Bicarbonate Alkalinity as CaCO3	mg/L	**1,170**	**1,120**	**1,150**	**1,060**	**363**	**388**	**574**	**688**	**766**	**925**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0095 J**	< 0.050 U	< 0.050 U
Chloride	mg/L	**497**	**471**	**500**	**444**	**0.80**	**1.2**	**6.8**	**29.7**	**38.7**	**78.4**
Sulfate	mg/L	**0.40**	**0.56**	**0.45**	**0.91**	**97.2**	**88.9**	**215**	**753**	**738**	**459**
Metals, Dissolved											
Barium	ug/L	**1,560**	**1,400**	**1,550**	**1,660**	**74.5**	**155**	**106**	**216**	**204**	**242**
Calcium	ug/L	**295,000**	**308,000**	**311,000**	**317,000**	**142,000**	**145,000**	**201,000**	**344,000**	**354,000**	**315,000**
Iron	ug/L	**18,400**	**20,100**	**19,200**	**20,000**	**41.0 J**	**269**	**241**	**1,190**	**35,700**	**46,300**
Magnesium	ug/L	**76,600**	**78,800**	**77,900**	**83,100**	**27,600**	**27,700**	**47,300**	**109,000**	**117,000**	**106,000**
Manganese	ug/L	**465**	**536**	**518**	**537**	**40.5**	**136**	**1,350**	**3,610**	**4,590**	**1,210**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	**1.3**	**1.3**	**0.93 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	**0.38 J**	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-004B	APS-004B	APS-004B	APS-004B	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		105 - 105.1	110 - 110.1	115 - 115.1	118.5 - 118.6	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-02-2021	03-02-2021	03-02-2021	03-02-2021	01-08-2021	01-08-2021	01-09-2021	01-09-2021	01-09-2021	01-09-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**7.6**
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**4.7**	**15.5**	**12.0**	**4.7**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**13.3 J**	**11.5 J**	**12.6 J**	**9.1 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**5.9 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	**0.30 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	**0.34 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	**0.32 J**	**0.16 J**	**0.15 J**	< 1.0 U	**0.093 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	**0.24 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-004B	APS-004B	APS-004B	APS-004B	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		105 - 105.1	110 - 110.1	115 - 115.1	118.5 - 118.6	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-02-2021	03-02-2021	03-02-2021	03-02-2021	01-08-2021	01-08-2021	01-09-2021	01-09-2021	01-09-2021	01-09-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	**3.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	**0.30 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

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Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	100 - 100.1	105 - 105.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-09-2021	01-09-2021	01-09-2021	01-09-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.74**	**0.81**	**0.9**	**0.9**	**0.92**	**1.43**	**3.4**	**1.96**	**2.07**	**0.71**
Oxidation-Reduction Potential, Field	mV	**-203**	**-206**	**-201**	**-208**	**-185**	**-183**	**18**	**-64**	**-127**	**-170**
pH, Field	SU	**6.37**	**6.51**	**6.4**	**6.44**	**6.42**	**6.39**	**6.36**	**6.38**	**6.39**	**6.52**
Specific Conductivity	uS/cm	**3,490**	**3,240**	**3,550**	**3,160**	**2,510**	**2,470**	**2,200**	**3,100**	**2,830**	**2,860**
Cumulative Volume Purged	ml	**1,000**	**800**	**800**	**900**	**900**	**700**	**1,300**	**800**	**700**	**1,100**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**1,150**	**1,100**	**1,100**	**990**	**785**	**739**	**898**	**995**	**963**	**897**
Bicarbonate Alkalinity as CaCO3	mg/L	**1,150**	**1,100**	**1,100**	**990**	**785**	**739**	**898**	**995**	**963**	**897**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0072 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0070 J**
Chloride	mg/L	**292**	**134**	**376**	**300**	**165**	**165**	**302**	**318**	**242**	**224**
Sulfate	mg/L	**25.0**	**240**	**0.63**	**0.23 J**	**92.7**	**174**	**0.42**	**0.17 J**	**3.6**	**11.8**
Metals, Dissolved											
Barium	ug/L	**851**	**1,210**	**1,190**	**1,610**	**767**	**572**	**2,110**	**2,260**	**2,540**	**2,840**
Calcium	ug/L	**266,000**	**274,000**	**294,000**	**256,000**	**205,000**	**220,000**	**244,000**	**248,000**	**217,000**	**175,000**
Iron	ug/L	**38,700**	**26,200**	**21,700**	**17,100**	**13,200**	**13,800**	**11,400**	**13,000**	**15,300**	**15,200**
Magnesium	ug/L	**88,400**	**71,200**	**75,000**	**68,100**	**53,600**	**59,500**	**62,800**	**69,300**	**60,500**	**51,200**
Manganese	ug/L	**465**	**513**	**458**	**338**	**1,080**	**1,260**	**513**	**219**	**300**	**328**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.58 J**	**0.63 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	**56.8 J**	**42.1 J**	**201**	**179**	**112**	**52.2 J**	**196**	**307**	**264**	**198**
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	100 - 100.1	105 - 105.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-09-2021	01-09-2021	01-09-2021	01-09-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	**11.1**	**0.71 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.8**	**2.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**33.0**	**16.6 J**	**80.1**	**56.7**	**21.7**	**14.2 J**	**49.9**	**72.0**	**71.5**	**58.2**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	**0.63 J**	< 4.0 U	< 4.0 U	**0.30 J**	**3.2 J**	**3.9 J**	**0.27 J**	< 4.0 U	**1.0 J**	**1.8 J**
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.14 J**	**0.12 J**	**0.098 J**	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006	APS-006
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	100 - 100.1	105 - 105.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-09-2021	01-09-2021	01-09-2021	01-09-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021	01-10-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.90 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-10-2021	01-10-2021	01-10-2021	01-11-2021	01-11-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**1.13**	**0.81**	**0.89**	**1.09**	**1.05**	**1.37**	**0.82**	**1.39**	**0.65**	**0.74**
Oxidation-Reduction Potential, Field	mV	**-184**	**-189**	**-191**	**18**	**-111**	**33**	**17**	**-5**	**-18**	**-106**
pH, Field	SU	**6.46**	**6.49**	**6.52**	**6.26**	**6.2**	**6.33**	**6.37**	**6.64**	**6.41**	**6.57**
Specific Conductivity	uS/cm	**2,300**	**2,360**	**2,250**	**2,430**	**3,770**	**1,970**	**1,440**	**1,322**	**1,280**	**1,370**
Cumulative Volume Purged	ml	**700**	**1,100**	**800**	**1,100**	**900**	**800**	**1,100**	**1,000**	**800**	**800**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**800**	**753**	**706**	**869**	**621**	**619**	**608**	**487**	**446**	**495**
Bicarbonate Alkalinity as CaCO3	mg/L	**800**	**753**	**706**	**869**	**621**	**619**	**608**	**487**	**446**	**495**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	**3.1**	< 0.050 U	< 0.050 U	**0.0077 J**	**0.032 J**	**0.0067 J**	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**202**	**158**	**140**	**179**	**132**	**124**	**81.6**	**70.6**	**70.3**	**70.3**
Sulfate	mg/L	**20.4**	**39.2**	**81.4**	**170**	**1,220**	**217**	**55.0**	**37.6**	**34.6**	**32.2**
Metals, Dissolved											
Barium	ug/L	**2,310**	**2,000**	**1,490**	**259**	**114**	**316**	**324**	**283**	**449**	**512**
Calcium	ug/L	**164,000**	**162,000**	**154,000**	**294,000**	**614,000**	**278,000**	**209,000**	**158,000**	**110,000**	**120,000**
Iron	ug/L	**13,400**	**11,400**	**10,400**	**16,700**	**18,700**	**429**	**145**	**754**	**5,740**	**10,400**
Magnesium	ug/L	**48,200**	**45,300**	**43,600**	**72,000**	**70,500**	**52,100**	**35,800**	**35,000**	**32,900**	**39,000**
Manganese	ug/L	**375**	**595**	**691**	**1,930**	**2,850**	**35.9**	**225**	**328**	**532**	**748**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	**0.43 J**	**0.55 J**	**0.52 J**	**1.0 J**	**0.56 J**	< 1.0 U	**0.37 J**	**0.50 J**	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	**52.2 J**	**65.2 J,M1**	< 100 U	**66.7 J**	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-10-2021	01-10-2021	01-10-2021	01-11-2021	01-11-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1,M0	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	**1.0**
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.30 J**	**0.48 J**	**0.89 J**	**1.7**	**1.9**	< 1.0 U	**3.2**	**3.1**	**3.0**	**1.9**
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**27.5**	**21.2**	**15.8 J**	**21.6**	**6.4 J**	< 20.0 U	**0.48 J**	**1.2 J**	**0.71 J**	**0.59 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	**2.4 J**	**3.9 J**	**4.7**	**1.5 J**	**5.5**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**3.4**	**3.3**	**1.1**	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	**0.13 J**	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-006	APS-006	APS-006	APS-006	APS-006	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-10-2021	01-10-2021	01-10-2021	01-11-2021	01-11-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.41 J**	**1.9**	**3.3**	**2.9**	**1.3**
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	**0.82 J**	**1.2**	**0.85 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.25 J**	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	100 - 100.1	105 - 105.1	110 - 110.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-13-2021	01-13-2021	01-13-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.59**	**1.82**	**0.74**	**0.78**	**1.47**	**0.74**	**0.7**	**1.55**	**5.15**	**1.06**
Oxidation-Reduction Potential, Field	mV	**-148**	**-171**	**-179**	**-201**	**-211**	**-209**	**-208**	**-155**	**-154**	**-154**
pH, Field	SU	**6.69**	**6.7**	**6.83**	**6.8**	**6.87**	**6.74**	**6.72**	**6.43**	**6.45**	**6.5**
Specific Conductivity	uS/cm	**1,019**	**971**	**1,660**	**2,010**	**2,100**	**2,470**	**2,360**	**1,405**	**1,473**	**2,100**
Cumulative Volume Purged	ml	**900**	**700**	**900**	**900**	**900**	**800**	**1,000**	**600**	**800**	**1,100**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**311**	**290**	**439**	**533**	**575**	**428**	**749**	**640**	**670**	**768**
Bicarbonate Alkalinity as CaCO3	mg/L	**311**	**290**	**439**	**533**	**575**	**428**	**749**	**640**	**670**	**768**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	**0.015 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0081 J**
Chloride	mg/L	**83.8**	**99.8**	**228**	**274**	**265**	**388**	**147**	**113**	**118**	**112**
Sulfate	mg/L	**20.7**	**20.2**	**24.7**	**7.7**	**8.3**	**20.3**	**0.20 J**	**4.1**	**0.41**	**0.21 J**
Metals, Dissolved											
Barium	ug/L	**380**	**393**	**1,120**	**1,790**	**1,410**	**1,780**	**1,960**	**1,770**	**1,740**	**1,910**
Calcium	ug/L	**76,100**	**75,400**	**124,000**	**136,000**	**140,000**	**119,000**	**104,000**	**138,000**	**154,000**	**171,000**
Iron	ug/L	**7,450**	**5,890**	**7,970**	**9,350**	**10,200**	**11,300**	**12,900**	**12,600**	**11,900**	**13,300**
Magnesium	ug/L	**23,600**	**23,000**	**38,300**	**40,200**	**45,500**	**42,800**	**36,500**	**39,100**	**42,400**	**46,400**
Manganese	ug/L	**558**	**481**	**551**	**558**	**579**	**403**	**275**	**309**	**422**	**515**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	**0.27 J**	**0.33 J**
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	100 - 100.1	105 - 105.1	110 - 110.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-13-2021	01-13-2021	01-13-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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	**0.13 J**
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	**0.93 J**	**0.73 J**	**0.84 J**	**0.93 J**	**1.4**	**1.3**	**4.0**	**0.66 J**	**0.47 J**	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.42 J**	**0.58 J**	**1.4**	**1.0**	**0.27 J**	**0.29 J**	**0.18 J**	**0.14 J**	**0.16 J**	**0.25 J**
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	**0.58 J**	**2.0 J**	**2.5 J**	**0.87 J**	**6.1 J**	**2.9 J**	**3.4 J**	**5.7 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.73 J**	**2.2 J**	**2.1 J**	**2.3 J**
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	**0.091 J**	**0.11 J**
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007	APS-007
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	100 - 100.1	105 - 105.1	110 - 110.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-12-2021	01-13-2021	01-13-2021	01-13-2021
Analyte	Unit										
Trichloroethene	ug/L	**0.43 J**	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		75 - 75.1	80 - 80.1	85 - 85.1	90 - 90.1	95 - 95.1	16 - 16.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-18-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.89**	**0.84**	**1.15**	**1.07**	**4.5**	**1.29**	**0.9**	**1**	**0.9**	**1.28**
Oxidation-Reduction Potential, Field	mV	**5**	**-97**	**-130**	**-139**	**-149**	**-12**	**27**	**24**	**9**	**-4**
pH, Field	SU	**6.33**	**6.42**	**6.4**	**6.47**	**6.4**	**6.4**	**6.53**	**6.73**	**6.74**	**6.76**
Specific Conductivity	uS/cm	**1,800**	**1,464**	**1,487**	**1,398**	**1,445**	**1,398**	**1,028**	**941**	**1,038**	**969**
Cumulative Volume Purged	ml	**900**	**1,000**	**700**	**1,000**	**700**	**1,400**	**1,200**	**1,000**	**1,000**	**900**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**662**	**703**	**656**	**695**	**660**	**586**	**427**	**363**	**392**	**321**
Bicarbonate Alkalinity as CaCO3	mg/L	**662**	**703**	**656**	**695**	**660**	**586**	**427**	**363**	**392**	**321**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	**0.0064 J**	< 0.050 U	< 0.050 U	< 0.050 U	**0.024 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**129**	**120**	**112**	**108**	**117**	**43.6**	**24.7**	**42.0**	**50.4**	**68.5**
Sulfate	mg/L	**0.19 J**	**0.36**	**9.1**	**1.9**	**2.3**	**41.9**	**23.6**	**20.7**	**18.4**	**26.9**
Metals, Dissolved											
Barium	ug/L	**1,700**	**1,050**	**1,900**	**2,040**	**1,920**	**211**	**265**	**208**	**272**	**287**
Calcium	ug/L	**155,000**	**157,000**	**142,000**	**168,000**	**152,000**	**170,000**	**120,000**	**90,800**	**108,000**	**95,900**
Iron	ug/L	**13,100**	**14,200**	**13,600**	**16,100**	**13,200**	**192**	**116**	**147**	**218**	**2,940**
Magnesium	ug/L	**46,400**	**44,600**	**42,900**	**49,200**	**45,200**	**47,200**	**25,400**	**20,400**	**21,700**	**21,400**
Manganese	ug/L	**294**	**436**	**224**	**215**	**306**	**19.6**	**390**	**570**	**365**	**465**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		75 - 75.1	80 - 80.1	85 - 85.1	90 - 90.1	95 - 95.1	16 - 16.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-18-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	**1.4**	**0.52 J**	**0.61 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.12 J**	**0.11 J**	**0.14 J**	**0.16 J**	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**10.4 J**	**26.0**	**5.8 J**	**6.4 J**	**5.5 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	**0.22 J**	**0.18 J**	**0.16 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	**2.6 J**	**2.2 J**	**1.7 J**	**1.5 J**	**1.8 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	**0.072 J**	< 1.0 U	**0.073 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	**0.27 J**	**0.20 J**	**0.19 J**	**0.12 J**	**0.11 J**	**0.12 J**	< 1.0 U	**0.38 J**	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-007	APS-007	APS-007	APS-007	APS-007	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		75 - 75.1	80 - 80.1	85 - 85.1	90 - 90.1	95 - 95.1	16 - 16.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-13-2021	01-18-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	**0.30 J**	**0.24 J**	**0.23 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	**0.49 J**

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**1.11**	**0.89**	**0.97**	**1.73**	**1.54**	**1.45**	**1.22**	**1.53**	**1.1**	**1.18**
Oxidation-Reduction Potential, Field	mV	**-35**	**-96**	**-119**	**-130**	**-135**	**-132**	**-122**	**-136**	**-149**	**-157**
pH, Field	SU	**6.82**	**6.93**	**6.93**	**6.95**	**6.94**	**6.82**	**6.75**	**6.76**	**6.74**	**6.83**
Specific Conductivity	uS/cm	**884**	**976**	**860**	**903**	**911**	**743**	**843**	**884**	**1,031**	**1,038**
Cumulative Volume Purged	ml	**800**	**1,100**	**1,100**	**1,000**	**700**	**700**	**700**	**800**	**800**	**700**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**325**	**321**	**291**	**303**	**299**	**254**	**296**	**328**	**304**	**347**
Bicarbonate Alkalinity as CaCO3	mg/L	**325**	**321**	**291**	**303**	**299**	**254**	**296**	**328**	**304**	**347**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	**0.054**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**44.3**	**54.9**	**47.2**	**61.8**	**66.8**	**47.7**	**55.3**	**43.8**	**74.6**	**78.9**
Sulfate	mg/L	**21.2**	**37.7**	**34.2**	**24.4**	**24.0**	**10.7**	**5.1**	**14.1**	**18.2**	**21.3**
Metals, Dissolved											
Barium	ug/L	**286**	**298**	**324**	**375**	**366**	**411**	**432**	**506**	**653**	**664**
Calcium	ug/L	**83,100**	**86,400**	**88,200**	**94,600**	**100,000**	**64,100**	**60,600**	**53,300**	**51,700**	**51,600**
Iron	ug/L	**3,610**	**4,370**	**3,140**	**3,550**	**3,640**	**4,390**	**7,620**	**6,260**	**6,570**	**5,880**
Magnesium	ug/L	**18,800**	**21,600**	**21,400**	**22,100**	**24,100**	**17,500**	**21,700**	**23,000**	**22,000**	**18,400**
Manganese	ug/L	**450**	**358**	**322**	**265**	**340**	**238**	**184**	**196**	**186**	**194**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.8**	**4.6**	**3.0**	**0.89 J**	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.23 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	**0.096 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2,L2	< 100 U,N2,L2	< 100 U,N2,L2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	**0.38 J**	< 2.0 U	< 2.0 U	**0.23 J**	< 2.0 U	< 2.0 U	**0.22 J**	**0.19 J**	**0.18 J**	**0.16 J**
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	**0.21 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	**0.10 J**	**0.10 J**	**0.098 J**	**0.085 J**
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	**0.30 J**	< 1.0 U	< 1.0 U	**0.16 J**	< 1.0 U	**0.12 J**	**0.13 J**	**0.11 J**	**0.11 J**	**0.096 J**
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008	APS-008
Sample Depth (ft BGS)		40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021	01-19-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	**0.59 J**	**0.56 J**	< 3.0 U	**0.35 J**	< 3.0 U	< 3.0 U	**0.32 J**	**0.29 J**	**0.28 J**	**0.25 J**

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		100 - 100.1	105 - 105.1	110 - 110.1	90 - 90.1	95 - 95.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N
Sample Date		01-20-2021	01-20-2021	01-20-2021	01-20-2021	01-20-2021	03-06-2021	03-06-2021	03-07-2021	03-07-2021
Analyte	Unit									
Field Water Quality Parameters										
Dissolved Oxygen, Field	ppm	**1.31**	**1.6**	**2.65**	**1.29**	**1.2**	**1.25**	**0.86**	**1.83**	**1.61**
Oxidation-Reduction Potential, Field	mV	**-113**	**-149**	**-162**	**10**	**-25**	**-91**	**-85**	**18**	**-12**
pH, Field	SU	**6.63**	**6.61**	**6.67**	**6.82**	**6.67**	**6.23**	**6.22**	**6.16**	**6.15**
Specific Conductivity	uS/cm	**1,269**	**1,371**	**1,406**	**812**	**1,261**	**956**	**974**	**876**	**1,106**
Cumulative Volume Purged	ml	**700**	**700**	**900**	**1,000**	**800**	**800**	**900**	**800**	**900**
General Chemistry Parameters, Dissolved										
Alkalinity, Total as CaCO3	mg/L	**404**	**380**	**417**	**327**	**366**	**675**	**675**	**514**	**614**
Bicarbonate Alkalinity as CaCO3	mg/L	**404**	**380**	**417**	**327**	**366**	**675**	**675**	**514**	**614**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	**0.17**	< 0.050 U	**8.9**	**1.5**	**0.78**	< 0.050 U
Chloride	mg/L	**86.6**	**115**	**107**	**61.7**	**84.6**	**54.6**	**86.0**	**41.6**	**92.3**
Sulfate	mg/L	**45.0**	**40.0**	**30.4**	**39.0**	**36.0**	**55.1**	**121**	**35.9**	**152**
Metals, Dissolved										
Barium	ug/L	**1,150**	**1,190**	**827**	**847**	**1,060**	**222**	**299**	**362**	**485**
Calcium	ug/L	**106,000**	**109,000**	**116,000**	**50,800**	**81,000**	**196,000**	**226,000**	**157,000**	**234,000**
Iron	ug/L	**15,200**	**15,900**	**11,300**	**4,920**	**13,500**	**200**	**201**	**166**	**11,700**
Magnesium	ug/L	**31,800**	**36,000**	**33,300**	**19,700**	**26,400**	**39,300**	**49,000**	**34,700**	**48,700**
Manganese	ug/L	**384**	**329**	**346**	**220**	**290**	**43.0**	**266**	**123**	**679**
Volatile Organic Compounds, Total										
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.20 J**	**0.53 J**	**0.47 J**
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	**0.55 J**	**0.72 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	**0.20 J**	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		100 - 100.1	105 - 105.1	110 - 110.1	90 - 90.1	95 - 95.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N
Sample Date		01-20-2021	01-20-2021	01-20-2021	01-20-2021	01-20-2021	03-06-2021	03-06-2021	03-07-2021	03-07-2021
Analyte	Unit									
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	**0.67 J**	**0.66 J**	**0.66 J**	**2.1**	**1.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.21 J**	**0.22 J**	**0.14 J**	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1
Ethyl ether	ug/L	**0.86 J**	**0.37 J**	**0.32 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1
Isobutyl alcohol	ug/L	< 100 U,N2,L2	< 100 U,N2,L2	< 100 U,N2,L2	< 100 U,N2,L2	< 100 U,N2,L2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	**0.21 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.16 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	**1.0 J**	**1.0 J**	**1.1 J**	< 4.0 U	**0.30 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	**0.11 J**	**0.089 J**	< 1.0 U	< 1.0 U	**0.099 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	**0.13 J**	**0.11 J**	< 1.0 U	**0.20 J**	**0.14 J**	**0.10 J**	< 1.0 U	**0.23 J**	**0.26 J**
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-008	APS-008	APS-008	APS-008	APS-008	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		100 - 100.1	105 - 105.1	110 - 110.1	90 - 90.1	95 - 95.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1
Sample Type		N	N	N	N	N	N	N	N	N
Sample Date		01-20-2021	01-20-2021	01-20-2021	01-20-2021	01-20-2021	03-06-2021	03-06-2021	03-07-2021	03-07-2021
Analyte	Unit									
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	**0.32 J**	**0.21 J**	< 3.0 U	< 3.0 U	**0.26 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	100 - 100.1	105 - 105.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-08-2021	03-08-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**2.88**	**0.97**	**1.26**	**1.25**	**1.51**	**1.54**	**1.16**	**1.2**	**1.17**	**5.39**
Oxidation-Reduction Potential, Field	mV	**-112**	**-135**	**-165**	**-169**	**-155**	**-148**	**-151**	**-156**	**-121**	**-97**
pH, Field	SU	**6.5**	**6.66**	**6.64**	**6.65**	**6.76**	**6.75**	**6.84**	**6.83**	**6.91**	**6.9**
Specific Conductivity	uS/cm	**1,004**	**1,019**	**894**	**833**	**844**	**814**	**711**	**669**	**707**	**652**
Cumulative Volume Purged	ml	**500**	**1,000**	**900**	**600**	**800**	**600**	**800**	**700**	**800**	**800**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**434**	**470**	**480**	**379**	**348**	**330**	**215**	**203**	**199**	**202**
Bicarbonate Alkalinity as CaCO3	mg/L	**434**	**470**	**480**	**379**	**348**	**330**	**215**	**203**	**199**	**202**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0081 J**	< 0.050 U	**0.0093 J**
Chloride	mg/L	**75.3**	**87.7**	**99.9**	**91.5**	**89.8**	**82.6**	**63.0**	**60.6**	**64.4**	**64.4**
Sulfate	mg/L	**34.2**	**37.6**	**43.3**	**38.1**	**27.4**	**28.8**	**13.2**	**11.3**	**18.7**	**10.5**
Metals, Dissolved											
Barium	ug/L	**232**	**247**	**310**	**279**	**259**	**256**	**173**	**185**	**215**	**213**
Calcium	ug/L	**135,000**	**141,000**	**154,000**	**134,000**	**128,000**	**110,000**	**70,400**	**72,500**	**66,800**	**66,100**
Iron	ug/L	**6,880**	**6,040**	**5,340**	**3,420**	**2,440**	**4,210**	**3,100**	**3,010**	**2,280**	**1,450**
Magnesium	ug/L	**29,400**	**29,500**	**32,100**	**25,200**	**19,000**	**21,500**	**13,700**	**12,700**	**12,900**	**14,600**
Manganese	ug/L	**363**	**296**	**434**	**456**	**381**	**454**	**205**	**188**	**166**	**141**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	**1.2**	< 1.0 U,M1	**0.59 J**	**0.69 J**	**0.59 J**	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	**0.78 J,M1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U,M1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U
Acrolein	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	100 - 100.1	105 - 105.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-08-2021	03-08-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U,M1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2,M1	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U,M1	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2,M1	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U,M1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U,M1	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2,M1	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U,M1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011	APS-011
Sample Depth (ft BGS)		45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	100 - 100.1	105 - 105.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-07-2021	03-08-2021	03-08-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U,M1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-011	APS-011	APS-011	APS-011	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		110 - 110.1	85 - 85.1	90 - 90.1	95 - 95.1	10 - 10.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	33 - 33.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-08-2021	03-08-2021	03-08-2021	03-08-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**4.29**	**1.53**	**1.19**	**1.12**	**1.38**	**0.99**	**0.88**	**1**	**0.95**	**0.83**
Oxidation-Reduction Potential, Field	mV	**-56**	**-72**	**-88**	**-108**	**57**	**-69**	**-109**	**-133**	**-129**	**-137**
pH, Field	SU	**6.87**	**6.88**	**6.92**	**6.88**	**6.36**	**6.56**	**6.57**	**6.71**	**6.55**	**6.58**
Specific Conductivity	uS/cm	**730**	**715**	**698**	**681**	**1,346**	**1,650**	**2,220**	**1,242**	**1,146**	**1,049**
Cumulative Volume Purged	ml	**800**	**800**	**900**	**900**	**700**	**900**	**900**	**700**	**800**	**800**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**212**	**215**	**210**	**206**	**564**	**467**	**364**	**515**	**583**	**559**
Bicarbonate Alkalinity as CaCO3	mg/L	**212**	**215**	**210**	**206**	**564**	**467**	**364**	**515**	**583**	**559**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0075 J**	< 0.050 U	**0.0074 J**	< 0.050 U	**0.0065 J**	**0.0084 J**
Chloride	mg/L	**67.8**	**62.0**	**59.9**	**60.8**	**49.3**	**114**	**302**	**44.0**	**124**	**115**
Sulfate	mg/L	**13.9**	**13.5**	**10.4**	**10.8**	**60.2**	**94.4**	**115**	**142**	**145**	**154**
Metals, Dissolved											
Barium	ug/L	**194**	**174**	**198**	**200**	**441**	**409**	**478**	**298**	**504**	**574**
Calcium	ug/L	**70,300**	**57,200**	**75,400**	**64,300**	**180,000**	**101,000**	**174,000**	**167,000**	**244,000**	**247,000**
Iron	ug/L	**3,110**	**2,400**	**2,510**	**2,460**	**15,900**	**20,200**	**36,700**	**3,610**	**13,100**	**17,800**
Magnesium	ug/L	**16,300**	**12,900**	**9,710**	**13,000**	**26,100**	**13,500**	**28,100**	**39,600**	**51,000**	**48,800**
Manganese	ug/L	**148**	**176**	**191**	**162**	**981**	**964**	**1,370**	**670**	**825**	**772**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	**0.46 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 5.0 U	**0.27 J**	**0.14 J**	**0.12 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-011	APS-011	APS-011	APS-011	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		110 - 110.1	85 - 85.1	90 - 90.1	95 - 95.1	10 - 10.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	33 - 33.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-08-2021	03-08-2021	03-08-2021	03-08-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 5.0 U	**0.15 J**	**0.22 J**	**0.24 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	**0.20 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.58 J**	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	**0.24 J**	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-011	APS-011	APS-011	APS-011	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		110 - 110.1	85 - 85.1	90 - 90.1	95 - 95.1	10 - 10.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	33 - 33.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-08-2021	03-08-2021	03-08-2021	03-08-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021	03-16-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	**0.32 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		39 - 39.1	43.4 - 43.5	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-16-2021	03-16-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-19-2021	03-19-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.86**	**1.04**	**1.15**	**1.1**	**1.09**	**1.01**	**1.05**	**1**	**1.32**	**1.14**
Oxidation-Reduction Potential, Field	mV	**-158**	**-174**	**-44**	**-85**	**-127**	**-143**	**-148**	**-159**	**-12**	**-119**
pH, Field	SU	**6.7**	**6.72**	**6.81**	**6.74**	**6.77**	**6.77**	**6.76**	**6.7**	**6.76**	**6.8**
Specific Conductivity	uS/cm	**993**	**1,012**	**652**	**698**	**714**	**696**	**649**	**664**	**570**	**634**
Cumulative Volume Purged	ml	**800**	**800**	**1,000**	**800**	**800**	**900**	**900**	**900**	**900**	**900**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**469**	**463**	**450**	**527**	**557**	**546**	**468**	**452**	**452**	**438**
Bicarbonate Alkalinity as CaCO3	mg/L	**469**	**463**	**450**	**527**	**557**	**546**	**468**	**452**	**452**	**438**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	**0.0065 J**	< 0.050 U	< 0.050 U	< 0.050 U	**0.092**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**62.4**	**111**	**28.0**	**44.0**	**39.4**	**39.1**	**52.0**	**81.4**	**60.1**	**105**
Sulfate	mg/L	**99.9**	**69.6**	**59.4**	**85.4**	**85.4**	**87.2**	**55.2**	**49.5**	**66.1**	**59.7**
Metals, Dissolved											
Barium	ug/L	**507**	**574**	**440**	**554**	**586**	**442**	**406**	**390**	**518**	**382**
Calcium	ug/L	**176,000**	**181,000**	**154,000**	**186,000**	**195,000**	**189,000**	**160,000**	**165,000**	**161,000**	**172,000**
Iron	ug/L	**20,300**	**27,200**	**6,810**	**9,860**	**8,780**	**8,760**	**7,700**	**7,740**	**10,700**	**13,200**
Magnesium	ug/L	**31,600**	**33,400**	**37,900**	**44,400**	**45,000**	**45,700**	**37,500**	**38,200**	**39,800**	**43,600**
Manganese	ug/L	**677**	**1,090**	**433**	**534**	**474**	**442**	**341**	**573**	**356**	**360**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		39 - 39.1	43.4 - 43.5	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-16-2021	03-16-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-19-2021	03-19-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012	APS-012
Sample Depth (ft BGS)		39 - 39.1	43.4 - 43.5	50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-16-2021	03-16-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-17-2021	03-19-2021	03-19-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-012	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013
Sample Depth (ft BGS)		90 - 90.1	19 - 19.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-19-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**1.12**	**1.22**	**0.98**	**0.89**	**0.93**	**0.66**	**1.87**	**0.85**	**2.19**	**2.03**
Oxidation-Reduction Potential, Field	mV	**-153**	**30**	**4**	**-10**	**-23**	**-32**	**-54**	**-50**	**-58**	**-58**
pH, Field	SU	**6.72**	**6.36**	**6.54**	**6.76**	**6.9**	**6.98**	**7.21**	**6.99**	**6.96**	**6.92**
Specific Conductivity	uS/cm	**677**	**543**	**691**	**608**	**644**	**720**	**791**	**882**	**761**	**826**
Cumulative Volume Purged	ml	**800**	**1,100**	**900**	**900**	**800**	**1,100**	**900**	**900**	**700**	**700**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**413**	**167**	**234**	**250**	**250**	**224**	**264**	**342**	**304**	**327**
Bicarbonate Alkalinity as CaCO3	mg/L	**413**	**167**	**234**	**250**	**250**	**224**	**264**	**342**	**304**	**327**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	**0.036 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**177**	**14.3**	**16.6**	**10.9**	**16.3**	**31.4**	**31.6**	**15.2**	**15.7**	**16.2**
Sulfate	mg/L	**39.4**	**65.5**	**75.3**	**30.4**	**34.9**	**60.2**	**58.7**	**48.2**	**40.0**	**49.9**
Metals, Dissolved											
Barium	ug/L	**493**	**114**	**154**	**176**	**220**	**249**	**238**	**297**	**200**	**154**
Calcium	ug/L	**177,000**	**62,700**	**80,400**	**69,500**	**78,600**	**84,700**	**93,300**	**102,000**	**91,800**	**105,000**
Iron	ug/L	**14,900**	**103**	**171**	**125**	**135**	**117**	**168**	**240**	**324**	**216**
Magnesium	ug/L	**45,600**	**16,100**	**21,500**	**19,500**	**21,300**	**20,700**	**23,400**	**28,900**	**25,200**	**26,600**
Manganese	ug/L	**427**	**2,240**	**849**	**221**	**108**	**126**	**144**	**250**	**281**	**228**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-012	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013
Sample Depth (ft BGS)		90 - 90.1	19 - 19.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-19-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	**0.17 J**	**0.23 J**	**0.13 J**	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-012	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013	APS-013
Sample Depth (ft BGS)		90 - 90.1	19 - 19.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1	50 - 50.1	55 - 55.1	60 - 60.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-19-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021	01-21-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-013	APS-013	APS-013	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		65 - 65.1	70 - 70.1	75 - 75.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-21-2021	01-22-2021	01-22-2021	03-03-2021	03-03-2021	03-03-2021	03-03-2021	03-04-2021	03-04-2021	03-04-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	1.02	1.16	1.25	1.36	0.97	0.8	0.66	1.02	0.94	0.77
Oxidation-Reduction Potential, Field	mV	-60	0	-45	25	-8	-59	-119	-17	-57	-120
pH, Field	SU	6.83	6.52	6.25	6.18	6.42	6.46	6.53	6.56	6.65	6.58
Specific Conductivity	uS/cm	832	699	1,140	1,338	1,015	1,068	1,023	869	788	870
Cumulative Volume Purged	ml	900	900	900	1,000	900	900	900	1,000	900	1,000
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	320	389	616	500	313	334	321	315	255	280
Bicarbonate Alkalinity as CaCO3	mg/L	320	389	616	500	313	334	321	315	255	280
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	20.0	15.2	219	334	101	134	118	130	80.4	146
Sulfate	mg/L	52.6	49.0	116	65.1	32.8	27.4	36.0	31.7	24.7	34.9
Metals, Dissolved											
Barium	ug/L	123	156	324	386	219	494	411	550	340	586
Calcium	ug/L	118,000	123,000	294,000	300,000	140,000	156,000	133,000	134,000	99,800	135,000
Iron	ug/L	432	4,940	32,800	270	293	5,330	5,470	4,680	5,280	8,580
Magnesium	ug/L	25,100	28,500	74,500	46,800	21,100	26,200	29,900	29,800	23,800	33,000
Manganese	ug/L	286	501	983	25.5	118	450	486	445	306	384
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U,L2	< 100 U,L2	< 100 U,L2	< 100 U,L2	< 100 U,M1	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1,M0	< 100 U,L1	< 100 U,L1
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1,M0	< 20.0 U,L1	< 20.0 U,L1

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-013	APS-013	APS-013	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		65 - 65.1	70 - 70.1	75 - 75.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-21-2021	01-22-2021	01-22-2021	03-03-2021	03-03-2021	03-03-2021	03-03-2021	03-04-2021	03-04-2021	03-04-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1,M0	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1
Carbon disulfide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.45 J**	**0.19 J**	**0.47 J**	< 5.0 U	**0.24 J**	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2,M1	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	**0.36 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-013	APS-013	APS-013	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		65 - 65.1	70 - 70.1	75 - 75.1	15 - 15.1	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	40 - 40.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-21-2021	01-22-2021	01-22-2021	03-03-2021	03-03-2021	03-03-2021	03-03-2021	03-04-2021	03-04-2021	03-04-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

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Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	100 - 100.1	105 - 105.1	110 - 110.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-05-2021	03-05-2021	03-05-2021	03-05-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.88**	**0.91**	**0.87**	**1.01**	**0.83**	**0.76**	**0.89**	**0.98**	**0.95**	**1.2**
Oxidation-Reduction Potential, Field	mV	**-161**	**-173**	**-183**	**-188**	**-184**	**-192**	**-181**	**-188**	**-184**	**-37**
pH, Field	SU	**6.69**	**6.73**	**6.71**	**6.68**	**6.63**	**6.66**	**6.71**	**6.73**	**6.69**	**6.73**
Specific Conductivity	uS/cm	**763**	**763**	**779**	**697**	**726**	**730**	**689**	**688**	**680**	**728**
Cumulative Volume Purged	ml	**800**	**900**	**1,000**	**800**	**900**	**1,000**	**800**	**800**	**800**	**1,000**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**250**	**247**	**241**	**233**	**226**	**229**	**239**	**266**	**273**	**216**
Bicarbonate Alkalinity as CaCO3	mg/L	**250**	**247**	**241**	**233**	**226**	**229**	**239**	**266**	**273**	**216**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**79.5**	**65.4**	**77.9**	**89.6**	**101**	**98.4**	**69.7**	**24.2**	**28.7**	**86.7**
Sulfate	mg/L	**24.1**	**18.9**	**18.4**	**20.7**	**22.7**	**21.9**	**24.9**	**24.6**	**28.0**	**21.8**
Metals, Dissolved											
Barium	ug/L	**389**	**393**	**457**	**555**	**485**	**444**	**486**	**423**	**387**	**435**
Calcium	ug/L	**93,200**	**83,400**	**88,100**	**101,000**	**102,000**	**99,100**	**94,800**	**88,900**	**95,200**	**88,200**
Iron	ug/L	**5,680**	**5,150**	**7,010**	**6,730**	**6,080**	**6,280**	**6,070**	**4,640**	**5,240**	**4,380**
Magnesium	ug/L	**23,000**	**22,000**	**23,600**	**27,100**	**27,400**	**26,600**	**25,200**	**20,200**	**20,800**	**23,600**
Manganese	ug/L	**244**	**221**	**257**	**352**	**314**	**263**	**229**	**172**	**175**	**240**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1
Acrolein	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	100 - 100.1	105 - 105.1	110 - 110.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-05-2021	03-05-2021	03-05-2021	03-05-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1
Carbon disulfide	ug/L	< 5.0 U	**0.21 J**	**0.17 J**	**0.16 J**	**0.15 J**	< 5.0 U	**0.30 J**	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,M1
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018	APS-018
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	65 - 65.1	70 - 70.1	75 - 75.1	100 - 100.1	105 - 105.1	110 - 110.1	80 - 80.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-04-2021	03-05-2021	03-05-2021	03-05-2021	03-05-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-018	APS-018	APS-018	APS-018	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	113.5 - 113.6	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	39 - 39.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-05-2021	03-05-2021	03-05-2021	03-06-2021	01-05-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.98**	**0.88**	**0.86**	**1.26**	**1.09**	**1.65**	**1.18**	**0.81**	**1.03**	**1.11**
Oxidation-Reduction Potential, Field	mV	**-92**	**-144**	**-176**	**-39**	**66**	**50**	**34**	**21**	**-19**	**-100**
pH, Field	SU	**6.72**	**6.7**	**6.76**	**6.59**	**6.24**	**6.28**	**6.34**	**6.34**	**6.4**	**6.55**
Specific Conductivity	uS/cm	**833**	**776**	**701**	**699**	**1,255**	**1,358**	**1,420**	**1,610**	**1,433**	**1,201**
Cumulative Volume Purged	ml	**1,000**	**800**	**800**	**1,200**	**1,000**	**1,000**	**1,000**	**1,000**	**1,100**	**700**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**222**	**221**	**222**	**303**	**542**	**560**	**538**	**597**	**558**	**460**
Bicarbonate Alkalinity as CaCO3	mg/L	**222**	**221**	**222**	**303**	**542**	**560**	**538**	**597**	**558**	**460**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	**0.0092 J**	**1.1**	**2.4**	**4.7**	**3.7**	**0.016 J**	**0.011 J**
Chloride	mg/L	**88.8**	**81.0**	**83.1**	**45.0**	**1.4**	**3.5**	**3.4**	**4.0**	**3.4**	**8.4**
Sulfate	mg/L	**23.0**	**25.0**	**23.0**	**48.1**	**66.0**	**114**	**154**	**205**	**207**	**111**
Metals, Dissolved											
Barium	ug/L	**418**	**431**	**477**	**397**	**299**	**254**	**259**	**449**	**593**	**440**
Calcium	ug/L	**88,600**	**89,500**	**93,400**	**110,000**	**187,000**	**199,000**	**199,000**	**240,000**	**219,000**	**167,000**
Iron	ug/L	**5,950**	**6,130**	**6,150**	**4,160**	**314**	**232**	**237**	**111**	**9,430**	**15,800**
Magnesium	ug/L	**23,900**	**24,200**	**25,300**	**23,600**	**43,200**	**50,800**	**51,700**	**56,300**	**52,100**	**38,600**
Manganese	ug/L	**226**	**230**	**274**	**221**	**751**	**268**	**448**	**1,010**	**1,460**	**976**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	**0.81 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U,L1	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	**6.5 J,L1**	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-018	APS-018	APS-018	APS-018	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	113.5 - 113.6	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	39 - 39.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-05-2021	03-05-2021	03-05-2021	03-06-2021	01-05-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021
Analyte	Unit										
Acrylonitrile	ug/L	**1.1 J**	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	ug/L	**0.77 J**	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-018	APS-018	APS-018	APS-018	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		85 - 85.1	90 - 90.1	95 - 95.1	113.5 - 113.6	20 - 20.1	25 - 25.1	30 - 30.1	35 - 35.1	39 - 39.1	45 - 45.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		03-05-2021	03-05-2021	03-05-2021	03-06-2021	01-05-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-06-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	64 - 64.1	100 - 100.1	105 - 105.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**1.06**	**0.94**	**1.35**	**1.25**	**1.03**	**1.02**	**1.14**	**1.03**	**0.93**	**1.33**
Oxidation-Reduction Potential, Field	mV	**-162**	**-174**	**-180**	**-175**	**-191**	**-194**	**1**	**-160**	**-178**	**-176**
pH, Field	SU	**6.44**	**6.44**	**6.4**	**6.37**	**6.44**	**6.46**	**6.31**	**6.46**	**6.4**	**6.4**
Specific Conductivity	uS/cm	**1,189**	**1,389**	**1,590**	**2,000**	**2,450**	**2,110**	**2,440**	**2,150**	**2,270**	**1,850**
Cumulative Volume Purged	ml	**800**	**1,000**	**900**	**800**	**1,000**	**1,000**	**900**	**700**	**800**	**700**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**453**	**469**	**526**	**628**	**727**	**676**	**774**	**708**	**755**	**671**
Bicarbonate Alkalinity as CaCO3	mg/L	**453**	**469**	**526**	**628**	**727**	**676**	**774**	**708**	**755**	**671**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0087 J**	**0.0053 J**	**0.021 J**	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**8.5**	**11.2**	**16.7**	**74.2**	**128**	**127**	**109**	**144**	**160**	**144**
Sulfate	mg/L	**114**	**159**	**215**	**231**	**208**	**61.0**	**203**	**36.1**	**23.5**	**7.4**
Metals, Dissolved											
Barium	ug/L	**604**	**717**	**862**	**1,350**	**595**	**634**	**1,510**	**1,150**	**1,450**	**895**
Calcium	ug/L	**152,000**	**158,000**	**175,000**	**169,000**	**188,000**	**165,000**	**163,000**	**158,000**	**157,000**	**164,000**
Iron	ug/L	**16,600**	**19,300**	**22,600**	**19,100**	**18,900**	**15,600**	**23,000**	**17,600**	**15,900**	**13,700**
Magnesium	ug/L	**41,700**	**47,400**	**58,400**	**57,800**	**62,300**	**48,300**	**61,700**	**56,200**	**57,400**	**53,200**
Manganese	ug/L	**1,580**	**1,250**	**903**	**631**	**482**	**530**	**532**	**329**	**403**	**375**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	**0.47 J**	**0.56 J**	**0.48 J**	**0.54 J**	**0.62 J**	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	**57.8 J**	**54.8 J**	**73.1 J**	< 100 U	**79.0 J**	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	64 - 64.1	100 - 100.1	105 - 105.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021
Analyte	Unit										
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.14 J**	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**5.9**	**1.4 J**	**0.82 J**	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.44 J**	**0.85 J**	**0.95 J**	**0.35 J**	**0.61 J**	**0.62 J**	**0.21 J**	**0.42 J**	**0.44 J**	**0.43 J**
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	**0.26 J,N2**	< 20.0 U,N2	**0.16 J,N2**	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	**1.2 J**	**2.5 J**	**24.0**	**28.7**	**13.7 J**	**49.0**	**25.6**	**28.7**	**14.7 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**1.9 J**	**4.2**	**1.2 J**	**6.6**	**5.7**	**7.6**
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.23 J**	**0.24 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019	APS-019
Sample Depth (ft BGS)		50 - 50.1	55 - 55.1	60 - 60.1	64 - 64.1	100 - 100.1	105 - 105.1	70 - 70.1	75 - 75.1	80 - 80.1	85 - 85.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-06-2021	01-06-2021	01-06-2021	01-06-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021	01-07-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-020	APS-020	APS-020	APS-020	APS-020	APS-020
Sample Depth (ft BGS)		90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	42.8 - 42.9	47.8 - 47.9	57 - 57.1	62.8 - 62.9	68 - 68.1	73 - 73.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-07-2021	01-07-2021	01-08-2021	01-08-2021	01-24-2021	01-24-2021	01-24-2021	01-24-2021	01-25-2021	01-25-2021
Analyte	Unit										
Field Water Quality Parameters											
Dissolved Oxygen, Field	ppm	**0.9**	**1.01**	**1.14**	**1.22**	**4**	**2.54**	**3.05**	**2.05**	**3**	**2.45**
Oxidation-Reduction Potential, Field	mV	**-180**	**-193**	**-109**	**-152**	**11**	**-8**	**24**	**-109**	**3**	**-2**
pH, Field	SU	**6.48**	**6.47**	**6.44**	**6.31**	**7.1**	**7.04**	**6.33**	**6.46**	**6.93**	**6.78**
Specific Conductivity	uS/cm	**2,050**	**1,960**	**2,120**	**3,820**	**88**	**251**	**1,017**	**1,122**	**106**	**386**
Cumulative Volume Purged	ml	**1,000**	**800**	**1,300**	**900**	**620**	**640**	**620**	**640**	**540**	**650**
General Chemistry Parameters, Dissolved											
Alkalinity, Total as CaCO3	mg/L	**682**	**676**	**691**	**602**	**529**	**735**	**1,000**	**1,010**	**725**	**925**
Bicarbonate Alkalinity as CaCO3	mg/L	**682**	**676**	**691**	**602**	**529**	**735**	**1,000**	**1,010**	**725**	**925**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	**0.0062 J**	**0.0053 J**	**0.0070 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**148**	**134**	**136**	**121**	**34.9**	**47.6**	**150**	**149**	**45.4**	**228**
Sulfate	mg/L	**2.6**	**10.9**	**39.0**	**1,340**	**2.7**	**2.1**	**0.14 J**	**0.35**	**1.1**	**0.47**
Metals, Dissolved											
Barium	ug/L	**1,090**	**547**	**458**	**146**	**368**	**897**	**1,870**	**1,420**	**849**	**1,100**
Calcium	ug/L	**172,000**	**164,000**	**190,000**	**606,000**	**122,000**	**211,000**	**249,000**	**294,000**	**157,000**	**242,000**
Iron	ug/L	**15,000**	**14,600**	**13,700**	**21,100**	**65.4**	**2,240**	**33,500**	**26,600**	**9,160**	**12,100**
Magnesium	ug/L	**52,500**	**53,700**	**56,600**	**69,200**	**27,600**	**55,900**	**78,900**	**74,700**	**37,600**	**63,900**
Manganese	ug/L	**436**	**521**	**1,180**	**3,320**	**389**	**2,120**	**1,680**	**1,350**	**809**	**931**
Volatile Organic Compounds, Total											
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	**0.30 J**	**0.39 J**	**0.55 J**	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 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
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 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
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-020	APS-020	APS-020	APS-020	APS-020	APS-020
Sample Depth (ft BGS)		90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	42.8 - 42.9	47.8 - 47.9	57 - 57.1	62.8 - 62.9	68 - 68.1	73 - 73.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-07-2021	01-07-2021	01-08-2021	01-08-2021	01-24-2021	01-24-2021	01-24-2021	01-24-2021	01-25-2021	01-25-2021
Analyte	Unit										
Acrylonitrile	ug/L	**0.80 J**	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.7**	**0.89 J**	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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
Carbon disulfide	ug/L	< 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
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**10.8**	**3.4**	**0.76 J**	**0.59 J**
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	**0.49 J**	**0.46 J**	**0.78 J**	**0.86 J**	< 1.0 U	**0.12 J**	**0.14 J**	**0.29 J**	**0.18 J**	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	**0.18 J,N2**	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**10.0 J**	**14.2 J**	**12.4 J**	**4.2 J**	**2.2 J**	**6.3 J**	**10.5 J**	**9.6 J**	**0.81 J**	**6.2 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2,M1	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 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
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	**9.0**	**5.9**	**4.4**	**5.4**	**0.21 J**	**0.57 J**	**0.74 J**	**0.71 J**	**0.077 J**	**0.32 J**
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 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
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 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
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	**0.12 J**	**0.14 J**	**0.42 J**	**0.12 J**	< 1.0 U	< 1.0 U	**0.087 J**	< 1.0 U	**0.13 J**	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
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Sample Location		APS-019	APS-019	APS-019	APS-019	APS-020	APS-020	APS-020	APS-020	APS-020	APS-020
Sample Depth (ft BGS)		90 - 90.1	95 - 95.1	110 - 110.1	115 - 115.1	42.8 - 42.9	47.8 - 47.9	57 - 57.1	62.8 - 62.9	68 - 68.1	73 - 73.1
Sample Type		N	N	N	N	N	N	N	N	N	N
Sample Date		01-07-2021	01-07-2021	01-08-2021	01-08-2021	01-24-2021	01-24-2021	01-24-2021	01-24-2021	01-25-2021	01-25-2021
Analyte	Unit										
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-020	APS-020	APS-020	APS-021	APS-021	APS-021	APS-021	APS-021
Sample Depth (ft BGS)		78 - 78.1	83 - 83.1	88 - 88.1	38.1 - 38.2	48.1 - 48.2	58.1 - 58.2	68.1 - 68.2	73.1 - 73.2
Sample Type		N	N	N	N	N	N	N	N
Sample Date		01-26-2021	01-26-2021	01-26-2021	03-20-2021	03-20-2021	03-20-2021	03-21-2021	03-21-2021
Analyte	Unit								
Field Water Quality Parameters									
Dissolved Oxygen, Field	ppm	**3.56**	**1.88**	**2.17**	**1.69**	**0.49**	**1.25**	**2.21**	**3.44**
Oxidation-Reduction Potential, Field	mV	**29**	**47**	**-157**	**26**	**-38**	**-166**	**2**	**-71**
pH, Field	SU	**7.02**	**6.52**	**6.79**	**6.65**	**6.53**	**6.71**	**6.96**	**7.01**
Specific Conductivity	uS/cm	**177**	**2,490**	**1,810**	**471**	**762**	**876**	**394**	**540**
Cumulative Volume Purged	ml	**600**	**630**	**640**	**520**	**540**	**550**	**550**	**570**
General Chemistry Parameters, Dissolved									
Alkalinity, Total as CaCO3	mg/L	**982**	**1,250**	**1,200**	**719**	**998**	**946**	**1,110**	**930**
Bicarbonate Alkalinity as CaCO3	mg/L	**982**	**1,250**	**1,200**	**719**	**998**	**946**	**1,110**	**930**
Carbonate Alkalinity as CaCO3	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	mg/L	**490**	**677**	**841**	**58.6**	**166**	**203**	**265**	**252**
Sulfate	mg/L	**1.1**	**0.42**	**0.28**	**3.7**	**0.11 J**	**0.12 J**	**0.13 J**	**0.32**
Metals, Dissolved									
Barium	ug/L	**1,310**	**2,180**	**2,230**	**567**	**1,260**	**1,570**	**2,100**	**1,790**
Calcium	ug/L	**221,000**	**265,000**	**283,000**	**229,000**	**301,000**	**312,000**	**299,000**	**234,000**
Iron	ug/L	**18,600**	**27,800**	**20,200**	**4,990**	**44,500**	**28,800**	**27,600**	**17,800**
Magnesium	ug/L	**54,300**	**67,400**	**75,000**	**54,100**	**75,000**	**78,400**	**72,900**	**57,700**
Manganese	ug/L	**900**	**557**	**473**	**1,180**	**3,560**	**442**	**401**	**460**
Volatile Organic Compounds, Total									
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	**0.098 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 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-Dichloroethane	ug/L	< 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-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 5.0 U,L1	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	**92.9 J**	**104**	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 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-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-020	APS-020	APS-020	APS-021	APS-021	APS-021	APS-021	APS-021
Sample Depth (ft BGS)		78 - 78.1	83 - 83.1	88 - 88.1	38.1 - 38.2	48.1 - 48.2	58.1 - 58.2	68.1 - 68.2	73.1 - 73.2
Sample Type		N	N	N	N	N	N	N	N
Sample Date		01-26-2021	01-26-2021	01-26-2021	03-20-2021	03-20-2021	03-20-2021	03-21-2021	03-21-2021
Analyte	Unit								
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	**0.78 J**	**4.4**	**1.3**	< 1.0 U	**3.9**	**2.1**	**9.4**	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	ug/L	< 5.0 U	**0.40 J**	**0.22 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	**1.3**	**9.5**	**3.1**	**1.3**	**11.5**	**29.6**	**125**	**8.9**
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	**0.19 J,N2**	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	**4.5 J**	**17.6 J**	**14.2 J**	**2.0 J**	**12.0 J**	**11.8 J**	**13.1 J**	**4.6 J**
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	**0.21 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	**0.74 J**	< 4.0 U	< 4.0 U	< 4.0 U	**0.33 J**	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1
Toluene	ug/L	**0.18 J**	**0.26 J**	**0.21 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U

Notes and definition are presented on Page 51

Table 2a: WATERLOO APS™ Groundwater Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS-020	APS-020	APS-020	APS-021	APS-021	APS-021	APS-021	APS-021
Sample Depth (ft BGS)		78 - 78.1	83 - 83.1	88 - 88.1	38.1 - 38.2	48.1 - 48.2	58.1 - 58.2	68.1 - 68.2	73.1 - 73.2
Sample Type		N	N	N	N	N	N	N	N
Sample Date		01-26-2021	01-26-2021	01-26-2021	03-20-2021	03-20-2021	03-20-2021	03-21-2021	03-21-2021
Analyte	Unit								
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	**0.48 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes:
ft BGS = feet below ground surface
ppm = parts per million
mV = millivolts
SU = standard units
uS/cm = microSiemens per centimeter
ml = milliliter
ug/L = micrograms per liter
***Bold** = Detected*

Qualifier Definition
J = Estimated concentration.
L1 = Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2 = Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0 = Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Field Water Quality Parameters									
				Analyte	Dissolved Oxygen		ORP		pH		Specific Conductivity		Cumulative Volume Purged	
				Unit	ppm	ppm	mV	mV	SU	pH units	uS/cm	uS/cm	ml	ml
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-001	N	12-19-2020	15 - 15.1		1.32		-88		6.01		1,374		600	
	N	12-19-2020	19 - 19.1		1.44		-150		6.05		1,510		700	
	N	12-19-2020	25 - 25.1		1.51		-146		6		1,720		800	
	N	12-19-2020	30 - 30.1		1.74		-140		6.12		1,660		700	
	N	12-20-2020	35 - 35.1		2.98		19		6.7		270		600	
	N	12-20-2020	40 - 40.1		1.46		28		5.91		1,590		900	
	N	12-20-2020	45 - 45.1		0.98		-91		6.1		1,770		900	
	N	12-20-2020	50 - 50.1		1.12		-120		6.17		1,860		700	
	N	12-20-2020	55 - 55.1		0.97		-158		6.14		1,960		800	
	N	12-20-2020	60 - 60.1		1.03		-156		6.09		2,170		900	
	N	12-20-2020	65 - 65.1		1.12		-144		5.96		2,520		900	
MW-302	N	05-17-2021		68 - 78		0		-83.9		6.29		4,727		
	N	08-23-2021		68 - 78		1.37		-90.3		6.51		4,030		
APS-001	N	12-21-2020	70 - 70.1		6.78		-85		6.22		3,370		900	
	N	12-21-2020	75 - 75.1		2.95		-96		5.82		5,610		900	
	N	12-21-2020	80 - 80.1		1.62		-130		5.9		6,540		1,000	
	N	12-21-2020	85 - 85.1		1.47		-148		5.96		6,880		800	
	N	12-21-2020	87.1 - 87.2		5		-155		6.23		2,940		600	
APS-002	N	12-17-2020	25 - 25.1		1.08		-57		6.3		1,960		1,000	
	N	12-17-2020	30 - 30.1		0.88		-187		6.42		2,190		1,000	
	N	12-17-2020	33 - 33.1		0.89		-205		6.51		1,990		1,000	
	N	12-17-2020	40 - 40.1		0.92		-192		6.41		2,240		1,000	
	N	12-17-2020	45 - 45.1		1.03		-196		6.4		2,310		900	
	N	12-17-2020	50 - 50.1		0.92		-198		6.35		2,400		800	
	N	12-17-2020	55 - 55.1		1.01		-199		6.44		2,300		1,200	
	N	12-17-2020	60 - 60.1		1.09		-196		6.4		2,270		800	
	N	12-17-2020	65 - 65.1		1.49		-185		6.37		2,150		800	
MW-303-P1	N	05-14-2021		68 - 78		5.06 X		-108.5		7.29		1,758		
	N	08-09-2021		68 - 78		5.26 X		-87.7		8.48		1,650		
APS-002	N	12-18-2020	70 - 70.1		1.14		-144		6.43		2,370		1,300	
	N	12-18-2020	75 - 75.1		1.92		-193		6.47		2,160		700	
	N	12-18-2020	80 - 80.1		1.71		-192		6.47		2,180		900	
	N	12-18-2020	81 - 81.1		2.29		-196		6.42		2,000		1,000	
MW-303-P2	N	05-14-2021		93 - 103		5.87 X		-60.2		6.76		3,828		
	N	08-09-2021		93 - 103		5.06 X		-26.9		6.41		3,437		
APS-003	N	12-09-2020	23.1 - 23.2		0.84		-178		6.33		3,690		1,400	
	N	12-09-2020	30 - 30.1		0.48		-203		6.5		2,980		1,100	
	N	12-09-2020	35.2 - 35.3		2.98		-190		6.45		2,770		1,000	
	N	12-14-2020	40 - 40.1		0.93		-90		6.09		2,550		1,700	
	N	12-14-2020	45 - 45.1		1.08		-151		6.26		2,480		900	
	N	12-14-2020	50 - 50.1		1.14		-165		6.35		2,600		900	
	N	12-14-2020	55 - 55.1		1.21		-175		6.41		2,570		800	
	N	12-14-2020	60 - 60.1		1.23		-180		6.41		2,690		1,000	
	N	12-14-2020	65 - 65.1		2.13		-187		6.53		2,750		1,500	
	N	12-14-2020	70 - 70.1		1.31		-177		6.44		2,810		900	
	N	12-15-2020	75 - 75.1		1.18		-68		6.4		2,360		1,000	
	N	12-15-2020	80 - 80.1		1.31		-160		6.41		2,310		1,000	
	N	12-15-2020	85 - 85.1		1.41		-174		6.4		2,380		800	
	N	12-15-2020	90 - 90.1		1.32		-165		6.36		2,270		800	
	N	12-15-2020	95 - 95.1		3.67		-170		6.35		2,350		800	
	N	12-15-2020	100 - 100.1		3.09		-157		6.42		2,270		900	
	N	12-15-2020	105 - 105.1		1.57		-160		6.44		2,350		900	
MW-304-P1	N	05-24-2021		106 - 116		2.48 X		-48.9		7.20		3,120		
	FD	05-24-2021		106 - 116										
	N	08-04-2021		106 - 116		6.25 X		-115.2		7.21		2,940		
APS-003	N	12-16-2020	113 - 113.1		1.82		22		6.46		2,380		500	
	N	12-16-2020	117 - 117.1		1.34		-100		6.45		2,980		1,000	
	N	12-16-2020	121 - 121.1		1.18		-168		6.53		3,450		1,000	
	N	12-16-2020	125 - 125.1		1.32		-170		6.45		3,780		1,000	
MW-304-P2	N	05-24-2021		126 - 136		2.30 X		-17.8		7.12		1,989		
	N	08-04-2021		126 - 136		6.51 X		-91.5		6.47		1,630		
MW-304-P3	N	05-26-2021		221 - 231		4.74 X		-93.9		7.61		1,929		
	N	08-04-2021		221 - 231		7.63 X		-173.6		7.85		1,540		
	FD	08-04-2021		221 - 231										

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
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					Field Water Quality Parameters									
				Analyte	Dissolved Oxygen		ORP		pH		Specific Conductivity		Cumulative Volume Purged	
				Unit	ppm	ppm	mV	mV	SU	pH units	uS/cm	uS/cm	ml	ml
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-004	N	12-06-2020	20 - 20.1		0.76		-210		6.86		3,980		1,500	
	N	12-06-2020	25 - 25.1		1.61		-186		6.71		4,220		700	
MW-306-P1	N	05-13-2021		25 - 35		3.99 X		-96.1		7.38		2,689		
	N	08-16-2021		25 - 35		6.85 X		-106.8		6.71		2,543		
APS-004	N	12-06-2020	30 - 30.1		0.75		-187		6.67		4,510		1,000	
	N	12-06-2020	35 - 35.1		0.75		-197		6.64		4,100		1,000	
	N	12-06-2020	40 - 40.1		0.99		-183		6.62		3,850		900	
	N	12-07-2020	45 - 45.1		1.65		1		6.67		1,850		800	
	N	12-07-2020	50 - 50.1		1.15		-177		6.52		3,060		1,200	
	N	12-07-2020	55 - 55.1		1.82		0		6.84		1,520		100	
	N	12-07-2020	60 - 60.1		3.1		0		6.89		1,088		100	
	N	12-07-2020	65 - 65.1		1.88		-152		6.46		2,430		700	
	N	12-08-2020	70 - 70.1		3.18		5		6.89		657		500	
	N	12-08-2020	75 - 75.1		1.68		-105		6.5		2,550		600	
	N	12-08-2020	80 - 80.1		1.88		-146		6.46		2,820		600	
MW-306-P2	N	05-13-2021		80 - 90		3.66 X		-98		7.04		2,901		
	N	08-16-2021		80 - 90		6.11 X		-161.4		6.79		2,722		
	FD	08-16-2021		80 - 90										
APS-004	N	12-08-2020	85 - 85.1		3.16		-126		6.43		1,451		500	
	N	12-08-2020	90 - 90.1		2.41		-107		6.52		2,270		500	
	N	12-09-2020	95 - 95.1		2.5		26		6.6		1,720		550	
	N	12-09-2020	100 - 100.1		2.5		-61		6.48		2,420		500	
MW-306-P3	N	05-13-2021		110 - 120		3.1 X		-65.1		7.06		2,944		
	N	08-16-2021		110 - 120		6.22 X		-205.6		6.89		3,008		
	FD	08-16-2021		110 - 120										
APS-005	N	12-01-2020	23.9 - 24		1.15		-158		6.27		1,421		800	
	N	12-01-2020	29 - 29.1		1.16		-140		6.12		2,570		600	
	N	12-03-2020	34 - 34.1		1.35		-48		6.23		2,210		600	
	N	12-03-2020	39 - 39.1		0.87		-199		6.44		3,600		1,000	
	N	12-03-2020	44 - 44.1		0.81		-200		6.45		3,680		1,000	
MW-404-P1	N	08-18-2021		48 - 58		6.72 X		-123.6		7.07		2,461		
APS-005	N	12-03-2020	49.1 - 49.2		0.83		-196		6.46		3,720		1,000	
	N	12-03-2020	54.1 - 54.2		0.82		-195		6.46		3,410		1,000	
	N	12-04-2020	58.9 - 59		1.05		-198		6.51		3,340		800	
	N	12-04-2020	64 - 64.1		0.76		-210		6.56		3,420		800	
	N	12-04-2020	69 - 69.1		1.03		-196		6.48		3,360		800	
MW-404-P2	N	08-18-2021		73 - 83		7.25 X		-85		6.82		2,200		
APS-005	N	12-04-2020	73.9 - 74		1.03		-191		6.52		3,410		800	
	N	12-04-2020	79 - 79.1		1.59		-188		6.46		3,430		700	
	N	12-05-2020	83.9 - 84		1.38		-117		6.55		1,930		1,000	
	N	12-05-2020	89 - 89.1		1.18		-189		6.49		3,150		1,200	
	N	12-05-2020	94 - 94.1		0.69		-203		6.58		2,860		1,400	
	N	12-05-2020	99 - 99.1		2.39		-166		6.55		2,860		1,000	
MW-404-P3	N	08-18-2021		103 - 113		5.55 X		-122.1		6.99		2,620		
APS-005	N	12-05-2020	104 - 104.1		1.36		-180		6.59		2,640		1,000	
	N	12-05-2020	109 - 109.1		4.72		-152		6.56		2,840		900	
	N	12-06-2020	114.5 - 114.6		1.04		-128		6.62		2,470		1,500	
APS-006	N	01-08-2021	15 - 15.1		1.49		-72		6.41		949		800	
	N	01-08-2021	20 - 20.1		1.21		-81		6.43		980		1,000	
	N	01-09-2021	25 - 25.1		0.99		27		6.44		1,540		1,300	
	N	01-09-2021	30 - 30.1		7.1		6		6.93		2,400		600	
MW-405-P1	N	05-11-2021		30 - 40		3.81 X		-116.3		6.91		2,289		
	N	08-11-2021		30 - 40		6.65 X		-124.2		6.69		2,290		
APS-006	N	01-09-2021	35 - 35.1		0.93		-108		6.35		2,960		1,100	
	N	01-09-2021	40 - 40.1		0.75		-176		6.31		3,080		900	
	N	01-09-2021	45 - 45.1		0.74		-203		6.37		3,490		1,000	
	N	01-09-2021	50 - 50.1		0.81		-206		6.51		3,240		800	
	N	01-09-2021	55 - 55.1		0.9		-201		6.4		3,550		800	
	N	01-09-2021	60 - 60.1		0.9		-208		6.44		3,160		900	
	N	01-10-2021	65 - 65.1		3.4		18		6.36		2,200		1,300	
	N	01-10-2021	70 - 70.1		1.96		-64		6.38		3,100		800	
MW-405-P2	N	05-11-2021		70 - 80		5.48 X		-64.4		6.81		2,674		
	FD	05-11-2021		70 - 80										
	N	08-11-2021		70 - 80		6.45 X		-162.4		6.83		2,338		
APS-006	N	01-10-2021	75 - 75.1		2.07		-127		6.39		2,830		700	
	N	01-10-2021	80 - 80.1		0.71		-170		6.52		2,860		1,100	
	N	01-10-2021	85 - 85.1		1.13		-184		6.46		2,300		700	
	N	01-10-2021	90 - 90.1		0.81		-189		6.49		2,360		1,100	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Field Water Quality Parameters									
				Analyte	Dissolved Oxygen		ORP		pH		Specific Conductivity		Cumulative Volume Purged	
				Unit	ppm	ppm	mV	mV	SU	pH units	uS/cm	uS/cm	ml	ml
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
MW-405-P3	N	05-11-2021		90 - 100		5.2 X		-56.7		6.95		2,129		
	N	08-11-2021		90 - 100		4.67 X		-92.5		6.71		2,156		
APS-006	N	01-10-2021	95 - 95.1		0.89		-191		6.52		2,250		800	
	N	01-10-2021	100 - 100.1		0.92		-185		6.42		2,510		900	
	N	01-10-2021	105 - 105.1		1.43		-183		6.39		2,470		700	
	N	01-11-2021	110 - 110.1		1.09		18		6.26		2,430		1,100	
	N	01-11-2021	115 - 115.1		1.05		-111		6.2		3,770		900	
APS-007	N	01-12-2021	15 - 15.1		1.37		33		6.33		1,970		800	
	N	01-12-2021	20 - 20.1		0.82		17		6.37		1,440		1,100	
MW-400-P1	N	05-12-2021		20 - 30		7.58 X		-30.3		7.86		1,564		
	N	08-10-2021		20 - 30		5.01 X		-142.3		9.48		1,133		
APS-007	N	01-12-2021	25 - 25.1		1.39		-5		6.64		1,322		1,000	
	N	01-12-2021	30 - 30.1		0.65		-18		6.41		1,280		800	
	N	01-12-2021	35 - 35.1		0.74		-106		6.57		1,370		800	
	N	01-12-2021	40 - 40.1		0.59		-148		6.69		1,019		900	
	N	01-12-2021	45 - 45.1		1.82		-171		6.7		971		700	
	N	01-12-2021	50 - 50.1		0.74		-179		6.83		1,660		900	
	N	01-12-2021	55 - 55.1		0.78		-201		6.8		2,010		900	
MW-400-P2	N	05-12-2021		55 - 65		1.71 X		-96.1		7.25		1,797		
	N	08-10-2021		55 - 65		4.9 X		-127.7		9.26		1,766		
APS-007	N	01-12-2021	60 - 60.1		1.47		-211		6.87		2,100		900	
	N	01-12-2021	65 - 65.1		0.74		-209		6.74		2,470		800	
	N	01-12-2021	70 - 70.1		0.7		-208		6.72		2,360		1,000	
	N	01-13-2021	75 - 75.1		0.89		5		6.33		1,800		900	
	N	01-13-2021	80 - 80.1		0.84		-97		6.42		1,464		1,000	
	N	01-13-2021	85 - 85.1		1.15		-130		6.4		1,487		700	
	N	01-13-2021	90 - 90.1		1.07		-139		6.47		1,398		1,000	
MW-400-P3	N	05-12-2021		90 - 100		4.47 X		-48.9		7.14		1,764		
	N	08-10-2021		90 - 100		4.42 X		-91.9		8.36		1,691		
APS-007	N	01-13-2021	95 - 95.1		4.5		-149		6.4		1,445		700	
	N	01-13-2021	100 - 100.1		1.55		-155		6.43		1,405		600	
	N	01-13-2021	105 - 105.1		5.15		-154		6.45		1,473		800	
	N	01-13-2021	110 - 110.1		1.06		-154		6.5		2,100		1,100	
MW-400-P4	N	05-12-2021		145 - 155		1.76 X		-99		7.26		1,333		
	N	05-14-2021		145 - 155		5.74 X		-41.4		7.17		1,103		
	N	08-10-2021		145 - 155		3.49 X		-154.7		9.68		969		
MW-400-P5	N	05-12-2021		195 - 205		7.82 X		19.2		7.52		1,570		
	N	08-10-2021		195 - 205		6.23 X		-101.9		9.65		1,641		
APS-008	N	01-18-2021	16 - 16.1		1.29		-12		6.4		1,398		1,400	
	N	01-19-2021	20 - 20.1		0.9		27		6.53		1,028		1,200	
	N	01-19-2021	25 - 25.1		1		24		6.73		941		1,000	
	N	01-19-2021	30 - 30.1		0.9		9		6.74		1,038		1,000	
MW-401-P1	N	05-07-2021		32 - 42		6.67 X		-39.6		8		1,129		
	N	08-06-2021		32 - 42		6.08 X		-118		7.6		881		
APS-008	N	01-19-2021	35 - 35.1		1.28		-4		6.76		969		900	
	N	01-19-2021	40 - 40.1		1.11		-35		6.82		884		800	
	N	01-19-2021	45 - 45.1		0.89		-96		6.93		976		1,100	
	N	01-19-2021	50 - 50.1		0.97		-119		6.93		860		1,100	
	N	01-19-2021	55 - 55.1		1.73		-130		6.95		903		1,000	
	N	01-19-2021	60 - 60.1		1.54		-135		6.94		911		700	
MW-401-P2	N	05-07-2021		62 - 72		7.55 X		125.8		7.64		1,050		
	N	08-06-2021		62 - 72		6.7 X		-188.4		7.61		904		
APS-008	N	01-19-2021	65 - 65.1		1.45		-132		6.82		743		700	
	N	01-19-2021	70 - 70.1		1.22		-122		6.75		843		700	
	N	01-19-2021	75 - 75.1		1.53		-136		6.76		884		800	
	N	01-19-2021	80 - 80.1		1.1		-149		6.74		1,031		800	
	N	01-19-2021	85 - 85.1		1.18		-157		6.83		1,038		700	
	N	01-20-2021	90 - 90.1		1.29		10		6.82		812		1,000	
MW-401-P3	N	05-07-2021		92 - 102		5.22 X		-16.2		7.06		1,281		
	N	08-06-2021		92 - 102		7.42 X		-81.4		7.1		1,160		
	FD	08-06-2021		92 - 102										
APS-008	N	01-20-2021	95 - 95.1		1.2		-25		6.67		1,261		800	
	N	01-20-2021	100 - 100.1		1.31		-113		6.63		1,269		700	
	N	01-20-2021	105 - 105.1		1.6		-149		6.61		1,371		700	
	N	01-20-2021	110 - 110.1		2.65		-162		6.67		1,406		900	

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
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					Field Water Quality Parameters									
				Analyte	Dissolved Oxygen		ORP		pH		Specific Conductivity		Cumulative Volume Purged	
				Unit	ppm	ppm	mV	mV	SU	pH units	uS/cm	uS/cm	ml	ml
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-012	N	03-16-2021	10 - 10.1		1.38		57		6.36		1,346		700	
	N	03-16-2021	15 - 15.1		0.99		-69		6.56		1,650		900	
	N	03-16-2021	20 - 20.1		0.88		-109		6.57		2,220		900	
	N	03-16-2021	25 - 25.1		1		-133		6.71		1,242		700	
	N	03-16-2021	30 - 30.1		0.95		-129		6.55		1,146		800	
	N	03-16-2021	33 - 33.1		0.83		-137		6.58		1,049		800	
	N	03-16-2021	39 - 39.1		0.86		-158		6.7		993		800	
	N	03-16-2021	43.4 - 43.5		1.04		-174		6.72		1,012		800	
	N	03-17-2021	50 - 50.1		1.15		-44		6.81		652		1,000	
MW-213-P1	N	08-19-2021		50 - 60		7.1 X		-109.2		7.13		1,044		
APS-012	N	03-17-2021	55 - 55.1		1.1		-85		6.74		698		800	
	N	03-17-2021	60 - 60.1		1.09		-127		6.77		714		800	
	N	03-17-2021	65 - 65.1		1.01		-143		6.77		696		900	
	N	03-17-2021	70 - 70.1		1.05		-148		6.76		649		900	
	N	03-17-2021	75 - 75.1		1		-159		6.7		664		900	
MW-213-P2	N	08-19-2021		75 - 85		7.53 X		134.2		6.67		1,122		
APS-012	N	03-19-2021	80 - 80.1		1.32		-12		6.76		570		900	
	N	03-19-2021	85 - 85.1		1.14		-119		6.8		634		900	
	N	03-19-2021	90 - 90.1		1.12		-153		6.72		677		800	
MW-505-P1	N	05-25-2021		15 - 25		5.53 X		74.0		8.15		473		
	N	08-05-2021		15 - 25		5.26 X		-54.6		8.56		484.1		
APS-013	N	01-21-2021	19 - 19.1		1.22		30		6.36		543		1,100	
	N	01-21-2021	25 - 25.1		0.98		4		6.54		691		900	
	N	01-21-2021	30 - 30.1		0.89		-10		6.76		608		900	
	N	01-21-2021	35 - 35.1		0.93		-23		6.9		644		800	
	N	01-21-2021	40 - 40.1		0.66		-32		6.98		720		1,100	
MW-505-P2	N	05-25-2021		40 - 50		4.20 X		33.2		8.43		511		
	N	08-05-2021		40 - 50		5.83 X		-118.9		8.24		643		
APS-013	N	01-21-2021	45 - 45.1		1.87		-54		7.21		791		900	
	N	01-21-2021	50 - 50.1		0.85		-50		6.99		882		900	
	N	01-21-2021	55 - 55.1		2.19		-58		6.96		761		700	
	N	01-21-2021	60 - 60.1		2.03		-58		6.92		826		700	
	N	01-21-2021	65 - 65.1		1.02		-60		6.83		832		900	
MW-505-P3	N	05-25-2021		65 - 75		4.51 X		58.2		8.04		530		
	N	08-05-2021		65 - 75		6.29 X		-112.3		7.9		646		
APS-013	N	01-22-2021	70 - 70.1		1.16		0		6.52		699		900	
	N	01-22-2021	75 - 75.1		1.25		-45		6.25		1,140		900	
APS-019	N	01-05-2021	20 - 20.1		1.09		66		6.24		1,255		1,000	
	N	01-06-2021	25 - 25.1		1.65		50		6.28		1,358		1,000	
	N	01-06-2021	30 - 30.1		1.18		34		6.34		1,420		1,000	
	N	01-06-2021	35 - 35.1		0.81		21		6.34		1,610		1,000	
	N	01-06-2021	39 - 39.1		1.03		-19		6.4		1,433		1,100	
	N	01-06-2021	45 - 45.1		1.11		-100		6.55		1,201		700	
	N	01-06-2021	50 - 50.1		1.06		-162		6.44		1,189		800	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		6.34 X		-276.2		7.31		1,543		
APS-019	N	01-06-2021	55 - 55.1		0.94		-174		6.44		1,389		1,000	
	N	01-06-2021	60 - 60.1		1.35		-180		6.4		1,590		900	
	N	01-06-2021	64 - 64.1		1.25		-175		6.37		2,000		800	
	N	01-07-2021	70 - 70.1		1.14		1		6.31		2,440		900	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		6.07 X		-127.7		6.95		2,020		
APS-019	N	01-07-2021	75 - 75.1		1.03		-160		6.46		2,150		700	
	N	01-07-2021	80 - 80.1		0.93		-178		6.4		2,270		800	
	N	01-07-2021	85 - 85.1		1.33		-176		6.4		1,850		700	
	N	01-07-2021	90 - 90.1		0.9		-180		6.48		2,050		1,000	
	N	01-07-2021	95 - 95.1		1.01		-193		6.47		1,960		800	
	N	01-07-2021	100 - 100.1		1.03		-191		6.44		2,450		1,000	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		7.2 X		-102.4		6.86		1,950		
APS-019	N	01-07-2021	105 - 105.1		1.02		-194		6.46		2,110		1,000	
	N	01-08-2021	110 - 110.1		1.14		-109		6.44		2,120		1,300	
	N	01-08-2021	115 - 115.1		1.22		-152		6.31		3,820		900	
MW-118	N	05-19-2021		38 - 48		0		-114		7.05		1,886		
	FD	05-19-2021		38 - 48										
	N	08-19-2021		38 - 48		1.42		-108.4		6.78		1,788		
APS-021	N	03-20-2021	38.1 - 38.2		1.69		26		6.65		471		520	
	N	03-20-2021	48.1 - 48.2		0.49		-38		6.53		762		540	
	N	03-20-2021	58.1 - 58.2		1.25		-166		6.71		876		550	
	N	03-21-2021	68.1 - 68.2		2.21		2		6.96		394		550	
	N	03-21-2021	73.1 - 73.2		3.44		-71		7.01		540		570	

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					General Chemistry Parameters, Dissolved						General Chemistry Parameters, Dissolved					
				Analyte	Alkalinity, Total as CaCO3		Bicarbonate Alkalinity as CaCO3		Carbonate Alkalinity as CaCO3		Nitrate as N		Chloride		Sulfate	
				Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)												
APS-001	N	12-19-2020	15 - 15.1		**572**		**572**		< 2.0 U		< 0.050 U		**19.8**		**1.1**	
	N	12-19-2020	19 - 19.1		**593**		**593**		< 2.0 U		< 0.050 U		**41.3**		**0.24 J**	
	N	12-19-2020	25 - 25.1		**764**		**764**		< 2.0 U		**0.44**		**28.4**		**2.9**	
	N	12-19-2020	30 - 30.1		**864**		**864**		< 2.0 U		< 0.050 U		**17.9**		< 0.25 U	
	N	12-20-2020	35 - 35.1		**753**		**753**		< 2.0 U		< 0.050 U		**13.0**		**2.8**	
	N	12-20-2020	40 - 40.1		**793**		**793**		< 2.0 U		< 0.050 U		**21.4**		**0.71**	
	N	12-20-2020	45 - 45.1		**830**		**830**		< 2.0 U		< 0.050 U		**18.5**		**8.3**	
	N	12-20-2020	50 - 50.1		**814**		**814**		< 2.0 U		< 0.050 U		**20.5**		**14.0**	
	N	12-20-2020	55 - 55.1		**948**		**948**		< 2.0 U		< 0.050 U		**21.1**		**5.0**	
	N	12-20-2020	60 - 60.1		**942**		**942**		< 2.0 U		< 0.050 U		**77.1**		**23.9**	
	N	12-20-2020	65 - 65.1		**933**		**933**		< 2.0 U		< 0.050 U		**186**		**3.7**	
MW-302	N	05-17-2021		68 - 78		**1,140**		**1,140**		< 2.0 U		< 0.050 U		**261**		**0.12 J**
	N	08-23-2021		68 - 78		**1,110**		**1,110**		< 2.0 U		< 0.050 U		**155**		**46.0**
APS-001	N	12-21-2020	70 - 70.1		**1,010**		**1,010**		< 2.0 U		< 0.050 U		**378**		**0.23 J**	
	N	12-21-2020	75 - 75.1		**1,020**		**1,020**		< 2.0 U		< 0.050 U		**1,070**		**0.17 J**	
	N	12-21-2020	80 - 80.1		**987**		**987**		< 2.0 U		< 0.050 U		**1,150**		< 0.25 U	
	N	12-21-2020	85 - 85.1		**1,520**		**1,520**		< 2.0 U		< 0.050 U		**1,240**		**0.25**	
	N	12-21-2020	87.1 - 87.2		**744**		**744**		< 2.0 U		< 0.050 U		**1,110**		**0.27**	
APS-002	N	12-17-2020	25 - 25.1		**787**		**787**		< 2.0 U		< 0.050 U		**76.6**		**0.28**	
	N	12-17-2020	30 - 30.1		**719**		**719**		< 2.0 U		< 0.050 U		**161**		< 0.25 U	
	N	12-17-2020	33 - 33.1		**740**		**740**		< 2.0 U		< 0.050 U		**217**		**0.32**	
	N	12-17-2020	40 - 40.1		**676**		**676**		< 2.0 U		< 0.050 U		**192**		**37.7**	
	N	12-17-2020	45 - 45.1		**717**		**717**		< 2.0 U		< 0.050 U		**196**		**42.4**	
	N	12-17-2020	50 - 50.1		**752**		**752**		< 2.0 U		< 0.050 U		**205**		**42.6**	
	N	12-17-2020	55 - 55.1		**696**		**696**		< 2.0 U		< 0.050 U		**162**		**80.4**	
	N	12-17-2020	60 - 60.1		**696**		**696**		< 2.0 U		< 0.050 U		**156**		**84.4**	
	N	12-17-2020	65 - 65.1		**766**		**766**		< 2.0 U		< 0.050 U		**109**		**69.2**	
MW-303-P1	N	05-14-2021		68 - 78		**726**		**726**		< 2.0 U		< 0.050 U		**109**		**43.6**
	N	08-09-2021		68 - 78		**734**		**734**		< 2.0 U		< 0.050 U		**101 J+**		**67.6**
APS-002	N	12-18-2020	70 - 70.1		**729**		**729**		< 2.0 U		< 0.050 U		**171**		**63.0**	
	N	12-18-2020	75 - 75.1		**747**		**747**		< 2.0 U		< 0.050 U		**109**		**96.3**	
	N	12-18-2020	80 - 80.1		**762**		**762**		< 2.0 U		< 0.050 U		**110**		**74.1**	
	N	12-18-2020	81 - 81.1		**712**		**712**		< 2.0 U		**0.24**		**119**		**70.4**	
MW-303-P2	N	05-14-2021		93 - 103		**1,100**		**1,100**		< 2.0 U		< 0.050 U		**780 J-**		**0.31 J+**
	N	08-09-2021		93 - 103		**1,110**		**1,110**		< 2.0 U		< 0.050 U		**648**		**0.18 J**
APS-003	N	12-09-2020	23.1 - 23.2		**1,050**		**1,050**		< 2.0 U		**2.4**		**446**		**0.20 J**	
	N	12-09-2020	30 - 30.1		**704**		**704**		< 2.0 U		**0.032 J**		**407**		< 0.25 U	
	N	12-09-2020	35.2 - 35.3		**711**		**711**		< 2.0 U		< 0.050 U		**361**		< 0.25 U	
	N	12-14-2020	40 - 40.1		**600**		**600**		< 2.0 U		< 0.050 U		**358**		< 0.25 U	
	N	12-14-2020	45 - 45.1		**687**		**687**		< 2.0 U		< 0.050 U		**337**		< 0.25 U	
	N	12-14-2020	50 - 50.1		**702**		**702**		< 2.0 U		< 0.050 U		**380**		**0.23 J**	
	N	12-14-2020	55 - 55.1		**718**		**718**		< 2.0 U		< 0.050 U		**333**		**4.3**	
	N	12-14-2020	60 - 60.1		**739**		**739**		< 2.0 U		< 0.050 U		**367**		**1.1**	
	N	12-14-2020	65 - 65.1		**715**		**715**		< 2.0 U		< 0.050 U		**375**		**0.34**	
	N	12-14-2020	70 - 70.1		**705**		**705**		< 2.0 U		< 0.050 U		**400**		**4.3**	
	N	12-15-2020	75 - 75.1		**803**		**803**		< 2.0 U		< 0.050 U		**243**		**5.9**	
	N	12-15-2020	80 - 80.1		**744**		**744**		< 2.0 U		< 0.050 U		**229**		**9.3**	
	N	12-15-2020	85 - 85.1		**710**		**710**		< 2.0 U		< 0.050 U		**285**		**0.87**	
	N	12-15-2020	90 - 90.1		**716**		**716**		< 2.0 U		< 0.050 U		**247**		**1.4**	
	N	12-15-2020	95 - 95.1		**783**		**783**		< 2.0 U		< 0.050 U		**196**		**5.4**	
	N	12-15-2020	100 - 100.1		**798**		**798**		< 2.0 U		**0.98**		**172**		**8.4**	
	N	12-15-2020	105 - 105.1		**818**		**818**		< 2.0 U		< 0.050 U		**207**		**3.9**	
MW-304-P1	N	05-24-2021		106 - 116		**1,050**		**1,050**		< 2.0 U		< 0.050 U		**449**		**3.9**
	FD	05-24-2021		106 - 116		**1,030**		**1,030**		< 2.0 U		< 0.050 U		**463**		**3.7**
	N	08-04-2021		106 - 116		**1,020**		**1,020**		< 2.0 U		< 0.050 U		**507**		**4.2**
APS-003	N	12-16-2020	113 - 113.1		**982**		**982**		< 2.0 U		< 0.050 U		**362**		**2.0**	
	N	12-16-2020	117 - 117.1		**958**		**958**		< 2.0 U		**0.24**		**342**		**0.79**	
	N	12-16-2020	121 - 121.1		**1,060**		**1,060**		< 2.0 U		< 0.050 U		**430**		**0.30**	
	N	12-16-2020	125 - 125.1		**1,160**		**1,160**		< 2.0 U		< 0.050 U		**520**		**0.22 J**	
MW-304-P2	N	05-24-2021		126 - 136		**724**		**724**		< 2.0 U		< 0.050 U		**235**		**27.4**
	N	08-04-2021		126 - 136		**649**		**649**		< 2.0 U		< 0.050 U		**193**		**46.8**
MW-304-P3	N	05-26-2021		221 - 231		**486**		**486**		< 2.0 U		< 0.050 U		**245**		**117**
	N	08-04-2021		221 - 231		**469**		**469**		< 2.0 U		< 0.050 U		**194**		**78.1**
	FD	08-04-2021		221 - 231		**462**		**462**		< 2.0 U		< 0.050 U		**196**		**77.4**

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Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					General Chemistry Parameters, Dissolved						General Chemistry Parameters, Dissolved					
				Analyte	Alkalinity, Total as CaCO3		Bicarbonate Alkalinity as CaCO3		Carbonate Alkalinity as CaCO3		Nitrate as N		Chloride		Sulfate	
				Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)												
APS-004	N	12-06-2020	20 - 20.1		**1,430**		**1,430**		< 2.0 U		**0.058**		**254**		**47.0**	
	N	12-06-2020	25 - 25.1		**1,550**		**1,550**		< 2.0 U		< 0.050 U		**265**		**21.3**	
MW-306-P1	N	05-13-2021		25 - 35		**803**		**803**		< 2.0 U		< 0.050 U		**310**		**39.3**
	N	08-16-2021		25 - 35		**958**		**958**		< 2.0 U		< 0.050 U		**410**		**2.6**
APS-004	N	12-06-2020	30 - 30.1		**1,620**		**1,620**		< 2.0 U		< 0.050 U		**275**		**20.0**	
	N	12-06-2020	35 - 35.1		**1,350**		**1,350**		< 2.0 U		**0.93**		**393**		**59.1**	
	N	12-06-2020	40 - 40.1		**1,160**		**1,160**		< 2.0 U		< 0.050 U		**463**		**96.2**	
	N	12-07-2020	45 - 45.1		**843**		**843**		< 2.0 U		< 0.050 U		**328**		**6.9**	
	N	12-07-2020	50 - 50.1		**908**		**908**		< 2.0 U		**0.034 J**		**368**		**2.8**	
	N	12-07-2020	55 - 55.1		**892**		**892**		< 2.0 U		**0.063**		**242**		**10.8**	
	N	12-07-2020	60 - 60.1		**855**		**855**		< 2.0 U		< 0.050 U		**233**		**17.9**	
	N	12-07-2020	65 - 65.1		**831**		**831**		< 2.0 U		< 0.050 U		**245**		**15.8**	
	N	12-08-2020	70 - 70.1		**833**		**833**		< 2.0 U		**0.042 J**		**247**		**14.5**	
	N	12-08-2020	75 - 75.1		**873**		**873**		< 2.0 U		< 0.050 U		**289**		**1.6**	
	N	12-08-2020	80 - 80.1		**925**		**925**		< 2.0 U		< 0.050 U		**342**		**2.4**	
MW-306-P2	N	05-13-2021		80 - 90		**886**		**878**		**8.4**		< 0.050 U		**362**		**186**
	N	08-16-2021		80 - 90		**990**		**990**		< 2.0 U		< 0.050 U		**394**		**3.5**
	FD	08-16-2021		80 - 90		**984**		**984**		< 2.0 U		< 0.050 U		**383**		**3.6**
APS-004	N	12-08-2020	85 - 85.1		**971**		**971**		< 2.0 U		< 0.050 U		**421**		**0.72**	
	N	12-08-2020	90 - 90.1		**1,010**		**1,010**		< 2.0 U		< 0.050 U		**381**		**0.48**	
	N	12-09-2020	95 - 95.1		**982**		**982**		< 2.0 U		**0.077**		**407**		**0.77**	
	N	12-09-2020	100 - 100.1		**1,080**		**1,080**		< 2.0 U		< 0.050 U		**467**		**0.35**	
MW-306-P3	N	05-13-2021		110 - 120		**816**		**816**		< 2.0 U		< 0.050 U		**431**		**0.29 J+**
	N	08-16-2021		110 - 120		**1,010**		**1,010**		< 2.0 U		< 0.050 U		**511**		< 0.25 U
	FD	08-16-2021		110 - 120		**1,000**		**1,000**		< 2.0 U		< 0.050 U		**505**		< 0.25 U
APS-005	N	12-01-2020	23.9 - 24		**779**		**779**		< 2.0 U		**0.048 J**		**7.1**		**31.0**	
	N	12-01-2020	29 - 29.1		**846**		**846**		< 2.0 U		< 0.050 U		**310**		**10.6**	
	N	12-03-2020	34 - 34.1		**966**		**966**		< 2.0 U		< 0.050 U		**522 M6,R1**		**0.41**	
	N	12-03-2020	39 - 39.1		**1,020**		**1,020**		< 2.0 U		< 0.050 U		**462**		**0.21 J**	
	N	12-03-2020	44 - 44.1		**1,010**		**1,010**		< 2.0 U		< 0.050 U		**474**		**0.28**	
MW-404-P1	N	08-18-2021		48 - 58		**779**		**779**		< 2.0 U		< 0.050 U		**458**		**0.34 J+**
APS-005	N	12-03-2020	49.1 - 49.2		**1,050**		**1,050**		< 2.0 U		< 0.050 U		**512**		**0.25 J**	
	N	12-03-2020	54.1 - 54.2		**1,080**		**1,080**		< 2.0 U		< 0.050 U		**375**		**0.32**	
	N	12-04-2020	58.9 - 59		**1,090**		**1,090**		< 2.0 U		< 0.050 U		**345**		< 0.25 U	
	N	12-04-2020	64 - 64.1		**1,090**		**1,090**		< 2.0 U		< 0.050 U		**367**		< 0.25 U	
	N	12-04-2020	69 - 69.1		**1,000**		**1,000**		< 2.0 U		< 0.050 U		**400**		< 0.25 U	
MW-404-P2	N	08-18-2021		73 - 83		**789**		**789**		< 2.0 U		< 0.050 U		**370**		**3.9**
APS-005	N	12-04-2020	73.9 - 74		**964**		**964**		< 2.0 U		< 0.050 U		**452**		**0.28**	
	N	12-04-2020	79 - 79.1		**983**		**983**		< 2.0 U		< 0.050 U		**422**		< 0.25 U	
	N	12-05-2020	83.9 - 84		**785**		**785**		< 2.0 U		**0.095**		**297**		**0.88**	
	N	12-05-2020	89 - 89.1		**896**		**896**		< 2.0 U		< 0.050 U		**373**		**0.31**	
	N	12-05-2020	94 - 94.1		**763**		**763**		< 2.0 U		< 0.050 U		**303**		**0.32**	
	N	12-05-2020	99 - 99.1		**926**		**926**		< 2.0 U		< 0.050 U		**306**		**0.27**	
MW-404-P3	N	08-18-2021		103 - 113		**969**		**969**		< 2.0 U		< 0.050 U		**396**		< 0.25 U
APS-005	N	12-05-2020	104 - 104.1		**859**		**859**		< 2.0 U		< 0.050 U		**283**		**0.25**	
	N	12-05-2020	109 - 109.1		**983**		**983**		< 2.0 U		**0.048 J**		**374**		**0.31**	
	N	12-06-2020	114.5 - 114.6		**911**		**911**		< 2.0 U		**0.15**		**326**		**1.3**	
APS-006	N	01-08-2021	15 - 15.1		**363**		**363**		< 2.0 U		< 0.050 U		**0.80**		**97.2**	
	N	01-08-2021	20 - 20.1		**388**		**388**		< 2.0 U		< 0.050 U		**1.2**		**88.9**	
	N	01-09-2021	25 - 25.1		**574**		**574**		< 2.0 U		< 0.050 U		**6.8**		**215**	
	N	01-09-2021	30 - 30.1		**688**		**688**		< 2.0 U		**0.0095 J**		**29.7**		**753**	
MW-405-P1	N	05-11-2021		30 - 40		**847**		**847**		< 2.0 U		**0.012 J**		**51.9**		**474**
	N	08-11-2021		30 - 40		**726**		**726**		< 2.0 U		< 0.050 U		**34.4**		**694**
APS-006	N	01-09-2021	35 - 35.1		**766**		**766**		< 2.0 U		< 0.050 U		**38.7**		**738**	
	N	01-09-2021	40 - 40.1		**925**		**925**		< 2.0 U		< 0.050 U		**78.4**		**459**	
	N	01-09-2021	45 - 45.1		**1,150**		**1,150**		< 2.0 U		< 0.050 U		**292**		**25.0**	
	N	01-09-2021	50 - 50.1		**1,100**		**1,100**		< 2.0 U		< 0.050 U		**134**		**240**	
	N	01-09-2021	55 - 55.1		**1,100**		**1,100**		< 2.0 U		< 0.050 U		**376**		**0.63**	
	N	01-09-2021	60 - 60.1		**990**		**990**		< 2.0 U		< 0.050 U		**300**		**0.23 J**	
	N	01-10-2021	65 - 65.1		**898**		**898**		< 2.0 U		< 0.050 U		**302**		**0.42**	
	N	01-10-2021	70 - 70.1		**995**		**995**		< 2.0 U		< 0.050 U		**318**		**0.17 J**	
MW-405-P2	N	05-11-2021		70 - 80		**981**		**981**		< 2.0 U		< 0.050 U		**289**		**0.45**
	FD	05-11-2021		70 - 80		**1,000**		**1,000**		< 2.0 U		< 0.050 U		**287**		< 0.25 U
	N	08-11-2021		70 - 80		**986**		**986**		< 2.0 U		< 0.050 U		**269**		**1.7**
APS-006	N	01-10-2021	75 - 75.1		**963**		**963**		< 2.0 U		< 0.050 U		**242**		**3.6**	
	N	01-10-2021	80 - 80.1		**897**		**897**		< 2.0 U		**0.0070 J**		**224**		**11.8**	
	N	01-10-2021	85 - 85.1		**800**		**800**		< 2.0 U		< 0.050 U		**202**		**20.4**	
	N	01-10-2021	90 - 90.1		**753**		**753**		< 2.0 U		**3.1**		**158**		**39.2**	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					General Chemistry Parameters, Dissolved						General Chemistry Parameters, Dissolved					
				Analyte	Alkalinity, Total as CaCO3		Bicarbonate Alkalinity as CaCO3		Carbonate Alkalinity as CaCO3		Nitrate as N		Chloride		Sulfate	
				Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)												
MW-405-P3	N	05-11-2021		90 - 100		813		813		< 2.0 U		< 0.050 U		179		48.0
	N	08-11-2021		90 - 100		785		785		< 2.0 U		< 0.050 U		186		97.1
APS-006	N	01-10-2021	95 - 95.1		706		706		< 2.0 U		< 0.050 U		140		81.4	
	N	01-10-2021	100 - 100.1		785		785		< 2.0 U		0.0072 J		165		92.7	
	N	01-10-2021	105 - 105.1		739		739		< 2.0 U		< 0.050 U		165		174	
	N	01-11-2021	110 - 110.1		869		869		< 2.0 U		< 0.050 U		179		170	
	N	01-11-2021	115 - 115.1		621		621		< 2.0 U		0.0077 J		132		1,220	
APS-007	N	01-12-2021	15 - 15.1		619		619		< 2.0 U		0.032 J		124		217	
	N	01-12-2021	20 - 20.1		608		608		< 2.0 U		0.0067 J		81.6		55.0	
MW-400-P1	N	05-12-2021		20 - 30		610		610		< 2.0 U		< 0.050 U		97.5		7.5
	N	08-10-2021		20 - 30		528		528		< 2.0 U		< 0.050 U		77.8		10.4
APS-007	N	01-12-2021	25 - 25.1		487		487		< 2.0 U		< 0.050 U		70.6		37.6	
	N	01-12-2021	30 - 30.1		446		446		< 2.0 U		< 0.050 U		70.3		34.6	
	N	01-12-2021	35 - 35.1		495		495		< 2.0 U		< 0.050 U		70.3		32.2	
	N	01-12-2021	40 - 40.1		311		311		< 2.0 U		0.015 J		83.8		20.7	
	N	01-12-2021	45 - 45.1		290		290		< 2.0 U		< 0.050 U		99.8		20.2	
	N	01-12-2021	50 - 50.1		439		439		< 2.0 U		< 0.050 U		228		24.7	
	N	01-12-2021	55 - 55.1		533		533		< 2.0 U		< 0.050 U		274		7.7	
MW-400-P2	N	05-12-2021		55 - 65		764		764		< 2.0 U		< 0.050 U		111		< 0.25 U
	N	08-10-2021		55 - 65		750		750		< 2.0 U		< 0.050 U		164		0.59
APS-007	N	01-12-2021	60 - 60.1		575		575		< 2.0 U		< 0.050 U		265		8.3	
	N	01-12-2021	65 - 65.1		428		428		< 2.0 U		< 0.050 U		388		20.3	
	N	01-12-2021	70 - 70.1		749		749		< 2.0 U		< 0.050 U		147		0.20 J	
	N	01-13-2021	75 - 75.1		662		662		< 2.0 U		< 0.050 U		129		0.19 J	
	N	01-13-2021	80 - 80.1		703		703		< 2.0 U		0.0064 J		120		0.36	
	N	01-13-2021	85 - 85.1		656		656		< 2.0 U		< 0.050 U		112		9.1	
	N	01-13-2021	90 - 90.1		695		695		< 2.0 U		< 0.050 U		108		1.9	
MW-400-P3	N	05-12-2021		90 - 100		793		793		< 2.0 U		< 0.050 U		115		< 0.25 U
	N	08-10-2021		90 - 100		819		819		< 2.0 U		< 0.050 U		121		0.043 J
APS-007	N	01-13-2021	95 - 95.1		660		660		< 2.0 U		< 0.050 U		117		2.3	
	N	01-13-2021	100 - 100.1		640		640		< 2.0 U		< 0.050 U		113		4.1	
	N	01-13-2021	105 - 105.1		670		670		< 2.0 U		< 0.050 U		118		0.41	
	N	01-13-2021	110 - 110.1		768		768		< 2.0 U		0.0081 J		112		0.21 J	
MW-400-P4	N	05-12-2021		145 - 155												
	N	05-14-2021		145 - 155		428		428		< 2.0 U		< 0.050 U		73.6		29.4
	N	08-10-2021		145 - 155		434		434		< 2.0 U		< 0.050 U		76.2		36.1
MW-400-P5	N	05-12-2021		195 - 205		600		600		< 2.0 U		< 0.050 U		117		42.3
	N	08-10-2021		195 - 205		541		541		< 2.0 U		< 0.050 U		135		199
APS-008	N	01-18-2021	16 - 16.1		586		586		< 2.0 U		0.024 J		43.6		41.9	
	N	01-19-2021	20 - 20.1		427		427		< 2.0 U		< 0.050 U		24.7		23.6	
	N	01-19-2021	25 - 25.1		363		363		< 2.0 U		< 0.050 U		42.0		20.7	
	N	01-19-2021	30 - 30.1		392		392		< 2.0 U		< 0.050 U		50.4		18.4	
MW-401-P1	N	05-07-2021		32 - 42		381		371		9.2		< 0.050 U		88.3		99.4
	N	08-06-2021		32 - 42		359		359		< 2.0 U		< 0.050 U		78.9		25.6
APS-008	N	01-19-2021	35 - 35.1		321		321		< 2.0 U		< 0.050 U		68.5		26.9	
	N	01-19-2021	40 - 40.1		325		325		< 2.0 U		< 0.050 U		44.3		21.2	
	N	01-19-2021	45 - 45.1		321		321		< 2.0 U		< 0.050 U		54.9		37.7	
	N	01-19-2021	50 - 50.1		291		291		< 2.0 U		< 0.050 U		47.2		34.2	
	N	01-19-2021	55 - 55.1		303		303		< 2.0 U		0.054		61.8		24.4	
	N	01-19-2021	60 - 60.1		299		299		< 2.0 U		< 0.050 U		66.8		24.0	
MW-401-P2	N	05-07-2021		62 - 72		312		312		< 2.0 U		< 0.050 U		62.2 J+		5.2
	N	08-06-2021		62 - 72		350		350		< 2.0 U		< 0.050 U		79.1		36.6
APS-008	N	01-19-2021	65 - 65.1		254		254		< 2.0 U		< 0.050 U		47.7		10.7	
	N	01-19-2021	70 - 70.1		296		296		< 2.0 U		< 0.050 U		55.3		5.1	
	N	01-19-2021	75 - 75.1		328		328		< 2.0 U		< 0.050 U		43.8		14.1	
	N	01-19-2021	80 - 80.1		304		304		< 2.0 U		< 0.050 U		74.6		18.2	
	N	01-19-2021	85 - 85.1		347		347		< 2.0 U		< 0.050 U		78.9		21.3	
	N	01-20-2021	90 - 90.1		327		327		< 2.0 U		0.17		61.7		39.0	
MW-401-P3	N	05-07-2021		92 - 102		439		439		< 2.0 U		< 0.050 U		121		29.9
	N	08-06-2021		92 - 102		449		449		< 2.0 U		< 0.050 U		123		35.7
	FD	08-06-2021		92 - 102		440		440		< 2.0 U		< 0.050 U		123		35.6
APS-008	N	01-20-2021	95 - 95.1		366		366		< 2.0 U		< 0.050 U		84.6		36.0	
	N	01-20-2021	100 - 100.1		404		404		< 2.0 U		< 0.050 U		86.6		45.0	
	N	01-20-2021	105 - 105.1		380		380		< 2.0 U		< 0.050 U		115		40.0	
	N	01-20-2021	110 - 110.1		417		417		< 2.0 U		< 0.050 U		107		30.4	

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					General Chemistry Parameters, Dissolved						General Chemistry Parameters, Dissolved					
				Analyte	Alkalinity, Total as CaCO3		Bicarbonate Alkalinity as CaCO3		Carbonate Alkalinity as CaCO3		Nitrate as N		Chloride		Sulfate	
				Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)												
APS-012	N	03-16-2021	10 - 10.1		564		564		< 2.0 U		0.0075 J		49.3		60.2	
	N	03-16-2021	15 - 15.1		467		467		< 2.0 U		< 0.050 U		114		94.4	
	N	03-16-2021	20 - 20.1		364		364		< 2.0 U		0.0074 J		302		115	
	N	03-16-2021	25 - 25.1		515		515		< 2.0 U		< 0.050 U		44.0		142	
	N	03-16-2021	30 - 30.1		583		583		< 2.0 U		0.0065 J		124		145	
	N	03-16-2021	33 - 33.1		559		559		< 2.0 U		0.0084 J		115		154	
	N	03-16-2021	39 - 39.1		469		469		< 2.0 U		< 0.050 U		62.4		99.9	
	N	03-16-2021	43.4 - 43.5		463		463		< 2.0 U		0.0065 J		111		69.6	
	N	03-17-2021	50 - 50.1		450		450		< 2.0 U		< 0.050 U		28.0		59.4	
MW-213-P1	N	08-19-2021		50 - 60		482		482		< 2.0 U		< 0.050 U		40.9		70.9
APS-012	N	03-17-2021	55 - 55.1		527		527		< 2.0 U		< 0.050 U		44.0		85.4	
	N	03-17-2021	60 - 60.1		557		557		< 2.0 U		< 0.050 U		39.4		85.4	
	N	03-17-2021	65 - 65.1		546		546		< 2.0 U		0.092		39.1		87.2	
	N	03-17-2021	70 - 70.1		468		468		< 2.0 U		< 0.050 U		52.0		55.2	
	N	03-17-2021	75 - 75.1		452		452		< 2.0 U		< 0.050 U		81.4		49.5	
MW-213-P2	N	08-19-2021		75 - 85		443		443		< 2.0 U		< 0.050 U		83.4		43.3
APS-012	N	03-19-2021	80 - 80.1		452		452		< 2.0 U		< 0.050 U		60.1		66.1	
	N	03-19-2021	85 - 85.1		438		438		< 2.0 U		< 0.050 U		105		59.7	
	N	03-19-2021	90 - 90.1		413		413		< 2.0 U		< 0.050 U		177		39.4	
MW-505-P1	N	05-25-2021		15 - 25		150		150		< 2.0 U		< 0.050 U		38.8		20.1
	N	08-05-2021		15 - 25		188		188		< 2.0 U		< 0.050 U		25.4		25.7
APS-013	N	01-21-2021	19 - 19.1		167		167		< 2.0 U		< 0.050 U		14.3		65.5	
	N	01-21-2021	25 - 25.1		234		234		< 2.0 U		< 0.050 U		16.6		75.3	
	N	01-21-2021	30 - 30.1		250		250		< 2.0 U		0.036 J		10.9		30.4	
	N	01-21-2021	35 - 35.1		250		250		< 2.0 U		< 0.050 U		16.3		34.9	
	N	01-21-2021	40 - 40.1		224		224		< 2.0 U		< 0.050 U		31.4		60.2	
MW-505-P2	N	05-25-2021		40 - 50		173		173		< 2.0 U		< 0.050 U		38.5		19.6
	N	08-05-2021		40 - 50		224		224		< 2.0 U		< 0.050 U		46.8		62.0
APS-013	N	01-21-2021	45 - 45.1		264		264		< 2.0 U		< 0.050 U		31.6		58.7	
	N	01-21-2021	50 - 50.1		342		342		< 2.0 U		< 0.050 U		15.2		48.2	
	N	01-21-2021	55 - 55.1		304		304		< 2.0 U		< 0.050 U		15.7		40.0	
	N	01-21-2021	60 - 60.1		327		327		< 2.0 U		< 0.050 U		16.2		49.9	
	N	01-21-2021	65 - 65.1		320		320		< 2.0 U		< 0.050 U		20.0		52.6	
MW-505-P3	N	05-25-2021		65 - 75		184		184		< 2.0 U		< 0.050 U		38.1		21.4
	N	08-05-2021		65 - 75		309		309		< 2.0 U		< 0.050 U		43.0		10.1
APS-013	N	01-22-2021	70 - 70.1		389		389		< 2.0 U		< 0.050 U		15.2		49.0	
	N	01-22-2021	75 - 75.1		616		616		< 2.0 U		< 0.050 U		219		116	
APS-019	N	01-05-2021	20 - 20.1		542		542		< 2.0 U		1.1		1.4		66.0	
	N	01-06-2021	25 - 25.1		560		560		< 2.0 U		2.4		3.5		114	
	N	01-06-2021	30 - 30.1		538		538		< 2.0 U		4.7		3.4		154	
	N	01-06-2021	35 - 35.1		597		597		< 2.0 U		3.7		4.0		205	
	N	01-06-2021	39 - 39.1		558		558		< 2.0 U		0.016 J		3.4		207	
	N	01-06-2021	45 - 45.1		460		460		< 2.0 U		0.011 J		8.4		111	
	N	01-06-2021	50 - 50.1		453		453		< 2.0 U		< 0.050 U		8.5		114	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		596		596		< 2.0 U		< 0.050 U		37.5		209
APS-019	N	01-06-2021	55 - 55.1		469		469		< 2.0 U		< 0.050 U		11.2		159	
	N	01-06-2021	60 - 60.1		526		526		< 2.0 U		< 0.050 U		16.7		215	
	N	01-06-2021	64 - 64.1		628		628		< 2.0 U		< 0.050 U		74.2		231	
	N	01-07-2021	70 - 70.1		774		774		< 2.0 U		0.021 J		109		203	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		834		834		< 2.0 U		< 0.050 U		172		38.5
APS-019	N	01-07-2021	75 - 75.1		708		708		< 2.0 U		< 0.050 U		144		36.1	
	N	01-07-2021	80 - 80.1		755		755		< 2.0 U		< 0.050 U		160		23.5	
	N	01-07-2021	85 - 85.1		671		671		< 2.0 U		< 0.050 U		144		7.4	
	N	01-07-2021	90 - 90.1		682		682		< 2.0 U		0.0062 J		148		2.6	
	N	01-07-2021	95 - 95.1		676		676		< 2.0 U		0.0053 J		134		10.9	
	N	01-07-2021	100 - 100.1		727		727		< 2.0 U		0.0087 J		128		208	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		676		676		< 2.0 U		< 0.050 U		129		160
APS-019	N	01-07-2021	105 - 105.1		676		676		< 2.0 U		0.0053 J		127		61.0	
	N	01-08-2021	110 - 110.1		691		691		< 2.0 U		0.0070 J		136		39.0	
	N	01-08-2021	115 - 115.1		602		602		< 2.0 U		< 0.050 U		121		1,340	
MW-118	N	05-19-2021		38 - 48		824		824		< 2.0 U		< 0.050 U		102		55.0
	FD	05-19-2021		38 - 48		807		807		< 2.0 U		< 0.050 U		103		54.6
	N	08-19-2021		38 - 48		926		926		< 2.0 U		< 0.050 U		132		2.3
APS-021	N	03-20-2021	38.1 - 38.2		719		719		< 2.0 U		< 0.050 U		58.6		3.7	
	N	03-20-2021	48.1 - 48.2		998		998		< 2.0 U		< 0.050 U		166		0.11 J	
	N	03-20-2021	58.1 - 58.2		946		946		< 2.0 U		< 0.050 U		203		0.12 J	
	N	03-21-2021	68.1 - 68.2		1,110		1,110		< 2.0 U		< 0.050 U		265		0.13 J	
	N	03-21-2021	73.1 - 73.2		930		930		< 2.0 U		< 0.050 U		252		0.32	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
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					Metals, Dissolved									
				Analyte	Barium		Calcium		Iron		Magnesium		Manganese	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-001	N	12-19-2020	15 - 15.1		537		142,000		89,900		45,800		4,920	
	N	12-19-2020	19 - 19.1		593		143,000		57,100		52,800		1,530	
	N	12-19-2020	25 - 25.1		811		192,000		30,700		61,500		3,630	
	N	12-19-2020	30 - 30.1		920		202,000		5,500		73,000		1,420	
	N	12-20-2020	35 - 35.1		899		164,000		1,030		47,600		245	
	N	12-20-2020	40 - 40.1		628		211,000		35,000		62,000		5,900	
	N	12-20-2020	45 - 45.1		523		213,000		5,920		60,000		6,910	
	N	12-20-2020	50 - 50.1		563		197,000		65,900		68,000		4,010	
	N	12-20-2020	55 - 55.1		538		238,000		37,000		63,500		2,300	
	N	12-20-2020	60 - 60.1		421		264,000		17,300		68,500		5,350	
	N	12-20-2020	65 - 65.1		573		296,000		41,200		74,600		3,970	
MW-302	N	05-17-2021		68 - 78		1,960		417,000		103,000		131,000		2,530
	N	08-23-2021		68 - 78		1,830		392,000		89,600		118,000		2,440
APS-001	N	12-21-2020	70 - 70.1		798		341,000		47,200		94,800		7,130	
	N	12-21-2020	75 - 75.1		1,850		462,000		105,000		141,000		3,240	
	N	12-21-2020	80 - 80.1		2,060		480,000		118,000		145,000		3,090	
	N	12-21-2020	85 - 85.1		1,730		477,000		81,500		150,000		5,650	
	N	12-21-2020	87.1 - 87.2		2,220		518,000		64,800		149,000		5,330	
APS-002	N	12-17-2020	25 - 25.1		998		197,000		71,300		67,200		478	
	N	12-17-2020	30 - 30.1		780		229,000		60,900		71,600		3,080	
	N	12-17-2020	33 - 33.1		870		285,000		39,200		70,300		2,450	
	N	12-17-2020	40 - 40.1		708		247,000		43,200		69,500		1,600	
	N	12-17-2020	45 - 45.1		855		268,000		42,600		69,500		1,970	
	N	12-17-2020	50 - 50.1		822		270,000		31,900		69,500		1,210	
	N	12-17-2020	55 - 55.1		731		242,000		40,800		65,800		984	
	N	12-17-2020	60 - 60.1		796		237,000		35,700		69,900		954	
	N	12-17-2020	65 - 65.1		840		238,000		37,800		72,100		965	
MW-303-P1	N	05-14-2021		68 - 78		1,200		218,000		40,700		67,700		719
	N	08-09-2021		68 - 78		1,020		216,000		44,100		66,500		786
APS-002	N	12-18-2020	70 - 70.1		1,010		261,000		47,100		75,700		905	
	N	12-18-2020	75 - 75.1		880		254,000		37,500		67,600		780	
	N	12-18-2020	80 - 80.1		1,000		249,000		42,100		66,500		853	
	N	12-18-2020	81 - 81.1		919		226,000		43,000		60,000		832	
MW-303-P2	N	05-14-2021		93 - 103		2,840		369,000		58,500		113,000		818
	N	08-09-2021		93 - 103		2,430		373,000		50,200		111,000		1,040
APS-003	N	12-09-2020	23.1 - 23.2		1,400		190,000		46,800		91,500		556	
	N	12-09-2020	30 - 30.1		745		234,000		51,200		80,400		1,130	
	N	12-09-2020	35.2 - 35.3		949		210,000		42,100		60,300		2,920	
	N	12-14-2020	40 - 40.1		1,480		241,000		30,500		55,100		2,250	
	N	12-14-2020	45 - 45.1		1,480		254,000		22,700		62,400		2,120	
	N	12-14-2020	50 - 50.1		2,000		263,000		22,400		66,400		2,260	
	N	12-14-2020	55 - 55.1		1,580		251,000		18,200		62,600		1,500	
	N	12-14-2020	60 - 60.1		1,170		258,000		19,900		65,100		760	
	N	12-14-2020	65 - 65.1		1,420		259,000		23,200		70,800		2,530	
	N	12-14-2020	70 - 70.1		1,580		266,000		24,800		75,500		1,750	
	N	12-15-2020	75 - 75.1		65.8		124,000		< 50.0 U		45,900		7.4	
	N	12-15-2020	80 - 80.1		44.4		103,000		< 50.0 U		32,700		< 5.0 U	
	N	12-15-2020	85 - 85.1		72.4		115,000		2,930		42,200		68.0	
	N	12-15-2020	90 - 90.1		98.1		135,000		1,880		42,400		83.9	
	N	12-15-2020	95 - 95.1		127		125,000		506		39,600		30.6	
	N	12-15-2020	100 - 100.1		44.0		103,000		< 50.0 U		32,700		< 5.0 U	
	N	12-15-2020	105 - 105.1		843		257,000		13,500		70,600		202	
MW-304-P1	N	05-24-2021		106 - 116		2,060		348,000		31,100		90,700		375
	FD	05-24-2021		106 - 116		1,980		338,000		29,000		89,000		363
	N	08-04-2021		106 - 116		2,380		345,000		29,300		93,100		355
APS-003	N	12-16-2020	113 - 113.1		1,590		289,000		15,300		77,100		380	
	N	12-16-2020	117 - 117.1		1,310		292,000		12,800		75,600		232	
	N	12-16-2020	121 - 121.1		1,650		304,000		13,300		80,500		278	
	N	12-16-2020	125 - 125.1		1,900		329,000		18,000		88,200		460	
MW-304-P2	N	05-24-2021		126 - 136		1,220		227,000		16,300		69,300		271
	N	08-04-2021		126 - 136		713		191,000		11,300		62,000		276
MW-304-P3	N	05-26-2021		221 - 231		792		137,000		10,100		49,500		168
	N	08-04-2021		221 - 231		381		88,000		2,310		35,000		127
	FD	08-04-2021		221 - 231		381		88,200		2,140		35,000		127

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					Metals, Dissolved									
				Analyte	Barium		Calcium		Iron		Magnesium		Manganese	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-004	N	12-06-2020	20 - 20.1		856		109,000		22,600		91,100		373	
	N	12-06-2020	25 - 25.1		535		74,100		12,400		91,800		105	
MW-306-P1	N	05-13-2021		25 - 35		828		176,000		21,000		68,100		1,370
	N	08-16-2021		25 - 35		1,040		224,000		25,900		78,000		1,420
APS-004	N	12-06-2020	30 - 30.1		757		70,300		9,860		94,600		158	
	N	12-06-2020	35 - 35.1		1,930		197,000		25,000		92,300		933	
	N	12-06-2020	40 - 40.1		2,670		334,000		23,500		85,800		960	
	N	12-07-2020	45 - 45.1		1,250		244,000		9,830		79,100		874	
	N	12-07-2020	50 - 50.1		1,020		316,000		24,700		76,500		462	
	N	12-07-2020	55 - 55.1		677		306,000		23,200		72,300		601	
	N	12-07-2020	60 - 60.1		532		297,000		22,700		72,400		462	
	N	12-07-2020	65 - 65.1		559		281,000		20,100		70,800		331	
	N	12-08-2020	70 - 70.1		757		276,000		15,800		71,200		554	
	N	12-08-2020	75 - 75.1		1,070		279,000		9,150		76,400		201	
	N	12-08-2020	80 - 80.1		1,250		287,000		16,200		79,000		300	
MW-306-P2	N	05-13-2021		80 - 90		1,590		252,000		17,800		71,900		414
	N	08-16-2021		80 - 90		1,980		272,000		19,300		68,700		260
	FD	08-16-2021		80 - 90		2,010		271,000		19,600		68,500		262
APS-004	N	12-08-2020	85 - 85.1		1,640		276,000		10,700		76,200		269	
	N	12-08-2020	90 - 90.1		1,660		282,000		11,900		77,800		256	
	N	12-09-2020	95 - 95.1		1,370		275,000		11,700		73,600		378	
	N	12-09-2020	100 - 100.1		1,930		287,000		11,500		82,100		377	
MW-306-P3	N	05-13-2021		110 - 120		3,740		273,000		20,100		83,100		176
	N	08-16-2021		110 - 120		4,720		278,000		19,500		81,700		129
	FD	08-16-2021		110 - 120		4,700		276,000		19,400		81,400		128
APS-005	N	12-01-2020	23.9 - 24		347		191,000		17,700		70,200		4,950	
	N	12-01-2020	29 - 29.1		581		271,000		12,200		90,800		4,450	
	N	12-03-2020	34 - 34.1		1,090		295,000		24,100		92,900		2,690	
	N	12-03-2020	39 - 39.1		1,600		326,000		25,400		87,800		1,880	
	N	12-03-2020	44 - 44.1		1,470		311,000		30,700		84,600		1,140	
MW-404-P1	N	08-18-2021		48 - 58		1,590		167,000		25,300		72,800		392
APS-005	N	12-03-2020	49.1 - 49.2		1,940		321,000		28,700		87,800		958	
	N	12-03-2020	54.1 - 54.2		2,280		263,000		29,700		73,200		639	
	N	12-04-2020	58.9 - 59		2,010		255,000		23,000		70,400		484	
	N	12-04-2020	64 - 64.1		2,040		265,000		26,800		71,100		532	
	N	12-04-2020	69 - 69.1		1,860		284,000		27,600		76,900		588	
MW-404-P2	N	08-18-2021		73 - 83		1,600		243,000		23,400		62,100		434
APS-005	N	12-04-2020	73.9 - 74		1,820		290,000		29,100		78,000		641	
	N	12-04-2020	79 - 79.1		1,900		295,000		33,300		74,900		760	
	N	12-05-2020	83.9 - 84		1,550		227,000		14,300		58,700		483	
	N	12-05-2020	89 - 89.1		1,900		261,000		21,100		70,800		305	
	N	12-05-2020	94 - 94.1		2,090		230,000		19,200		66,200		223	
	N	12-05-2020	99 - 99.1		2,080		237,000		15,800		68,200		221	
MW-404-P3	N	08-18-2021		103 - 113		2,480		262,000		17,000		73,400		164
APS-005	N	12-05-2020	104 - 104.1		1,880		229,000		18,300		65,600		263	
	N	12-05-2020	109 - 109.1		2,300		244,000		17,800		70,100		288	
	N	12-06-2020	114.5 - 114.6		2,020		226,000		10,600		65,100		256	
APS-006	N	01-08-2021	15 - 15.1		74.5		142,000		41.0 J		27,600		40.5	
	N	01-08-2021	20 - 20.1		155		145,000		269		27,700		136	
	N	01-09-2021	25 - 25.1		106		201,000		241		47,300		1,350	
	N	01-09-2021	30 - 30.1		216		344,000		1,190		109,000		3,610	
MW-405-P1	N	05-11-2021		30 - 40		237		302,000		28,500		99,000		2,100
	N	08-11-2021		30 - 40		137		345,000		20,700		99,100		3,020
APS-006	N	01-09-2021	35 - 35.1		204		354,000		35,700		117,000		4,590	
	N	01-09-2021	40 - 40.1		242		315,000		46,300		106,000		1,210	
	N	01-09-2021	45 - 45.1		851		266,000		38,700		88,400		465	
	N	01-09-2021	50 - 50.1		1,210		274,000		26,200		71,200		513	
	N	01-09-2021	55 - 55.1		1,190		294,000		21,700		75,000		458	
	N	01-09-2021	60 - 60.1		1,610		256,000		17,100		68,100		338	
	N	01-10-2021	65 - 65.1		2,110		244,000		11,400		62,800		513	
	N	01-10-2021	70 - 70.1		2,260		248,000		13,000		69,300		219	
MW-405-P2	N	05-11-2021		70 - 80		2,650		210,000		17,200		63,100		271
	FD	05-11-2021		70 - 80		2,850		225,000		18,900		66,000		285
	N	08-11-2021		70 - 80		2,760		219,000		15,700		58,900		291
APS-006	N	01-10-2021	75 - 75.1		2,540		217,000		15,300		60,500		300	
	N	01-10-2021	80 - 80.1		2,840		175,000		15,200		51,200		328	
	N	01-10-2021	85 - 85.1		2,310		164,000		13,400		48,200		375	
	N	01-10-2021	90 - 90.1		2,000		162,000		11,400		45,300		595	

Notes and definition are presented on Page 56

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					Metals, Dissolved									
				Analyte	Barium		Calcium		Iron		Magnesium		Manganese	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
MW-405-P3	N	05-11-2021		90 - 100		1,610		177,000		12,800		50,200		740
	N	08-11-2021		90 - 100		1,660		191,000		13,600		51,900		781
APS-006	N	01-10-2021	95 - 95.1		1,490		154,000		10,400		43,600		691	
	N	01-10-2021	100 - 100.1		767		205,000		13,200		53,600		1,080	
	N	01-10-2021	105 - 105.1		572		220,000		13,800		59,500		1,260	
	N	01-11-2021	110 - 110.1		259		294,000		16,700		72,000		1,930	
	N	01-11-2021	115 - 115.1		114		614,000		18,700		70,500		2,850	
APS-007	N	01-12-2021	15 - 15.1		316		278,000		429		52,100		35.9	
	N	01-12-2021	20 - 20.1		324		209,000		145		35,800		225	
MW-400-P1	N	05-12-2021		20 - 30		1,240		116,000		16,900		41,100		353
	N	08-10-2021		20 - 30		908		106,000		13,000		36,700		324
APS-007	N	01-12-2021	25 - 25.1		283		158,000		754		35,000		328	
	N	01-12-2021	30 - 30.1		449		110,000		5,740		32,900		532	
	N	01-12-2021	35 - 35.1		512		120,000		10,400		39,000		748	
	N	01-12-2021	40 - 40.1		380		76,100		7,450		23,600		558	
	N	01-12-2021	45 - 45.1		393		75,400		5,890		23,000		481	
	N	01-12-2021	50 - 50.1		1,120		124,000		7,970		38,300		551	
	N	01-12-2021	55 - 55.1		1,790		136,000		9,350		40,200		558	
MW-400-P2	N	05-12-2021		55 - 65		2,020		139,000		22,800		43,200		410
	N	08-10-2021		55 - 65		1,970		125,000		19,000		40,100		418
APS-007	N	01-12-2021	60 - 60.1		1,410		140,000		10,200		45,500		579	
	N	01-12-2021	65 - 65.1		1,780		119,000		11,300		42,800		403	
	N	01-12-2021	70 - 70.1		1,960		104,000		12,900		36,500		275	
	N	01-13-2021	75 - 75.1		1,700		155,000		13,100		46,400		294	
	N	01-13-2021	80 - 80.1		1,050		157,000		14,200		44,600		436	
	N	01-13-2021	85 - 85.1		1,900		142,000		13,600		42,900		224	
	N	01-13-2021	90 - 90.1		2,040		168,000		16,100		49,200		215	
MW-400-P3	N	05-12-2021		90 - 100		2,030		159,000		23,500		46,500		439
	N	08-10-2021		90 - 100		2,200		180,000		21,500		49,300		440
APS-007	N	01-13-2021	95 - 95.1		1,920		152,000		13,200		45,200		306	
	N	01-13-2021	100 - 100.1		1,770		138,000		12,600		39,100		309	
	N	01-13-2021	105 - 105.1		1,740		154,000		11,900		42,400		422	
	N	01-13-2021	110 - 110.1		1,910		171,000		13,300		46,400		515	
MW-400-P4	N	05-12-2021		145 - 155		1,700		118,000		13,400		41,200		231
	N	05-14-2021		145 - 155										
	N	08-10-2021		145 - 155		512		64,900		3,470		29,000		141
MW-400-P5	N	05-12-2021		195 - 205		1,040		104,000		11,600		40,200		172
	N	08-10-2021		195 - 205		219		53,100		2,010		25,600		95.6
APS-008	N	01-18-2021	16 - 16.1		211		170,000		192		47,200		19.6	
	N	01-19-2021	20 - 20.1		265		120,000		116		25,400		390	
	N	01-19-2021	25 - 25.1		208		90,800		147		20,400		570	
	N	01-19-2021	30 - 30.1		272		108,000		218		21,700		365	
MW-401-P1	N	05-07-2021		32 - 42		496		76,500		3,120		21,100		340
	N	08-06-2021		32 - 42		390		91,800		6,960		22,300		625
APS-008	N	01-19-2021	35 - 35.1		287		95,900		2,940		21,400		465	
	N	01-19-2021	40 - 40.1		286		83,100		3,610		18,800		450	
	N	01-19-2021	45 - 45.1		298		86,400		4,370		21,600		358	
	N	01-19-2021	50 - 50.1		324		88,200		3,140		21,400		322	
	N	01-19-2021	55 - 55.1		375		94,600		3,550		22,100		265	
	N	01-19-2021	60 - 60.1		366		100,000		3,640		24,100		340	
MW-401-P2	N	05-07-2021		62 - 72		374		82,600		10,800		21,400		395
	N	08-06-2021		62 - 72		413		106,000		7,760		24,100		354
APS-008	N	01-19-2021	65 - 65.1		411		64,100		4,390		17,500		238	
	N	01-19-2021	70 - 70.1		432		60,600		7,620		21,700		184	
	N	01-19-2021	75 - 75.1		506		53,300		6,260		23,000		196	
	N	01-19-2021	80 - 80.1		653		51,700		6,570		22,000		186	
	N	01-19-2021	85 - 85.1		664		51,600		5,880		18,400		194	
	N	01-20-2021	90 - 90.1		847		50,800		4,920		19,700		220	
MW-401-P3	N	05-07-2021		92 - 102		1,140		107,000		19,500		32,000		488
	N	08-06-2021		92 - 102		1,270		98,400		15,400		28,000		355
	FD	08-06-2021		92 - 102		1,300		101,000		16,100		28,500		364
APS-008	N	01-20-2021	95 - 95.1		1,060		81,000		13,500		26,400		290	
	N	01-20-2021	100 - 100.1		1,150		106,000		15,200		31,800		384	
	N	01-20-2021	105 - 105.1		1,190		109,000		15,900		36,000		329	
	N	01-20-2021	110 - 110.1		827		116,000		11,300		33,300		346	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
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					Metals, Dissolved									
				Analyte	Barium		Calcium		Iron		Magnesium		Manganese	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-012	N	03-16-2021	10 - 10.1		441		180,000		15,900		26,100		981	
	N	03-16-2021	15 - 15.1		409		101,000		20,200		13,500		964	
	N	03-16-2021	20 - 20.1		478		174,000		36,700		28,100		1,370	
	N	03-16-2021	25 - 25.1		298		167,000		3,610		39,600		670	
	N	03-16-2021	30 - 30.1		504		244,000		13,100		51,000		825	
	N	03-16-2021	33 - 33.1		574		247,000		17,800		48,800		772	
	N	03-16-2021	39 - 39.1		507		176,000		20,300		31,600		677	
	N	03-16-2021	43.4 - 43.5		574		181,000		27,200		33,400		1,090	
	N	03-17-2021	50 - 50.1		440		154,000		6,810		37,900		433	
MW-213-P1	N	08-19-2021		50 - 60		484		168,000		19,800		40,300		680
APS-012	N	03-17-2021	55 - 55.1		554		186,000		9,860		44,400		534	
	N	03-17-2021	60 - 60.1		586		195,000		8,780		45,000		474	
	N	03-17-2021	65 - 65.1		442		189,000		8,760		45,700		442	
	N	03-17-2021	70 - 70.1		406		160,000		7,700		37,500		341	
	N	03-17-2021	75 - 75.1		390		165,000		7,740		38,200		573	
MW-213-P2	N	08-19-2021		75 - 85		550		150,000		15,500		39,000		422
APS-012	N	03-19-2021	80 - 80.1		518		161,000		10,700		39,800		356	
	N	03-19-2021	85 - 85.1		382		172,000		13,200		43,600		360	
	N	03-19-2021	90 - 90.1		493		177,000		14,900		45,600		427	
MW-505-P1	N	05-25-2021		15 - 25		106		46,700		293		11,700		2,780
	N	08-05-2021		15 - 25		128		57,600		368		13,700		3,730
APS-013	N	01-21-2021	19 - 19.1		114		62,700		103		16,100		2,240	
	N	01-21-2021	25 - 25.1		154		80,400		171		21,500		849	
	N	01-21-2021	30 - 30.1		176		69,500		125		19,500		221	
	N	01-21-2021	35 - 35.1		220		78,600		135		21,300		108	
	N	01-21-2021	40 - 40.1		249		84,700		117		20,700		126	
MW-505-P2	N	05-25-2021		40 - 50		112		55,000		334		12,600		3,080
	N	08-05-2021		40 - 50		145		71,800		2,340		15,000		3,020
APS-013	N	01-21-2021	45 - 45.1		238		93,300		168		23,400		144	
	N	01-21-2021	50 - 50.1		297		102,000		240		28,900		250	
	N	01-21-2021	55 - 55.1		200		91,800		324		25,200		281	
	N	01-21-2021	60 - 60.1		154		105,000		216		26,600		228	
	N	01-21-2021	65 - 65.1		123		118,000		432		25,100		286	
MW-505-P3	N	05-25-2021		65 - 75		108		58,000		1,390		12,800		2,950
	N	08-05-2021		65 - 75		165		94,600		5,880		19,600		2,880
APS-013	N	01-22-2021	70 - 70.1		156		123,000		4,940		28,500		501	
	N	01-22-2021	75 - 75.1		324		294,000		32,800		74,500		983	
APS-019	N	01-05-2021	20 - 20.1		299		187,000		314		43,200		751	
	N	01-06-2021	25 - 25.1		254		199,000		232		50,800		268	
	N	01-06-2021	30 - 30.1		259		199,000		237		51,700		448	
	N	01-06-2021	35 - 35.1		449		240,000		111		56,300		1,010	
	N	01-06-2021	39 - 39.1		593		219,000		9,430		52,100		1,460	
	N	01-06-2021	45 - 45.1		440		167,000		15,800		38,600		976	
	N	01-06-2021	50 - 50.1		604		152,000		16,600		41,700		1,580	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		500		197,000		35,100		60,600		1,280
APS-019	N	01-06-2021	55 - 55.1		717		158,000		19,300		47,400		1,250	
	N	01-06-2021	60 - 60.1		862		175,000		22,600		58,400		903	
	N	01-06-2021	64 - 64.1		1,350		169,000		19,100		57,800		631	
	N	01-07-2021	70 - 70.1		1,510		163,000		23,000		61,700		532	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		1,480		174,000		20,900		68,900		410
APS-019	N	01-07-2021	75 - 75.1		1,150		158,000		17,600		56,200		329	
	N	01-07-2021	80 - 80.1		1,450		157,000		15,900		57,400		403	
	N	01-07-2021	85 - 85.1		895		164,000		13,700		53,200		375	
	N	01-07-2021	90 - 90.1		1,090		172,000		15,000		52,500		436	
	N	01-07-2021	95 - 95.1		547		164,000		14,600		53,700		521	
	N	01-07-2021	100 - 100.1		595		188,000		18,900		62,300		482	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		749		233,000		19,900		54,500		1,200
APS-019	N	01-07-2021	105 - 105.1		634		165,000		15,600		48,300		530	
	N	01-08-2021	110 - 110.1		458		190,000		13,700		56,600		1,180	
	N	01-08-2021	115 - 115.1		146		606,000		21,100		69,200		3,320	
MW-118	N	05-19-2021		38 - 48		990		247,000		30,500		60,600		1,370
	FD	05-19-2021		38 - 48		968		245,000		30,100		59,900		1,350
	N	08-19-2021		38 - 48		1,150		282,000		25,900		69,300		1,720
APS-021	N	03-20-2021	38.1 - 38.2		567		229,000		4,990		54,100		1,180	
	N	03-20-2021	48.1 - 48.2		1,260		301,000		44,500		75,000		3,560	
	N	03-20-2021	58.1 - 58.2		1,570		312,000		28,800		78,400		442	
	N	03-21-2021	68.1 - 68.2		2,100		299,000		27,600		72,900		401	
	N	03-21-2021	73.1 - 73.2		1,790		234,000		17,800		57,700		460	

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					Volatile Organic Compounds, Total															
				Analyte	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-trichloro-1,2,2-trifluoroethane (Freon		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene		1,1-Dichloropropene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-23-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.67 J**		< 1.0 U		< 1.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.50 J**		< 1.0 U		< 1.0 U	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.54 J**		< 1.0 U		< 1.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.39 J**		< 1.0 U		< 1.0 U
	N	08-09-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.79 J**		< 1.0 U		< 1.0 U	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.76 J**		< 1.0 U		< 1.0 U	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.49 J**		< 1.0 U		< 1.0 U	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.43 J**		< 1.0 U		< 1.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-09-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.78 J**		< 1.0 U		< 1.0 U	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.80 J**		< 1.0 U		< 1.0 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.0**		< 1.0 U		< 1.0 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-trichloro-1,2,2-trifluoroethane (Freon		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene		1,1-Dichloropropene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-16-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.87 J**		< 1.0 U		< 1.0 U	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.2**		< 1.0 U		< 1.0 U	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.1**		< 1.0 U		< 1.0 U	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.2**		< 1.0 U		< 1.0 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.71 J**		< 1.0 U		< 1.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.46 J**		< 1.0 U		< 1.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.1**		< 1.0 U		< 1.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.3**		< 1.0 U		< 1.0 U	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.43 J**		< 1.0 U		< 1.0 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.55 J**		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-trichloro-1,2,2-trifluoroethane (Freon		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene		1,1-Dichloropropene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.52 J**		< 1.0 U		< 1.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.52 J**		< 1.0 U		< 1.0 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.58 J**		< 1.0 U		< 1.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.63 J**		< 1.0 U		< 1.0 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.0 J**		< 1.0 U		< 1.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.56 J**		< 1.0 U		< 1.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.37 J**		< 1.0 U		< 1.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.50 J**		< 1.0 U		< 1.0 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.26 J**		< 1.0 U		< 1.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.40 J**		< 1.0 U		< 1.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.27 J**		< 1.0 U		< 1.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.33 J**		< 1.0 U		< 1.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-06-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.46 J**		< 1.0 U		< 1.0 U
	N	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.55 J**		**0.20 J**		< 1.0 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.72 J**		**0.26 J**		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	1,1,1,2-Tetrachloroethane		1,1,1-Trichloroethane		1,1,2,2-Tetrachloroethane		1,1,2-trichloro-1,2,2-trifluoroethane (Freon		1,1,2-Trichloroethane		1,1-Dichloroethane		1,1-Dichloroethene		1,1-Dichloropropene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.47 J**		< 1.0 U		< 1.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.56 J**		< 1.0 U		< 1.0 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.48 J**		< 1.0 U		< 1.0 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.54 J**		< 1.0 U		< 1.0 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.18 J**		< 1.0 U		< 1.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.30 J**		< 1.0 U		< 1.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.39 J**		< 1.0 U		< 1.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.62 J**		< 1.0 U		< 1.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.54 J**		< 1.0 U		< 1.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.55 J**		< 1.0 U		< 1.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.37 J**		< 1.0 U		< 1.0 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 5.0 U		< 5.0 U		< 25.0 U		< 50.0 U		< 5.0 U		< 5.0 U		< 5.0 U	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.37 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.13 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		**0.42 J**		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-23-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.35 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.67 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		**0.18 J**		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 1.0 U		**3.0**		**1.5 J**		< 10.0 U		**1.0 J**		< 1.0 U		< 1.0 U	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-09-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-09-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.038 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-16-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.040 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.038 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.037 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.037 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.037 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-06-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	1,2,3-Trichlorobenzene		1,2,3-Trichloropropane		1,2,4-Trichlorobenzene		1,2,4-Trimethylbenzene		1,2-Dibromo-3-chloropropane		1,2-Dichlorobenzene		1,2-Dichloroethane		1,2-Dichloropropane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.037 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.039 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		**0.21 J**		< 1.0 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.035 U		< 1.0 U		< 1.0 U		< 1.0 U
	FD	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.034 U		< 1.0 U		< 1.0 U		< 1.0 U
	N	08-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 0.036 U		< 1.0 U		< 1.0 U		< 1.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 10.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total													
				Analyte	1,3,5-Trimethylbenzene		1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		1,4-Dioxane		2,2-Dichloropropane		2-Butanone		2-Hexanone	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		**1.9 J**		< 5.0 U		< 5.0 U		**5.9**		< 500 U		< 5.0 U		< 100 U		< 100 U	
	N	12-19-2020	19 - 19.1		**1.4 J**		< 1.0 U		< 1.0 U		**3.2**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-19-2020	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-19-2020	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		**1.0**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	50 - 50.1		**0.13 J**		< 1.0 U		< 1.0 U		**11.8**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	55 - 55.1		**0.12 J**		< 1.0 U		< 1.0 U		**9.8**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.43 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-20-2020	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.31 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-302	N	05-17-2021		68 - 78		**1.1 J**		< 1.0 U		< 1.0 U		< 1.0 U		**459 J**		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-23-2021		68 - 78		**0.95 J**		< 1.0 U		< 1.0 U		< 1.0 U		**506**		< 1.0 U		< 20.0 U		< 20.0 U
APS-001	N	12-21-2020	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-21-2020	75 - 75.1		**1.1 J**		< 1.0 U		< 1.0 U		**3.9**		**197**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-21-2020	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		**4.8**		**284**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-21-2020	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**263**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-21-2020	87.1 - 87.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**294**		< 1.0 U		< 20.0 U		< 20.0 U	
APS-002	N	12-17-2020	25 - 25.1		< 5.0 U		**1.3**		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	33 - 33.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.27 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.69 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-17-2020	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-09-2021		68 - 78		< 5.0 U		< 1.0 U		< 1.0 U		**0.42 J**		**16.6**		< 1.0 U		< 20.0 U		< 20.0 U
APS-002	N	12-18-2020	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.34 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-18-2020	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.38 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-18-2020	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.36 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-18-2020	81 - 81.1		< 5.0 U		< 1.0 U		< 1.0 U		**0.42 J**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-09-2021		93 - 103		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**404**		< 1.0 U		< 20.0 U		< 20.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 5.0 U		< 1.0 U		< 1.0 U		**1.4**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-09-2020	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**398**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-09-2020	35.2 - 35.3		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-14-2020	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-15-2020	105 - 105.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	FD	05-24-2021		106 - 116		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		**4.2 J**		< 20.0 U
	N	08-04-2021		106 - 116		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**344**		< 1.0 U		< 20.0 U		< 20.0 U
APS-003	N	12-16-2020	113 - 113.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-16-2020	117 - 117.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-16-2020	121 - 121.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-16-2020	125 - 125.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L1		< 1.0 U		< 20.0 U		< 20.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-04-2021		126 - 136		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**89.6**		< 1.0 U		< 20.0 U		< 20.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-04-2021		221 - 231		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**56.0**		< 1.0 U		**55.0**		< 20.0 U
	FD	08-04-2021		221 - 231		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**56.1**		< 1.0 U		**51.1**		< 20.0 U

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	1,3,5-Trimethylbenzene		1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		1,4-Dioxane		2,2-Dichloropropane		2-Butanone		2-Hexanone	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		**3.0**		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-06-2020	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		**4.0**		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 5.0 U		< 1.0 U		< 1.0 U		**0.62 J**		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-16-2021		25 - 35		< 5.0 U		< 1.0 U		< 1.0 U		**0.68 J**		**127**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-004	N	12-06-2020	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-06-2020	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		**3.7**		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-06-2020	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-07-2020	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-07-2020	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-07-2020	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-07-2020	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-07-2020	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-08-2020	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-08-2020	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-08-2020	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**45.9 J**		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-16-2021		80 - 90		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**68.1**		< 1.0 UJ		< 20.0 U		< 20.0 U
	FD	08-16-2021		80 - 90		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**72.7**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-004	N	12-08-2020	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-08-2020	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**75.5 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-09-2020	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		**2.6 J**		< 20.0 U	
	N	12-09-2020	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**66.3 J**		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-16-2021		110 - 120		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**79.1**		< 1.0 UJ		< 20.0 U		< 20.0 U
	FD	08-16-2021		110 - 120		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**84.4**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-005	N	12-01-2020	23.9 - 24		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-01-2020	29 - 29.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-03-2020	34 - 34.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2,M0		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-03-2020	39 - 39.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-03-2020	44 - 44.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**113**		< 1.0 U		< 20.0 U		< 20.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-03-2020	54.1 - 54.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**198 D6,M1**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-04-2020	58.9 - 59		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**217**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-04-2020	64 - 64.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-04-2020	69 - 69.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**108**		< 1.0 U		< 20.0 U		< 20.0 U
APS-005	N	12-04-2020	73.9 - 74		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-04-2020	79 - 79.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-05-2020	83.9 - 84		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-05-2020	89 - 89.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-05-2020	94 - 94.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-05-2020	99 - 99.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**163**		< 1.0 U		< 20.0 U		< 20.0 U
APS-005	N	12-05-2020	104 - 104.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-05-2020	109 - 109.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
	N	12-06-2020	114.5 - 114.6		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,L2		< 1.0 U		< 20.0 U		< 20.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-08-2021	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-11-2021		30 - 40		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**3.36**		< 1.0 U		< 20.0 U		< 20.0 U
APS-006	N	01-09-2021	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**56.8 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**42.1 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**201**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-09-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**179**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**196**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**307**		< 1.0 U		< 20.0 U		< 20.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**493 J**		< 1.0 U		< 20.0 U		< 20.0 U
	FD	05-11-2021		70 - 80		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**365 J**		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-11-2021		70 - 80		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**488**		< 1.0 U		< 20.0 U		< 20.0 U
APS-006	N	01-10-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**264**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**198**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**52.2 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**65.2 J,M1**		< 1.0 U		< 20.0 U		< 20.0 U	

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					Volatile Organic Compounds, Total															
				Analyte	1,3,5-Trimethylbenzene		1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		1,4-Dioxane		2,2-Dichloropropane		2-Butanone		2-Hexanone	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-11-2021		90 - 100		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**218**		< 1.0 U		< 20.0 U		< 20.0 U
APS-006	N	01-10-2021	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**112**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-10-2021	105 - 105.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**52.2 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-11-2021	110 - 110.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**66.7 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-11-2021	115 - 115.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-10-2021		20 - 30		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**18.2 J**		< 1.0 U		< 20.0 U		< 20.0 U
APS-007	N	01-12-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-10-2021		55 - 65		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**39.6 J**		< 1.0 U		< 20.0 U		< 20.0 U
APS-007	N	01-12-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U,M1		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-12-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-10-2021		90 - 100		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**57.4 J**		< 1.0 U		< 20.0 U		< 20.0 U
APS-007	N	01-13-2021	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	105 - 105.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-13-2021	110 - 110.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**25.6 J**		< 1.0 U		< 20.0 U		< 20.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		**12.3 J**		< 20.0 U
	N	08-10-2021		195 - 205		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**23.5 J**		< 1.0 U		< 20.0 U		< 20.0 U
APS-008	N	01-18-2021	16 - 16.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-06-2021		32 - 42		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 U		< 20.0 U		< 20.0 U
APS-008	N	01-19-2021	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-06-2021		62 - 72		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 U		< 20.0 U		< 20.0 U
APS-008	N	01-19-2021	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-19-2021	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-20-2021	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		**8.6 J**		< 20.0 U
	N	08-06-2021		92 - 102		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**5.37**		< 1.0 U		< 20.0 U		< 20.0 U
	FD	08-06-2021		92 - 102		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**5.44**		< 1.0 U		< 20.0 U		< 20.0 U
APS-008	N	01-20-2021	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-20-2021	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-20-2021	105 - 105.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-20-2021	110 - 110.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	1,3,5-Trimethylbenzene		1,3-Dichlorobenzene		1,3-Dichloropropane		1,4-Dichlorobenzene		1,4-Dioxane		2,2-Dichloropropane		2-Butanone		2-Hexanone	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	15 - 15.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	33 - 33.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	39 - 39.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-16-2021	43.4 - 43.5		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-17-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 U		< 20.0 U		< 20.0 U
APS-012	N	03-17-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-17-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-17-2021	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-17-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-17-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 U		< 20.0 U		< 20.0 U
APS-012	N	03-19-2021	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-19-2021	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-19-2021	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-05-2021		15 - 25		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 U		< 20.0 U		< 20.0 U
APS-013	N	01-21-2021	19 - 19.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	40 - 40.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-05-2021		40 - 50		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-013	N	01-21-2021	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-21-2021	65 - 65.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		**177**		< 20.0 U
	N	08-05-2021		65 - 75		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 3.00 U		< 1.0 UJ		**16.1 J**		< 20.0 U
APS-013	N	01-22-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-22-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	25 - 25.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	30 - 30.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	35 - 35.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	39 - 39.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	45 - 45.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	50 - 50.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**64.6**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-019	N	01-06-2021	55 - 55.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	60 - 60.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-06-2021	64 - 64.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	70 - 70.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**73.1 J**		< 1.0 U		< 20.0 U		< 20.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**297**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-019	N	01-07-2021	75 - 75.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	80 - 80.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**79.0 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	85 - 85.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	90 - 90.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	95 - 95.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-07-2021	100 - 100.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**57.8 J**		< 1.0 U		< 20.0 U		< 20.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**111**		< 1.0 UJ		< 20.0 U		< 20.0 U
APS-019	N	01-07-2021	105 - 105.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**54.8 J**		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-08-2021	110 - 110.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	01-08-2021	115 - 115.1		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
MW-118	N	05-19-2021		38 - 48		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	FD	05-19-2021		38 - 48		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 UJ		< 1.0 U		< 20.0 U		< 20.0 U
	N	08-19-2021		38 - 48		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**16.5**		< 1.0 U		< 20.0 U		< 20.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-20-2021	48.1 - 48.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-20-2021	58.1 - 58.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-21-2021	68.1 - 68.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	
	N	03-21-2021	73.1 - 73.2		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U		< 1.0 U		< 20.0 U		< 20.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	4-Chlorotoluene		4-Isopropyltoluene		4-Methyl-2-pentanone		Acetone		Acetonitrile		Acrolein		Acrylonitrile		Allyl chloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 5.0 U		< 100 U		< 100 U		< 500 U		< 100 U		< 500 U		< 100 U,L1	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-20-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 1.0 U		< 20.0 U		**9.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-23-2021		68 - 78		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 1.0 U		< 20.0 U		**5.9 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-09-2021		68 - 78		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 1.0 U		< 20.0 U		**8.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-09-2021		93 - 103		< 1.0 U		< 1.0 U		< 20.0 U		**4.5 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1,M0	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 1.0 U,L1		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1,M0	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 1.0 U,L1		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 1.0 U,L1		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 1.0 U,L1		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 1.0 U,L1		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 20.0 U		**11.9 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 20.0 U		**14.9 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 20.0 U		**3.8 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 20.0 U		**3.7 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 20.0 U		**88.3**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 20.0 U		**50.6 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 20.0 U		**45.9 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	4-Chlorotoluene		4-Isopropyltoluene		4-Methyl-2-pentanone		Acetone		Acetonitrile		Acrolein		Acrylonitrile		Allyl chloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 1.0 U		< 20.0 U		**12.8 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-16-2021		25 - 35		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 1.0 U		< 20.0 U		**5.3 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		**6.8 J**		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L2		< 100 U		< 20.0 U,L1	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 1.0 U		< 20.0 U		**12.8 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 20.0 U		**3.9 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 20.0 U		**4.3 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L1		< 100 U		< 20.0 U,L1	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L1		< 100 U		< 20.0 U,L1	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1,M0	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 20.0 U		**4.4 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L1		< 100 U		< 20.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1,M0	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L1		< 100 U		< 20.0 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 20.0 U		**4.9 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U,L1		< 100 U		< 20.0 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 20.0 U		**7.4 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 20.0 U		**6.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1,M0	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	4-Chlorotoluene		4-Isopropyltoluene		4-Methyl-2-pentanone		Acetone		Acetonitrile		Acrolein		Acrylonitrile		Allyl chloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		**2.0 J**		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 20.0 U		**6.2 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-10-2021		55 - 65		< 1.0 U		< 1.0 U		< 20.0 U		**3.8 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 20.0 U		**4.8 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 20.0 U		**16.8 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 20.0 U		**6.5 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 20.0 U		**3.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-06-2021		62 - 72		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 1.0 U		< 20.0 U		**11.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	4-Chlorotoluene		4-Isopropyltoluene		4-Methyl-2-pentanone		Acetone		Acetonitrile		Acrolein		Acrylonitrile		Allyl chloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U,L1		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U,L1		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U,L1		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U,L1		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 20.0 U		**3.0 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 20.0 U		**108**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 20.0 U		**22.4 J**		< 100 U		< 20.0 U		< 100 U		< 20.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 UJ		< 20.0 UJ		< 100 U		< 20.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 UJ		< 20.0 UJ		< 100 U		< 20.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		**0.80 J**		< 20.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 UJ		< 20.0 UJ		< 100 U		< 20.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 20.0 U		**3.1 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	FD	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 20.0 U		**3.1 J**		< 100 U		< 20.0 UJ		< 100 U		< 20.0 UJ
	N	08-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 UJ		< 100 U		< 20.0 UJ		< 100 U		< 20.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 1.0 U		< 20.0 U		< 20.0 U		< 100 U		< 20.0 U		< 100 U		< 20.0 U,L1	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	Benzene		beta-Chloroprene		Bromobenzene		Bromodichloromethane		Bromoform		Bromomethane		Carbon disulfide		Carbon tetrachloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		**271**		< 500 U,N2		< 5.0 U		< 5.0 U		< 5.0 U		< 25.0 U		< 25.0 U		< 5.0 U	
	N	12-19-2020	19 - 19.1		**184**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-19-2020	25 - 25.1		**12.4**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-19-2020	30 - 30.1		**1.1**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-20-2020	35 - 35.1		**0.64 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-20-2020	40 - 40.1		**149**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-20-2020	45 - 45.1		**53.4**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.19 J**		< 1.0 U	
	N	12-20-2020	50 - 50.1		**11.6**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.22 J**		< 1.0 U	
	N	12-20-2020	55 - 55.1		**129**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.15 J**		< 1.0 U	
	N	12-20-2020	60 - 60.1		**13.8**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-20-2020	65 - 65.1		**63.1**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.23 J**		< 1.0 U	
MW-302	N	05-17-2021		68 - 78		**684**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-23-2021		68 - 78		**485**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-001	N	12-21-2020	70 - 70.1		**105**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.13 J**		< 1.0 U	
	N	12-21-2020	75 - 75.1		**756**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.25 J**		< 1.0 U	
	N	12-21-2020	80 - 80.1		**593**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.27 J**		< 1.0 U	
	N	12-21-2020	85 - 85.1		**447**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.28 J**		< 1.0 U	
	N	12-21-2020	87.1 - 87.2		**189**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
APS-002	N	12-17-2020	25 - 25.1		**23.3**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	30 - 30.1		**25.3**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	33 - 33.1		**15.2**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	40 - 40.1		**7.9**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	45 - 45.1		**5.7**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	50 - 50.1		**6.1**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.26 J**		< 1.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.29 J**		< 1.0 U	
	N	12-17-2020	60 - 60.1		**2.0**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-17-2020	65 - 65.1		**3.4**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-303-P1	N	05-14-2021		68 - 78		**16.0**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-09-2021		68 - 78		**10.5**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-002	N	12-18-2020	70 - 70.1		**5.9**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-18-2020	75 - 75.1		**1.0**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-18-2020	80 - 80.1		**0.45 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-18-2020	81 - 81.1		**0.37 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-303-P2	N	05-14-2021		93 - 103		**225**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-09-2021		93 - 103		**276**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-003	N	12-09-2020	23.1 - 23.2		**11.2**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.76 J**		< 1.0 U	
	N	12-09-2020	30 - 30.1		**4.6**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-09-2020	35.2 - 35.3		**5.2**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	40 - 40.1		**1.5**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U,L1	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Benzene		beta-Chloroprene		Bromobenzene		Bromodichloromethane		Bromoform		Bromomethane		Carbon disulfide		Carbon tetrachloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		**3.6**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-06-2020	25 - 25.1		**4.0**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-306-P1	N	05-13-2021		25 - 35		**1.6**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-16-2021		25 - 35		**1.6**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-004	N	12-06-2020	30 - 30.1		**6.1**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-06-2020	35 - 35.1		**5.4**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-06-2020	40 - 40.1		**5.6**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-07-2020	60 - 60.1		**0.41 J**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-07-2020	65 - 65.1		**0.46 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-08-2020	70 - 70.1		**0.40 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.68 J**		< 1.0 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 100 U,N2,L2,M0		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.64 J**		< 1.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.67 J**		< 1.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 100 U,N2,L2,M0		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.68 J**		< 1.0 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.74 J**		< 1.0 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.66 J**		< 1.0 U	
	N	12-05-2020	83.9 - 84		**0.37 J**		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.59 J**		< 1.0 U	
	N	12-05-2020	89 - 89.1		**0.29 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 100 U,N2,L2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Benzene		beta-Chloroprene		Bromobenzene		Bromodichloromethane		Bromoform		Bromomethane		Carbon disulfide		Carbon tetrachloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-10-2021		20 - 30		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-10-2021		55 - 65		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-12-2021	70 - 70.1		**0.14 J**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.13 J**		< 1.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.83 J**		< 1.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.93 J**		< 1.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		**0.70 J**		< 1.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-06-2021		62 - 72		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-06-2021		92 - 102		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	Benzene		beta-Chloroprene		Bromobenzene		Bromodichloromethane		Bromoform		Bromomethane		Carbon disulfide		Carbon tetrachloride	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		**0.14 J**		< 1.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
MW-118	N	05-19-2021		38 - 48		**1.5**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	FD	05-19-2021		38 - 48		**1.4**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 UJ		< 5.0 U		< 1.0 U
	N	08-19-2021		38 - 48		**2.1**		< 100 U		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-20-2021	48.1 - 48.2		**3.9**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-20-2021	58.1 - 58.2		**2.1**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-21-2021	68.1 - 68.2		**9.4**		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 100 U,N2		< 1.0 U		< 1.0 U		< 1.0 U		< 5.0 U		< 5.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Chlorobenzene		Chlorobromomethane		Chloroethane		Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Cyclohexane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		**70.7**		< 5.0 U		< 10.0 U		< 5.0 U		< 10.0 U		< 5.0 U		< 5.0 U		< 100 U,N2	
	N	12-19-2020	19 - 19.1		**40.8**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-19-2020	25 - 25.1		**172**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.53 J**		< 1.0 U		< 20.0 U,N2	
	N	12-19-2020	30 - 30.1		**0.49 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.1**		< 1.0 U		< 20.0 U,N2	
	N	12-20-2020	35 - 35.1		**142**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.47 J**		< 1.0 U		< 20.0 U,N2	
	N	12-20-2020	40 - 40.1		**297**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.37 J**		< 1.0 U		< 20.0 U,N2	
	N	12-20-2020	45 - 45.1		**326**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.97 J**		< 1.0 U		**0.26 J,N2**	
	N	12-20-2020	50 - 50.1		**173**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.72 J**		< 1.0 U		< 20.0 U,N2	
	N	12-20-2020	55 - 55.1		**296**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.7**		< 1.0 U		**0.16 J,N2**	
	N	12-20-2020	60 - 60.1		**56.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.1**		< 1.0 U		< 20.0 U,N2	
	N	12-20-2020	65 - 65.1		**63.9**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.2**		< 1.0 U		**0.15 J,N2**	
MW-302	N	05-17-2021		68 - 78		**61.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-23-2021		68 - 78		**52.7**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-001	N	12-21-2020	70 - 70.1		**9.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.46 J**		< 1.0 U		< 20.0 U,N2	
	N	12-21-2020	75 - 75.1		**64.2**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.30 J**		< 1.0 U		< 20.0 U,N2	
	N	12-21-2020	80 - 80.1		**59.1**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-21-2020	85 - 85.1		**35.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-21-2020	87.1 - 87.2		**6.4**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**4.1 J,N2**	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**6.8 J,N2**	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**3.9 J,N2**	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**18.1**		< 1.0 U		**0.88 J,N2**	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**23.7**		< 1.0 U		**1.4 J,N2**	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**16.6**		< 1.0 U		< 20.0 U,N2	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**9.3**		< 1.0 U		< 20.0 U,N2	
	N	12-17-2020	60 - 60.1		**0.48 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**10.6**		< 1.0 U		< 20.0 U,N2	
	N	12-17-2020	65 - 65.1		**0.53 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**14.3**		< 1.0 U		< 20.0 U,N2	
MW-303-P1	N	05-14-2021		68 - 78		**1.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**11.3**		< 1.0 U		< 20.0 U
	N	08-09-2021		68 - 78		**1.3**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		**14.5**		< 1.0 U		**0.45 J**
APS-002	N	12-18-2020	70 - 70.1		**0.46 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**21.4**		< 1.0 U		< 20.0 U,N2	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**14.4**		< 1.0 U		< 20.0 U,N2	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**9.1**		< 1.0 U		< 20.0 U,N2	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**8.3**		< 1.0 U		< 20.0 U,N2	
MW-303-P2	N	05-14-2021		93 - 103		**27.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.4**		< 1.0 U		< 20.0 U
	N	08-09-2021		93 - 103		**36.4**		< 1.0 U		**0.81 J**		< 1.0 U		< 2.0 U		**1.6**		< 1.0 U		< 20.0 U
APS-003	N	12-09-2020	23.1 - 23.2		**63.1**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-09-2020	30 - 30.1		**9.9**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**1.9 J,N2**	
	N	12-09-2020	35.2 - 35.3		**10.7**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**1.1 J,N2**	
	N	12-14-2020	40 - 40.1		**3.0**		< 1.0 U		**4.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**1.2 J,N2**	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 1.0 U		**3.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 1.0 U		**3.3**		< 1.0 U		< 2.0 U		**1.4**		< 1.0 U		< 20.0 U,N2	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 1.0 U		**5.4**		< 1.0 U		< 2.0 U		**3.1**		< 1.0 U		< 20.0 U,N2	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**4.0**		< 1.0 U		< 20.0 U,N2	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**6.5**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**16.5**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**21.4**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**15.1**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**17.0**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**16.5**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**11.9**		< 1.0 U		< 20.0 U,N2	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**10.5**		< 1.0 U		< 20.0 U,N2	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**12.9**		< 1.0 U		< 20.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**13.4**		< 1.0 U		< 20.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 UJ		**12.0**		< 1.0 U		< 20.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**5.2**		< 1.0 U		< 20.0 U,N2	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.3**		< 1.0 U		< 20.0 U,N2	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**5.2**		< 1.0 U		< 20.0 U,N2	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.64 J**		< 1.0 U		< 20.0 U,N2	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.4**		< 1.0 U		< 20.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 U		**0.55 J**		< 2.0 UJ		**1.4**		< 1.0 U		< 20.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 U		**0.54 J**		< 2.0 UJ		**1.4**		< 1.0 U		< 20.0 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	Chlorobenzene		Chlorobromomethane		Chloroethane		Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Cyclohexane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		**43.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.4**		< 1.0 U		< 20.0 U,N2	
	N	12-06-2020	25 - 25.1		**55.8**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.5**		< 1.0 U		< 20.0 U,N2	
MW-306-P1	N	05-13-2021		25 - 35		**35.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.1**		< 1.0 U		< 20.0 U
	N	08-16-2021		25 - 35		**72.0**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-004	N	12-06-2020	30 - 30.1		**138**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.3**		< 1.0 U		< 20.0 U,N2	
	N	12-06-2020	35 - 35.1		**126**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.5**		< 1.0 U		< 20.0 U,N2	
	N	12-06-2020	40 - 40.1		**124**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.8**		< 1.0 U		< 20.0 U,N2	
	N	12-07-2020	45 - 45.1		**24.4**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**3.5**		< 1.0 U		< 20.0 U,N2	
	N	12-07-2020	50 - 50.1		**30.5**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**7.0**		< 1.0 U		< 20.0 U,N2	
	N	12-07-2020	55 - 55.1		**31.5**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**12.2**		< 1.0 U		< 20.0 U,N2	
	N	12-07-2020	60 - 60.1		**13.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**16.7**		< 1.0 U		< 20.0 U,N2	
	N	12-07-2020	65 - 65.1		**5.5**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**34.1**		< 1.0 U		< 20.0 U,N2	
	N	12-08-2020	70 - 70.1		**3.5**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**27.4**		< 1.0 U		< 20.0 U,N2	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**8.7**		< 1.0 U		< 20.0 U,N2	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**18.6**		< 1.0 U		< 20.0 U,N2	
MW-306-P2	N	05-13-2021		80 - 90		**3.2**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**8.6**		< 1.0 U		< 20.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**2.5**		< 1.0 U		**0.18 J**
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**2.6**		< 1.0 U		< 20.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**4.8**		< 1.0 U		< 20.0 U,N2	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**5.1**		< 1.0 U		< 20.0 U,N2	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**8.6**		< 1.0 U		< 20.0 U,N2	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.9**		< 1.0 U		< 20.0 U,N2	
MW-306-P3	N	05-13-2021		110 - 120		**0.73 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**6.7**		< 1.0 U		< 20.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**1.4**		< 1.0 U		< 20.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**1.5**		< 1.0 U		< 20.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.7**		< 1.0 U		< 20.0 U,N2	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**15.8**		< 1.0 U		< 20.0 U,N2	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.56 J**		< 1.0 U		< 20.0 U,N2	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.30 J**		< 1.0 U		< 20.0 U,N2	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.59 J**		< 1.0 U		< 20.0 U,N2	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-04-2020	58.9 - 59		**1.7**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.31 J**		< 1.0 U		< 20.0 U,N2	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.45 J**		< 1.0 U		< 20.0 U,N2	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.6**		< 1.0 U		< 20.0 U,N2	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.8**		< 1.0 U		< 20.0 U,N2	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.68 J**		< 1.0 U		< 20.0 U,N2	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.35 J**		< 1.0 U		< 20.0 U,N2	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.39 J**		< 1.0 U		< 20.0 U,N2	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.085 J**		< 1.0 U		< 20.0 U,N2	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-11-2021		30 - 40		**0.89 J**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-006	N	01-09-2021	35 - 35.1		**1.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	40 - 40.1		**7.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	45 - 45.1		**11.1**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	50 - 50.1		**0.71 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.30 J**		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.48 J**		< 1.0 U		< 20.0 U,N2	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Chlorobenzene		Chlorobromomethane		Chloroethane		Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Cyclohexane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.95 J**		< 1.0 U		< 20.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**1.2**		< 1.0 U		< 20.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.89 J**		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.8**		< 1.0 U		< 20.0 U,N2	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**2.1**		< 1.0 U		< 20.0 U,N2	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.7**		< 1.0 U		< 20.0 U,N2	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.9**		< 1.0 U		< 20.0 U,N2	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**3.2**		< 1.0 U		< 20.0 U,N2	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.31 J**		< 1.0 U		< 20.0 U
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		**1.2**		< 1.0 U		< 20.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**3.1**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	30 - 30.1		**1.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**3.0**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	35 - 35.1		**1.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.9**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	40 - 40.1		**0.93 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.42 J**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	45 - 45.1		**0.73 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.58 J**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	50 - 50.1		**0.84 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.4**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	55 - 55.1		**0.93 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**1.0**		< 1.0 U		< 20.0 U,N2	
MW-400-P2	N	05-12-2021		55 - 65		**1.1**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-10-2021		55 - 65		**2.2**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-007	N	01-12-2021	60 - 60.1		**1.4**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.27 J**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	65 - 65.1		**1.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.29 J**		< 1.0 U		< 20.0 U,N2	
	N	01-12-2021	70 - 70.1		**4.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.18 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.12 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.11 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	85 - 85.1		**1.4**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.14 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	90 - 90.1		**0.52 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.16 J**		< 1.0 U		< 20.0 U,N2	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-10-2021		90 - 100		**0.65 J**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-007	N	01-13-2021	95 - 95.1		**0.61 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.13 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	100 - 100.1		**0.66 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.14 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	105 - 105.1		**0.47 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.16 J**		< 1.0 U		< 20.0 U,N2	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.25 J**		< 1.0 U		< 20.0 U,N2	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 2.0 U		**0.44 J**		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-401-P2	N	05-07-2021		62 - 72		**2.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-06-2021		62 - 72		**0.75 J**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-008	N	01-19-2021	65 - 65.1		**1.8**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.13 J**		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	70 - 70.1		**4.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	75 - 75.1		**3.0**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	80 - 80.1		**0.89 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.11 J**		< 1.0 U		< 20.0 U,N2	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-20-2021	90 - 90.1		**2.1**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-401-P3	N	05-07-2021		92 - 102		**0.75 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-06-2021		92 - 102		**1.1**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
	FD	08-06-2021		92 - 102		**1.1**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-008	N	01-20-2021	95 - 95.1		**1.4**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.18 J**		< 1.0 U		< 20.0 U,N2	
	N	01-20-2021	100 - 100.1		**0.67 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.21 J**		< 1.0 U		< 20.0 U,N2	
	N	01-20-2021	105 - 105.1		**0.66 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.22 J**		< 1.0 U		< 20.0 U,N2	
	N	01-20-2021	110 - 110.1		**0.66 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.14 J**		< 1.0 U		< 20.0 U,N2	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Chlorobenzene		Chlorobromomethane		Chloroethane		Chloroform		Chloromethane		cis-1,2-Dichloroethene		cis-1,3-Dichloropropene		Cyclohexane	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 UJ		< 1.0 U		< 1.0 U		< 20.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.44 J**		< 1.0 U		< 20.0 U,N2	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		**1.4 J**		< 1.0 U		< 2.0 U		**0.82 J**		< 1.0 U		< 20.0 UJ
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.85 J**		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.95 J**		< 1.0 U		< 20.0 U,N2	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.35 J**		< 1.0 U		< 20.0 U,N2	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		**5.9**		< 1.0 U		< 2.0 U		**0.21 J**		< 1.0 U		**0.26 J,N2**	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		**7.8 J**		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		**0.19 J**
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		**1.4 J**		< 1.0 U		< 2.0 U		**0.42 J**		< 1.0 U		< 20.0 U,N2	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		**0.82 J**		< 1.0 U		< 2.0 U		**0.44 J**		< 1.0 U		**0.16 J,N2**	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.43 J**		< 1.0 U		< 20.0 U,N2	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.49 J**		< 1.0 U		< 20.0 U,N2	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.46 J**		< 1.0 U		< 20.0 U,N2	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.61 J**		< 1.0 U		< 20.0 U,N2	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		**0.71 J**		< 1.0 U		< 20.0 UJ
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.62 J**		< 1.0 U		< 20.0 U,N2	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.78 J**		< 1.0 U		< 20.0 U,N2	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		**0.86 J**		< 1.0 U		< 20.0 U,N2	
MW-118	N	05-19-2021		38 - 48		**15.7**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	FD	05-19-2021		38 - 48		**15.2**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
	N	08-19-2021		38 - 48		**37.2**		< 1.0 U		< 2.0 UJ		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U
APS-021	N	03-20-2021	38.1 - 38.2		**1.3**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-20-2021	48.1 - 48.2		**11.5**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-20-2021	58.1 - 58.2		**29.6**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-21-2021	68.1 - 68.2		**125**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	
	N	03-21-2021	73.1 - 73.2		**8.9**		< 1.0 U		< 2.0 U		< 1.0 U		< 2.0 U		< 1.0 U		< 1.0 U		< 20.0 U,N2	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane (Freon 12)		Ethyl ether		Ethyl methacrylate		Ethylbenzene		Ethylene dibromide		Hexachlorobutadiene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 5.0 U		< 10.0 U		**4.3 J**		< 100 U		< 5.0 U		< 5.0 U		< 5.0 U	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 1.0 U		< 2.0 U		**5.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		**24.2**		< 20.0 U		**0.38 J**		< 1.0 U		< 1.0 U	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.6 J**		< 20.0 U		**0.48 J**		< 1.0 U		< 1.0 U	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		**19.5 J**		< 20.0 U		**25.0**		< 1.0 U		< 1.0 U	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		**72.7**		< 20.0 U		**0.28 J**		< 1.0 U		< 1.0 U	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		**48.5**		< 20.0 U		**0.11 J**		< 1.0 U		< 1.0 U	
	N	12-20-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**70.9**		< 20.0 U		**0.70 J**		< 1.0 U		< 1.0 U	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**20.2**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		**47.0**		< 20.0 U		**0.24 J**		< 1.0 U		< 1.0 U	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 1.0 U		< 2.0 U		**27.2**		< 20.0 U		**3.2**		< 0.034 U		< 1.0 U
	N	08-23-2021		68 - 78		< 1.0 U		< 1.0 U		< 2.0 UJ		**30.3**		< 20.0 U		**1.9**		< 0.036 U		< 1.0 U
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**27.7**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**40.5**		< 20.0 U		**2.8**		< 1.0 U		< 1.0 U	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**36.4**		< 20.0 U		**4.4**		< 1.0 U		< 1.0 U	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**32.9**		< 20.0 U		**4.2**		< 1.0 U		< 1.0 U	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 1.0 U		< 2.0 U		**25.5**		< 20.0 U		**0.29 J**		< 1.0 U		< 1.0 U	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		**31.6**		< 20.0 U		**4.9**		< 1.0 U		< 1.0 U	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		**29.5**		< 20.0 U		**0.20 J**		< 1.0 U		< 1.0 U	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		< 2.0 U		**22.1**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		**11.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.8 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		**11.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 1.0 U		< 2.0 U		**9.8 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-09-2021		68 - 78		< 1.0 U		< 1.0 U		< 2.0 UJ		**11.7 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 2.0 U		**7.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 1.0 U		< 2.0 U		**39.8**		< 20.0 U		**0.46 J**		< 0.035 U		< 1.0 U
	N	08-09-2021		93 - 103		< 1.0 U		< 1.0 U		< 2.0 U		**44.9**		< 20.0 U		**0.56 J**		< 0.034 U		< 1.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 1.0 U		< 2.0 U		**12.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 1.0 U		< 2.0 U		**8.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U,L1,M0		**8.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**7.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**8.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**8.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**7.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**7.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**12.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**12.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		**11.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**4.3 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 U		**17.4 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 U		**17.5 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 2.0 UJ		**21.6**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 2.0 U		**12.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 2.0 U		**7.0 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 U		**5.3 J**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 UJ		**3.7 J**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 2.0 UJ		**3.7 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane (Freon 12)		Ethyl ether		Ethyl methacrylate		Ethylbenzene		Ethylene dibromide		Hexachlorobutadiene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		**12.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 1.0 U		< 2.0 U		**9.1 J**		< 20.0 U		< 1.0 U		< 0.038 U		< 1.0 U
	N	08-16-2021		25 - 35		< 1.0 U		< 1.0 U		< 2.0 U		**17.8 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.3 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		**11.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**8.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**9.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 1.0 U		< 2.0 U		**10.6 J**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 2.0 U		**16.1 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 2.0 U		**16.6 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.3 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 1.0 U		< 2.0 U		**10 J**		< 20.0 U		< 1.0 U		< 0.040 U		< 1.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 2.0 U		**11.6 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 2.0 U		**12.4 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 2.0 U		**5.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 2.0 U		**47.6**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.8 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		**16.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 2.0 U		**14.6 J**		< 20.0 U		< 1.0 U		< 0.038 U		< 1.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 2.0 U,L1		**14.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 2.0 U		**28.0 D6**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 1.0 U		< 2.0 U		**42.9**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 2.0 U		**40.2**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 2.0 U		**20.2**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 2.0 U		**14.0 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 2.0 U		**15.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 2.0 U		**11.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**14.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 2.0 U		**19.9 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 2.0 U,L1		**16.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 2.0 U		**13.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 2.0 U		**3.9 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		**5.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		**33.0**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		**16.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**80.1**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**56.7**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		**49.9**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**72.0**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 U		**63.4**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 U		**64.6**		< 20.0 U		< 1.0 U		< 0.037 U		< 1.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 2.0 U		**81.1**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**71.5**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**58.2**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**27.5**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		**21.2**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane (Freon 12)		Ethyl ether		Ethyl methacrylate		Ethylbenzene		Ethylene dibromide		Hexachlorobutadiene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		**25.2**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		**26.7**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		**15.8 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**21.7**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		**21.6**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 2.0 U		**6.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.48 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		< 2.0 U		**4.0 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 2.0 U		**1.7 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		**1.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.71 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.59 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.58 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**2.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 1.0 U		< 2.0 U		**6.4 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-10-2021		55 - 65		< 1.0 U		< 1.0 U		< 2.0 U		**7.7 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**2.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.87 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**6.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**26.0**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**5.8 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		**6.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		**5.5 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 1.0 U		< 2.0 U		**7.4 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		**5.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**2.9 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		**3.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		**5.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 2.0 U		**4.1 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 2.0 U		**1.5 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 2.0 U		**4.0 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 2.0 U		**1.1 J**		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.037 U		< 1.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 2.0 UJ		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		**0.096 J**		< 1.0 U		< 1.0 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.037 U		< 1.0 U
	N	08-06-2021		62 - 72		< 1.0 U		< 1.0 U		< 2.0 UJ		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.23 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 1.0 U		< 2.0 U		**1.2 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
	N	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 2.0 UJ		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 2.0 UJ		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.86 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.37 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		**0.32 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

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					Volatile Organic Compounds, Total															
				Analyte	Dibromochloromethane		Dibromomethane		Dichlorodifluoromethane (Freon 12)		Ethyl ether		Ethyl methacrylate		Ethylbenzene		Ethylene dibromide		Hexachlorobutadiene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.037 U		< 1.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 2.0 UJ		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		< 2.0 U		**12.8 J**		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 2.0 U		**1.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 2.0 U		**2.5 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 2.0 U		**24.0**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 2.0 U		**49.0**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		< 2.0 U		**58.8**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 2.0 U		**25.6**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 2.0 U		**28.7**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 2.0 U		**10.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 2.0 U		**14.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 2.0 U		**28.7**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 2.0 U		**14.8 J**		< 20.0 U		< 1.0 U		< 0.039 U		< 1.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 2.0 U		**13.7 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 2.0 U		**12.4 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 2.0 U		**4.2 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.035 U		< 1.0 U
	FD	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 2.0 U		< 20.0 U		< 20.0 U		< 1.0 U		< 0.034 U		< 1.0 U
	N	08-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 2.0 U		**9.7 J**		< 20.0 U		< 1.0 U		< 0.036 U		< 1.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 1.0 U		< 2.0 U		**2.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 1.0 U		< 2.0 U		**12.0 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 1.0 U		< 2.0 U		**11.8 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 1.0 U		< 2.0 U		**13.1 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 1.0 U		< 2.0 U		**4.6 J**		< 20.0 U		< 1.0 U		< 1.0 U		< 1.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Isobutyl alcohol		Isopropylbenzene (Cumene)		m,p-Xylenes		Methacrylonitrile		Methyl acetate		Methyl iodide		Methyl methacrylate		Methyl tert-butyl ether	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 500 U,N2		**3.7 J**		< 10.0 U		< 500 U		< 100 U,N2		< 25.0 U		< 100 U		< 20.0 U	
	N	12-19-2020	19 - 19.1		< 100 U,N2		**2.6**		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-19-2020	25 - 25.1		< 100 U,N2		**0.93 J**		**1.3 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.74 J**	
	N	12-19-2020	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-20-2020	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.78 J**	
	N	12-20-2020	40 - 40.1		< 100 U,N2		**3.5**		**16.3**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.81 J**	
	N	12-20-2020	45 - 45.1		< 100 U,N2		**0.46 J**		**3.6**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**4.8**	
	N	12-20-2020	50 - 50.1		< 100 U,N2		**1.6**		**2.0**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**4.1**	
	N	12-20-2020	55 - 55.1		< 100 U,N2		**3.2**		**6.0**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**7.0**	
	N	12-20-2020	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.3 J**	
	N	12-20-2020	65 - 65.1		< 100 U,N2		**0.78 J**		**0.28 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**8.1**	
MW-302	N	05-17-2021		68 - 78		< 100 U		**6.3**		**3.5**		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**8.2**
	N	08-23-2021		68 - 78		< 100 U		**5.9**		**2.6 J**		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**7.4**
APS-001	N	12-21-2020	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**6.3**	
	N	12-21-2020	75 - 75.1		< 100 U,N2		**4.2**		**3.2**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**11.3**	
	N	12-21-2020	80 - 80.1		< 100 U,N2		**4.6**		**4.6**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**10.3**	
	N	12-21-2020	85 - 85.1		< 100 U,N2		**1.4**		**1.2 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**8.3**	
	N	12-21-2020	87.1 - 87.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**6.3**	
APS-002	N	12-17-2020	25 - 25.1		< 100 U,N2		**5.2**		**17.5**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.51 J**	
	N	12-17-2020	30 - 30.1		< 100 U,N2		**5.1**		**1.4 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.46 J**	
	N	12-17-2020	33 - 33.1		< 100 U,N2		**0.90 J**		**0.50 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.31 J**	
	N	12-17-2020	40 - 40.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.092 J**	
	N	12-17-2020	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.13 J**	
	N	12-17-2020	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.23 J**	
	N	12-17-2020	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-17-2020	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-17-2020	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.36 J**
	N	08-09-2021		68 - 78		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-002	N	12-18-2020	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-18-2020	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-18-2020	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-18-2020	81 - 81.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**6.2**
	N	08-09-2021		93 - 103		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**6.4**
APS-003	N	12-09-2020	23.1 - 23.2		< 100 U,N2		**0.26 J**		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.50 J**	
	N	12-09-2020	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.24 J**	
	N	12-09-2020	35.2 - 35.3		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.26 J**	
	N	12-14-2020	40 - 40.1		< 100 U,N2		< 1.0 U		**0.30 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.22 J**	
	N	12-14-2020	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-14-2020	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-14-2020	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-14-2020	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-14-2020	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-14-2020	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	85 - 85.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	95 - 95.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	100 - 100.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-15-2020	105 - 105.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.61 J**
	FD	05-24-2021		106 - 116		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.64 J**
	N	08-04-2021		106 - 116		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.67 J**
APS-003	N	12-16-2020	113 - 113.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-16-2020	117 - 117.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.33 J**	
	N	12-16-2020	121 - 121.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.35 J**	
	N	12-16-2020	125 - 125.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.34 J**	
MW-304-P2	N	05-24-2021		126 - 136		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-04-2021		126 - 136		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.24 J**
	N	08-04-2021		221 - 231		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	FD	08-04-2021		221 - 231		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Isobutyl alcohol		Isopropylbenzene (Cumene)		m,p-Xylenes		Methacrylonitrile		Methyl acetate		Methyl iodide		Methyl methacrylate		Methyl tert-butyl ether	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.23 J**	
	N	12-06-2020	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.23 J**	
MW-306-P1	N	05-13-2021		25 - 35		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.25 J**
	N	08-16-2021		25 - 35		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.25 J**
APS-004	N	12-06-2020	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.33 J**	
	N	12-06-2020	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	12-06-2020	40 - 40.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.34 J**	
	N	12-07-2020	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.19 J**	
	N	12-07-2020	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.24 J**	
	N	12-07-2020	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-07-2020	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-07-2020	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-08-2020	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-08-2020	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.24 J**	
	N	12-08-2020	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.29 J**
	N	08-16-2021		80 - 90		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.30 J**
	FD	08-16-2021		80 - 90		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.30 J**
APS-004	N	12-08-2020	85 - 85.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.29 J**	
	N	12-08-2020	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	12-09-2020	95 - 95.1		< 100 U,N2		< 1.0 U		**0.50 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.29 J**	
	N	12-09-2020	100 - 100.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.37 J**	
MW-306-P3	N	05-13-2021		110 - 120		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-16-2021		110 - 120		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.24 J**
	FD	08-16-2021		110 - 120		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-005	N	12-01-2020	23.9 - 24		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-01-2020	29 - 29.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.76 J**	
	N	12-03-2020	34 - 34.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	12-03-2020	39 - 39.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.29 J**	
	N	12-03-2020	44 - 44.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.28 J**	
MW-404-P1	N	08-18-2021		48 - 58		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.23 J**
APS-005	N	12-03-2020	49.1 - 49.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.31 J**	
	N	12-03-2020	54.1 - 54.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.31 J**	
	N	12-04-2020	58.9 - 59		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.36 J**	
	N	12-04-2020	64 - 64.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.37 J**	
	N	12-04-2020	69 - 69.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.27 J**	
MW-404-P2	N	08-18-2021		73 - 83		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.22 J**
APS-005	N	12-04-2020	73.9 - 74		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	12-04-2020	79 - 79.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.28 J**	
	N	12-05-2020	83.9 - 84		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	12-05-2020	89 - 89.1		< 100 U,N2		< 1.0 U		**0.17 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.31 J**	
	N	12-05-2020	94 - 94.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.28 J**	
	N	12-05-2020	99 - 99.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.25 J**	
MW-404-P3	N	08-18-2021		103 - 113		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.33 J**
APS-005	N	12-05-2020	104 - 104.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.22 J**	
	N	12-05-2020	109 - 109.1		< 100 U,N2		< 1.0 U		**0.18 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.32 J**	
	N	12-06-2020	114.5 - 114.6		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.29 J**	
APS-006	N	01-08-2021	15 - 15.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-08-2021	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-11-2021		30 - 40		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-006	N	01-09-2021	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	40 - 40.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.63 J**	
	N	01-09-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-09-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	01-10-2021	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.27 J**	
	N	01-10-2021	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.72 J**
	FD	05-11-2021		70 - 80		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.73 J**
	N	08-11-2021		70 - 80		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.5 J**
APS-006	N	01-10-2021	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.0 J**	
	N	01-10-2021	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.8 J**	
	N	01-10-2021	85 - 85.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.4 J**	
	N	01-10-2021	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**3.9 J**	

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	Isobutyl alcohol		Isopropylbenzene (Cumene)		m,p-Xylenes		Methacrylonitrile		Methyl acetate		Methyl iodide		Methyl methacrylate		Methyl tert-butyl ether	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**2.8 J**
	N	08-11-2021		90 - 100		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**3.5 J**
APS-006	N	01-10-2021	95 - 95.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**4.7**	
	N	01-10-2021	100 - 100.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**3.2 J**	
	N	01-10-2021	105 - 105.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**3.9 J**	
	N	01-11-2021	110 - 110.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.5 J**	
	N	01-11-2021	115 - 115.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**5.5**	
APS-007	N	01-12-2021	15 - 15.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		**1.8 J**		**1.6 J**
	N	08-10-2021		20 - 30		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.91 J**
APS-007	N	01-12-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	40 - 40.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**2.1 J**
	N	08-10-2021		55 - 65		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.4 J**
APS-007	N	01-12-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-12-2021	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.73 J**	
	N	01-13-2021	75 - 75.1		< 100 U,N2		< 1.0 U		**0.22 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.6 J**	
	N	01-13-2021	80 - 80.1		< 100 U,N2		< 1.0 U		**0.18 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.2 J**	
	N	01-13-2021	85 - 85.1		< 100 U,N2		< 1.0 U		**0.16 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.7 J**	
	N	01-13-2021	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.5 J**	
MW-400-P3	N	05-12-2021		90 - 100		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**2.4 J**
	N	08-10-2021		90 - 100		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**3.4 J**
APS-007	N	01-13-2021	95 - 95.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.8 J**	
	N	01-13-2021	100 - 100.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.2 J**	
	N	01-13-2021	105 - 105.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.1 J**	
	N	01-13-2021	110 - 110.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**2.3 J**	
MW-400-P4	N	05-12-2021		145 - 155		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		**2.9 J**		**2.0 J**
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.1 J**
MW-400-P5	N	05-12-2021		195 - 205		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.8 J**
	N	08-10-2021		195 - 205		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.0 J**
APS-008	N	01-18-2021	16 - 16.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-06-2021		32 - 42		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-008	N	01-19-2021	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	40 - 40.1		< 100 U,N2		< 1.0 U		**0.38 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	55 - 55.1		< 100 U,N2		< 1.0 U		**0.23 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-06-2021		62 - 72		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-008	N	01-19-2021	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	70 - 70.1		< 100 U,N2		< 1.0 U		**0.22 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	75 - 75.1		< 100 U,N2,L2		< 1.0 U		**0.19 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	80 - 80.1		< 100 U,N2,L2		< 1.0 U		**0.18 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-19-2021	85 - 85.1		< 100 U,N2,L2		< 1.0 U		**0.16 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-20-2021	90 - 90.1		< 100 U,N2,L2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**1.1 J**
	N	08-06-2021		92 - 102		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.76 J**
	FD	08-06-2021		92 - 102		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.70 J**
APS-008	N	01-20-2021	95 - 95.1		< 100 U,N2,L2		< 1.0 U		**0.16 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.30 J**	
	N	01-20-2021	100 - 100.1		< 100 U,N2,L2		< 1.0 U		**0.21 J**		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.0 J**	
	N	01-20-2021	105 - 105.1		< 100 U,N2,L2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.0 J**	
	N	01-20-2021	110 - 110.1		< 100 U,N2,L2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.1 J**	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Isobutyl alcohol		Isopropylbenzene (Cumene)		m,p-Xylenes		Methacrylonitrile		Methyl acetate		Methyl iodide		Methyl methacrylate		Methyl tert-butyl ether	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	15 - 15.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.58 J**	
	N	03-16-2021	33 - 33.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	39 - 39.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-16-2021	43.4 - 43.5		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-17-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**0.24 J**
APS-012	N	03-17-2021	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-17-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-17-2021	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-17-2021	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-17-2021	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-012	N	03-19-2021	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-19-2021	85 - 85.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-19-2021	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-05-2021		15 - 25		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-013	N	01-21-2021	19 - 19.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	40 - 40.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-05-2021		40 - 50		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-013	N	01-21-2021	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-21-2021	65 - 65.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-05-2021		65 - 75		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-013	N	01-22-2021	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-22-2021	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.36 J**	
APS-019	N	01-05-2021	20 - 20.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	25 - 25.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	30 - 30.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	35 - 35.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	39 - 39.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	45 - 45.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	50 - 50.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-019	N	01-06-2021	55 - 55.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	60 - 60.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-06-2021	64 - 64.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	01-07-2021	70 - 70.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.2 J**	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**3.0 J**
APS-019	N	01-07-2021	75 - 75.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**6.6**	
	N	01-07-2021	80 - 80.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**5.7**	
	N	01-07-2021	85 - 85.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**7.6**	
	N	01-07-2021	90 - 90.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**9.0**	
	N	01-07-2021	95 - 95.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**5.9**	
	N	01-07-2021	100 - 100.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**1.9 J**	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		**5.6**
APS-019	N	01-07-2021	105 - 105.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**4.2**	
	N	01-08-2021	110 - 110.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**4.4**	
	N	01-08-2021	115 - 115.1		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**5.4**	
MW-118	N	05-19-2021		38 - 48		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	FD	05-19-2021		38 - 48		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
	N	08-19-2021		38 - 48		< 100 U		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U		< 5.0 UJ		< 20.0 U		< 4.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-20-2021	48.1 - 48.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-20-2021	58.1 - 58.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		**0.33 J**	
	N	03-21-2021	68.1 - 68.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	
	N	03-21-2021	73.1 - 73.2		< 100 U,N2		< 1.0 U		< 2.0 U		< 100 U		< 20.0 U,N2		< 5.0 U		< 20.0 U		< 4.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Methylcyclohexane		Methylene chloride		n-Butylbenzene		n-Hexane		n-Propylbenzene		o-Chlorotoluene (2-chlorotoluene)		o-Xylene		Propionitrile	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 100 U,N2		< 25.0 U		< 5.0 U		< 25.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 500 U	
	N	12-19-2020	19 - 19.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		**0.77 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-19-2020	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-19-2020	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.31 J**		< 100 U	
	N	12-20-2020	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**15.7**		< 100 U	
	N	12-20-2020	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.36 J**		< 100 U	
	N	12-20-2020	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.87 J**		< 100 U	
	N	12-20-2020	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.53 J**		< 100 U	
	N	12-20-2020	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.27 J**		< 100 U	
MW-302	N	05-17-2021		68 - 78		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		**1.2**		< 1.0 U		**7.5**		< 100 U
	N	08-23-2021		68 - 78		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		**1.2**		< 1.0 U		**5.3**		< 100 U
APS-001	N	12-21-2020	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.077 J**		< 100 U	
	N	12-21-2020	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		**0.94 J**		< 1.0 U		**9.8**		< 100 U	
	N	12-21-2020	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		**1.1**		< 1.0 U		**13.5**		< 100 U	
	N	12-21-2020	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		**0.26 J**		< 1.0 U		**2.9**		< 100 U	
	N	12-21-2020	87.1 - 87.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.19 J**		< 100 U	
APS-002	N	12-17-2020	25 - 25.1		**0.65 J,N2**		< 5.0 U		**1.2**		< 5.0 U		**5.8**		< 1.0 U		**4.1**		< 100 U	
	N	12-17-2020	30 - 30.1		**0.73 J,N2**		< 5.0 U		< 1.0 U		< 5.0 U		**2.1**		< 1.0 U		**0.14 J**		< 100 U	
	N	12-17-2020	33 - 33.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		**0.15 J**		< 1.0 U		**0.089 J**		< 100 U	
	N	12-17-2020	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-303-P1	N	05-14-2021		68 - 78		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-09-2021		68 - 78		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-002	N	12-18-2020	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-18-2020	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-18-2020	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-18-2020	81 - 81.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-303-P2	N	05-14-2021		93 - 103		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-09-2021		93 - 103		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-003	N	12-09-2020	23.1 - 23.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	35.2 - 35.3		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	40 - 40.1		**0.16 J,N2**		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.14 J**		< 100 U	
	N	12-14-2020	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	105 - 105.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-304-P1	N	05-24-2021		106 - 116		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	05-24-2021		106 - 116		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-04-2021		106 - 116		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-003	N	12-16-2020	113 - 113.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	117 - 117.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	121 - 121.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	125 - 125.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-304-P2	N	05-24-2021		126 - 136		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-04-2021		126 - 136		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
MW-304-P3	N	05-26-2021		221 - 231		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-04-2021		221 - 231		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	08-04-2021		221 - 231		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Methylcyclohexane		Methylene chloride		n-Butylbenzene		n-Hexane		n-Propylbenzene		o-Chlorotoluene (2-chlorotoluene)		o-Xylene		Propionitrile	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P1	N	05-13-2021		25 - 35		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		25 - 35		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-004	N	12-06-2020	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P2	N	05-13-2021		80 - 90		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		80 - 90		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	08-16-2021		80 - 90		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-004	N	12-08-2020	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P3	N	05-13-2021		110 - 120		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		110 - 120		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	08-16-2021		110 - 120		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-01-2020	23.9 - 24		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-01-2020	29 - 29.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	34 - 34.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	39 - 39.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	44 - 44.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P1	N	08-18-2021		48 - 58		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-03-2020	49.1 - 49.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	54.1 - 54.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	58.9 - 59		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	64 - 64.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	69 - 69.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P2	N	08-18-2021		73 - 83		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-04-2020	73.9 - 74		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	79 - 79.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	83.9 - 84		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	89 - 89.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	94 - 94.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	99 - 99.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P3	N	08-18-2021		103 - 113		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-05-2020	104 - 104.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	109 - 109.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	114.5 - 114.6		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
APS-006	N	01-08-2021	15 - 15.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-405-P1	N	05-11-2021		30 - 40		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		30 - 40		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-09-2021	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-405-P2	N	05-11-2021		70 - 80		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	05-11-2021		70 - 80		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		70 - 80		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-10-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	Methylcyclohexane		Methylene chloride		n-Butylbenzene		n-Hexane		n-Propylbenzene		o-Chlorotoluene (2-chlorotoluene)		o-Xylene		Propionitrile	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		90 - 100		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-10-2021	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	105 - 105.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-11-2021	110 - 110.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-11-2021	115 - 115.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
APS-007	N	01-12-2021	15 - 15.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P1	N	05-12-2021		20 - 30		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		20 - 30		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-12-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P2	N	05-12-2021		55 - 65		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		55 - 65		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-12-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.072 J**		< 100 U	
	N	01-13-2021	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.073 J**		< 100 U	
	N	01-13-2021	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P3	N	05-12-2021		90 - 100		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		90 - 100		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-13-2021	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	105 - 105.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	110 - 110.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P4	N	05-12-2021		145 - 155		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
MW-400-P5	N	05-12-2021		195 - 205		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		195 - 205		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-18-2021	16 - 16.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P1	N	05-07-2021		32 - 42		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		32 - 42		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-19-2021	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.21 J**		< 100 U	
	N	01-19-2021	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 100 U	
	N	01-19-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P2	N	05-07-2021		62 - 72		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		62 - 72		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-19-2021	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.10 J**		< 100 U	
	N	01-19-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.10 J**		< 100 U	
	N	01-19-2021	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.098 J**		< 100 U	
	N	01-19-2021	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.085 J**		< 100 U	
	N	01-20-2021	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P3	N	05-07-2021		92 - 102		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		92 - 102		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	08-06-2021		92 - 102		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-20-2021	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.099 J**		< 100 U	
	N	01-20-2021	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 100 U	
	N	01-20-2021	105 - 105.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		**0.089 J**		< 100 U	
	N	01-20-2021	110 - 110.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
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					Volatile Organic Compounds, Total															
				Analyte	Methylcyclohexane		Methylene chloride		n-Butylbenzene		n-Hexane		n-Propylbenzene		o-Chlorotoluene (2-chlorotoluene)		o-Xylene		Propionitrile	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	15 - 15.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	33 - 33.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	39 - 39.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	43.4 - 43.5		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-213-P1	N	08-19-2021		50 - 60		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-012	N	03-17-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-213-P2	N	08-19-2021		75 - 85		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-012	N	03-19-2021	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-19-2021	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-19-2021	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P1	N	05-25-2021		15 - 25		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		15 - 25		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-21-2021	19 - 19.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	40 - 40.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P2	N	05-25-2021		40 - 50		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		40 - 50		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-21-2021	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	65 - 65.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P3	N	05-25-2021		65 - 75		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		65 - 75		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-22-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-22-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
APS-019	N	01-05-2021	20 - 20.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	25 - 25.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	30 - 30.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	35 - 35.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	39 - 39.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	45 - 45.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	50 - 50.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-06-2021	55 - 55.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	60 - 60.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	64 - 64.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	70 - 70.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-07-2021	75 - 75.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	80 - 80.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	85 - 85.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	90 - 90.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	95 - 95.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	100 - 100.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 UJ		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-07-2021	105 - 105.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	110 - 110.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	115 - 115.1		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-118	N	05-19-2021		38 - 48		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	05-19-2021		38 - 48		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-19-2021		38 - 48		< 20.0 U		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-021	N	03-20-2021	38.1 - 38.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-20-2021	48.1 - 48.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-20-2021	58.1 - 58.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-21-2021	68.1 - 68.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-21-2021	73.1 - 73.2		< 20.0 U,N2		< 5.0 U		< 1.0 U		< 5.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		trans-1,4-Dichlorobutene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 5.0 U		< 500 U	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**3.2**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.58 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.1**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.2**		**0.13 J**		< 1.0 U		< 100 U	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.44 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.1**		< 1.0 U		< 1.0 U		< 100 U	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**19.8**		< 1.0 U		< 1.0 U		< 100 U
	N	08-23-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**13.7**		< 1.0 U		< 1.0 U		< 100 U
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.76 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**13.5**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**17.6**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**13.3**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**3.1**		< 1.0 U		< 1.0 U		< 100 U	
APS-002	N	12-17-2020	25 - 25.1		**2.0**		< 1.0 U		**0.99 J,L1**		< 1.0 U		**6.0**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.62 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 1.0 U		**0.19 J,L1**		< 1.0 U		**0.30 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.21 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.53 J**		< 1.0 U		< 100 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.49 J**		< 1.0 U		< 100 U	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**14.8**		< 1.0 U		< 1.0 U		< 100 U
	N	08-09-2021		68 - 78		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.53 J**		**0.39 J**		< 1.0 U		< 100 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.58 J**		< 1.0 U		< 100 U	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**18.4**		< 1.0 U		< 1.0 U		< 100 U
	N	08-09-2021		93 - 103		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**15.9**		< 1.0 U		< 1.0 U		< 100 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.20 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	45 - 45.1		< 1.0 U,L1		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	50 - 50.1		< 1.0 U,L1		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	55 - 55.1		< 1.0 U,L1		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	60 - 60.1		< 1.0 U,L1		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	65 - 65.1		< 1.0 U,L1		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**7.4**		< 1.0 U		< 1.0 U		< 100 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**7.9**		**0.43 J**		< 1.0 U		< 100 U
	N	08-04-2021		106 - 116		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**4.3**		**0.38 J**		< 1.0 U		< 100 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-04-2021		126 - 136		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**41.3**		< 1.0 U		< 1.0 U		< 100 U
	N	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**7.3**		< 1.0 U		< 1.0 U		< 100 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**7.2**		< 1.0 U		< 1.0 U		< 100 U

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		trans-1,4-Dichlorobutene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.69 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.53 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**27.7**		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		25 - 35		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**10.1**		< 1.0 U		< 1.0 U		< 100 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.33 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.47 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.30 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.31 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**4.3**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.47 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**13.3**		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.59 J**		< 1.0 U		< 1.0 U		< 100 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.64 J**		< 1.0 U		< 1.0 U		< 100 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.59 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**20.6**		< 1.0 U		< 1.0 U		< 100 U
	N	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**15.0**		< 1.0 U		< 1.0 U		< 100 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**14.6**		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.0**		< 1.0 U		< 100 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**32.4**		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**6.3**		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.22 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.21 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.25 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**3.4**		< 1.0 U		< 1.0 U		< 100 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.19 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**1.1**		< 1.0 U		< 1.0 U		< 100 U	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		**0.31 J**		< 1.0 U		< 1.0 U		< 100 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.093 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.3**		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		30 - 40		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.14 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.2**		< 1.0 U		< 1.0 U		< 100 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.2**		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		70 - 80		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.3**		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.098 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

					Volatile Organic Compounds, Total															
				Analyte	sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		trans-1,4-Dichlorobutene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.67 J**		< 1.0 U		< 1.0 U		< 100 U
	N	08-11-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.15 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
APS-007	N	01-12-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		**3.4**		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		**3.3**		< 1.0 U		**0.12 J**		< 1.0 U		< 100 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**127**		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		20 - 30		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**31.5**		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-12-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		**1.1**		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.13 J**		< 1.0 U		< 100 U	
	N	01-12-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**32.7**		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		55 - 65		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**9.1**		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.27 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.20 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.19 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**39.2**		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		90 - 100		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**7.0**		< 1.0 U		< 1.0 U		< 100 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.10 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.091 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**103**		< 1.0 U		< 1.0 U		< 100 U
	N	05-14-2021		145 - 155																
	N	08-10-2021		145 - 155		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.7**		< 1.0 U		< 1.0 U		< 100 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**101**		< 1.0 U		< 1.0 U		< 100 U
	N	08-10-2021		195 - 205		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.9**		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.38 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**5.0**		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		32 - 42		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.30 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.16 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.1**		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		62 - 72		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.13 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.096 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.20 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**12.6**		< 1.0 U		< 1.0 U		< 100 U
	N	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.52 J**		< 1.0 U		< 1.0 U		< 100 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.53 J**		< 1.0 U		< 1.0 U		< 100 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.14 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.13 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total															
				Analyte	sec-Butylbenzene		Styrene		tert-Butylbenzene		Tetrachloroethene		Toluene		trans-1,2-Dichloroethene		trans-1,3-Dichloropropene		trans-1,4-Dichlorobutene	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)																
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.76 J**		< 1.0 U		< 1.0 U		< 100 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**1.5**		< 1.0 U		< 1.0 U		< 100 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		15 - 25		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.17 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.23 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.13 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.11 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		40 - 50		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**13.5**		< 1.0 U		< 1.0 U		< 100 U
	N	08-05-2021		65 - 75		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**5.0**		< 1.0 U		< 1.0 U		< 100 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.10 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.3**		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.16 J**		< 1.0 U		< 100 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**3.9**		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.14 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.23 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**2.7**		< 1.0 U		< 1.0 U		< 100 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.24 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.42 J**		< 1.0 U		< 1.0 U		< 100 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		**0.12 J**		< 1.0 U		< 1.0 U		< 100 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	FD	05-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
	N	08-19-2021		38 - 48		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		< 1.0 U		< 1.0 U		< 1.0 U		< 100 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 1.0 U		< 1.0 U		< 1.0 U,L1		**0.42 J**		< 1.0 U		< 1.0 U		< 100 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total									
				Analyte	Trichloroethene		Trichlorofluoromethane (Freon 11)		Vinyl acetate		Vinyl chloride		Xylene, Total	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-001	N	12-19-2020	15 - 15.1		< 5.0 U		< 10.0 U		< 100 U,L2		< 5.0 U		< 15.0 U	
	N	12-19-2020	19 - 19.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.53 J**	
	N	12-19-2020	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**1.3 J**	
	N	12-19-2020	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		< 3.0 U	
	N	12-20-2020	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.42 J**	
	N	12-20-2020	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**32.0**	
	N	12-20-2020	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**3.9**	
	N	12-20-2020	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**2.9 J**	
	N	12-20-2020	55 - 55.1		**0.26 J**		< 2.0 U		< 20.0 U,L2		< 1.0 U		**6.6**	
	N	12-20-2020	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.43 J**	
	N	12-20-2020	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.55 J**	
MW-302	N	05-17-2021		68 - 78		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**11.0**
	N	08-23-2021		68 - 78		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		**7.9 J**
APS-001	N	12-21-2020	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.19 J**	
	N	12-21-2020	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**0.26 J**		**12.9**	
	N	12-21-2020	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**18.2**	
	N	12-21-2020	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**0.46 J**		**4.2**	
	N	12-21-2020	87.1 - 87.2		< 1.0 U		< 2.0 U		< 20.0 U,L2		< 1.0 U		**0.28 J**	
APS-002	N	12-17-2020	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**21.6**	
	N	12-17-2020	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**1.5 J**	
	N	12-17-2020	33 - 33.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.59 J**	
	N	12-17-2020	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		**12.6**		< 3.0 U	
	N	12-17-2020	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		**9.8**		< 3.0 U	
	N	12-17-2020	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**4.7**		< 3.0 U	
	N	12-17-2020	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**1.5**		< 3.0 U	
	N	12-17-2020	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**1.3**		< 3.0 U	
	N	12-17-2020	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**1.8**		< 3.0 U	
MW-303-P1	N	05-14-2021		68 - 78		< 1.0 U		< 2.0 U		< 20.0 U		**2.3**		< 3.0 U
	N	08-09-2021		68 - 78		< 1.0 U		< 2.0 UJ		< 20.0 U		**2.8**		< 3.0 U
APS-002	N	12-18-2020	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**5.1**		< 3.0 U	
	N	12-18-2020	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**2.6**		< 3.0 U	
	N	12-18-2020	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**1.1**		< 3.0 U	
	N	12-18-2020	81 - 81.1		< 1.0 U		< 2.0 U		< 20.0 U,L2		**0.97 J**		< 3.0 U	
MW-303-P2	N	05-14-2021		93 - 103		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-09-2021		93 - 103		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-003	N	12-09-2020	23.1 - 23.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.42 J**	
	N	12-09-2020	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-09-2020	35.2 - 35.3		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-14-2020	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.44 J**	
	N	12-14-2020	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		**1.3**		< 3.0 U	
	N	12-14-2020	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-14-2020	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.0**		< 3.0 U	
	N	12-14-2020	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.3**		< 3.0 U	
	N	12-14-2020	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.5**		< 3.0 U	
	N	12-14-2020	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		**3.1**		< 3.0 U	
	N	12-15-2020	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		**6.2**		< 3.0 U	
	N	12-15-2020	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		**5.9**		< 3.0 U	
	N	12-15-2020	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.7**		< 3.0 U	
	N	12-15-2020	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.3**		< 3.0 U	
	N	12-15-2020	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		**4.9**		< 3.0 U	
	N	12-15-2020	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		**1.7**		< 3.0 U	
	N	12-15-2020	105 - 105.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.3**		< 3.0 U	
MW-304-P1	N	05-24-2021		106 - 116		< 1.0 U		< 2.0 U		< 20.0 U		**7.2**		< 3.0 U
	FD	05-24-2021		106 - 116		< 1.0 U		< 2.0 U		< 20.0 U		**7.3**		< 3.0 U
	N	08-04-2021		106 - 116		< 1.0 U		< 2.0 U		< 20.0 UJ		**9.7**		< 3.0 U
APS-003	N	12-16-2020	113 - 113.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-16-2020	117 - 117.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-16-2020	121 - 121.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-16-2020	125 - 125.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-304-P2	N	05-24-2021		126 - 136		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-04-2021		126 - 136		< 1.0 U		< 2.0 U		< 20.0 UJ		**2.0**		< 3.0 U
MW-304-P3	N	05-26-2021		221 - 231		< 1.0 U		< 2.0 U		< 20.0 U		**0.83 J**		< 3.0 U
	N	08-04-2021		221 - 231		< 1.0 U		< 2.0 U		< 20.0 UJ		**0.79 J**		< 3.0 U
	FD	08-04-2021		221 - 231		< 1.0 U		< 2.0 U		< 20.0 UJ		**0.92 J**		< 3.0 U

Notes and definition are presented on Page 56

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total									
				Analyte	Trichloroethene		Trichlorofluoromethane (Freon 11)		Vinyl acetate		Vinyl chloride		Xylene, Total	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-004	N	12-06-2020	20 - 20.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.26 J**		< 3.0 U	
	N	12-06-2020	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.24 J**		< 3.0 U	
MW-306-P1	N	05-13-2021		25 - 35		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-16-2021		25 - 35		< 1.0 U		< 2.0 UJ		< 20.0 U		**0.45 J**		< 3.0 U
APS-004	N	12-06-2020	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.66 J**		< 3.0 U	
	N	12-06-2020	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.37 J**		< 3.0 U	
	N	12-06-2020	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-07-2020	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-07-2020	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		**4.3**		< 3.0 U	
	N	12-07-2020	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		**3.8**		< 3.0 U	
	N	12-07-2020	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		**6.0**		< 3.0 U	
	N	12-07-2020	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		**11.4**		< 3.0 U	
	N	12-08-2020	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		**5.6**		< 3.0 U	
	N	12-08-2020	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.4**		< 3.0 U	
	N	12-08-2020	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		**4.5**		< 3.0 U	
MW-306-P2	N	05-13-2021		80 - 90		< 1.0 U		< 2.0 U		< 20.0 U		**2.8**		< 3.0 U
	N	08-16-2021		80 - 90		< 1.0 U		< 2.0 UJ		< 20.0 U		**8.2**		< 3.0 U
	FD	08-16-2021		80 - 90		< 1.0 U		< 2.0 UJ		< 20.0 U		**8.4**		< 3.0 U
APS-004	N	12-08-2020	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.85 J**		< 3.0 U	
	N	12-08-2020	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.0**		< 3.0 U	
	N	12-09-2020	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		**1.5**		**0.66 J**	
	N	12-09-2020	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		**2.0**		< 3.0 U	
MW-306-P3	N	05-13-2021		110 - 120		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-16-2021		110 - 120		< 1.0 U		< 2.0 UJ		< 20.0 U		**6.6**		< 3.0 U
	FD	08-16-2021		110 - 120		< 1.0 U		< 2.0 UJ		< 20.0 U		**6.8**		< 3.0 U
APS-005	N	12-01-2020	23.9 - 24		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-01-2020	29 - 29.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.73 J**		< 3.0 U	
	N	12-03-2020	34 - 34.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-03-2020	39 - 39.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-03-2020	44 - 44.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-404-P1	N	08-18-2021		48 - 58		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-005	N	12-03-2020	49.1 - 49.2		< 1.0 U		< 2.0 U		< 20.0 U		**0.58 J**		< 3.0 U	
	N	12-03-2020	54.1 - 54.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-04-2020	58.9 - 59		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-04-2020	64 - 64.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-04-2020	69 - 69.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-404-P2	N	08-18-2021		73 - 83		< 1.0 U		< 2.0 UJ		< 20.0 U		**4.5**		< 3.0 U
APS-005	N	12-04-2020	73.9 - 74		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-04-2020	79 - 79.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	12-05-2020	83.9 - 84		< 1.0 U		< 2.0 U		< 20.0 U		**0.71 J**		< 3.0 U	
	N	12-05-2020	89 - 89.1		< 1.0 U		< 2.0 U		< 20.0 U		**1.6**		**0.17 J**	
	N	12-05-2020	94 - 94.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.41 J**		< 3.0 U	
	N	12-05-2020	99 - 99.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.70 J**		< 3.0 U	
MW-404-P3	N	08-18-2021		103 - 113		< 1.0 U		< 2.0 UJ		< 20.0 U		**3.3**		< 3.0 U
APS-005	N	12-05-2020	104 - 104.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.83 J**		< 3.0 U	
	N	12-05-2020	109 - 109.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.69 J**		**0.18 J**	
	N	12-06-2020	114.5 - 114.6		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
APS-006	N	01-08-2021	15 - 15.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-08-2021	20 - 20.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-405-P1	N	05-11-2021		30 - 40		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-11-2021		30 - 40		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-006	N	01-09-2021	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-09-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-10-2021	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-10-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-405-P2	N	05-11-2021		70 - 80		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	FD	05-11-2021		70 - 80		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-11-2021		70 - 80		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-006	N	01-10-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-10-2021	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-10-2021	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.82 J**		< 3.0 U	
	N	01-10-2021	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		**1.2**		< 3.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total									
				Analyte	Trichloroethene		Trichlorofluoromethane (Freon 11)		Vinyl acetate		Vinyl chloride		Xylene, Total	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
MW-405-P3	N	05-11-2021		90 - 100		< 1.0 U		< 2.0 U		< 20.0 U		**1.1**		< 3.0 U
	N	08-11-2021		90 - 100		< 1.0 U		< 2.0 UJ		< 20.0 U		**1.1**		< 3.0 U
APS-006	N	01-10-2021	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.85 J**		< 3.0 U	
	N	01-10-2021	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-10-2021	105 - 105.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.90 J**		< 3.0 U	
	N	01-11-2021	110 - 110.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-11-2021	115 - 115.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
APS-007	N	01-12-2021	15 - 15.1		**0.41 J**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	20 - 20.1		**1.9**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-400-P1	N	05-12-2021		20 - 30		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-10-2021		20 - 30		**0.61 J**		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-007	N	01-12-2021	25 - 25.1		**3.3**		< 2.0 U		< 20.0 U		**0.25 J**		< 3.0 U	
	N	01-12-2021	30 - 30.1		**2.9**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	35 - 35.1		**1.3**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	40 - 40.1		**0.43 J**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	45 - 45.1		**0.27 J**		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-400-P2	N	05-12-2021		55 - 65		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-10-2021		55 - 65		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-007	N	01-12-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.22 J**		< 3.0 U	
	N	01-12-2021	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-12-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-13-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.30 J**	
	N	01-13-2021	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.24 J**	
	N	01-13-2021	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.23 J**	
	N	01-13-2021	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-400-P3	N	05-12-2021		90 - 100		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-10-2021		90 - 100		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-007	N	01-13-2021	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-13-2021	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-13-2021	105 - 105.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-13-2021	110 - 110.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-400-P4	N	05-12-2021		145 - 155		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	05-14-2021		145 - 155										
	N	08-10-2021		145 - 155		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
MW-400-P5	N	05-12-2021		195 - 205		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-10-2021		195 - 205		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-008	N	01-18-2021	16 - 16.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-19-2021	20 - 20.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-19-2021	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-19-2021	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-401-P1	N	05-07-2021		32 - 42		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-06-2021		32 - 42		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-008	N	01-19-2021	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.49 J**	
	N	01-19-2021	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.59 J**	
	N	01-19-2021	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.56 J**	
	N	01-19-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-19-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.35 J**	
	N	01-19-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-401-P2	N	05-07-2021		62 - 72		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-06-2021		62 - 72		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-008	N	01-19-2021	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-19-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.32 J**	
	N	01-19-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.29 J**	
	N	01-19-2021	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.28 J**	
	N	01-19-2021	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.25 J**	
	N	01-20-2021	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-401-P3	N	05-07-2021		92 - 102		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-06-2021		92 - 102		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
	FD	08-06-2021		92 - 102		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-008	N	01-20-2021	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.26 J**	
	N	01-20-2021	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.32 J**	
	N	01-20-2021	105 - 105.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		**0.21 J**	
	N	01-20-2021	110 - 110.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	

Table 2b: WATERLOO APS™ and Monitoring Well Groundwater
Analytical Results
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					Volatile Organic Compounds, Total									
				Analyte	Trichloroethene		Trichlorofluoromethane (Freon 11)		Vinyl acetate		Vinyl chloride		Xylene, Total	
				Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
				Sample Source	APS	MW	APS	MW	APS	MW	APS	MW	APS	MW
Sample Location	Sample Type	Sample Date	APS Sample Interval (ft BGS)	MW Sample Interval (ft BGS)										
APS-012	N	03-16-2021	10 - 10.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	15 - 15.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	20 - 20.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	33 - 33.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	39 - 39.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-16-2021	43.4 - 43.5		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-17-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-213-P1	N	08-19-2021		50 - 60		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-012	N	03-17-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-17-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-17-2021	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-17-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-17-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-213-P2	N	08-19-2021		75 - 85		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-012	N	03-19-2021	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-19-2021	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-19-2021	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-505-P1	N	05-25-2021		15 - 25		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-05-2021		15 - 25		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-013	N	01-21-2021	19 - 19.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	40 - 40.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-505-P2	N	05-25-2021		40 - 50		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-05-2021		40 - 50		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-013	N	01-21-2021	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-21-2021	65 - 65.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-505-P3	N	05-25-2021		65 - 75		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-05-2021		65 - 75		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-013	N	01-22-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-22-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
APS-019	N	01-05-2021	20 - 20.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	25 - 25.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	30 - 30.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	35 - 35.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	39 - 39.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	45 - 45.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	50 - 50.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-407R-P1	N	08-12-2021		53.6 - 63.6		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-019	N	01-06-2021	55 - 55.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	60 - 60.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-06-2021	64 - 64.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-07-2021	70 - 70.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-407R-P2	N	08-12-2021		73.6 - 83.6		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-019	N	01-07-2021	75 - 75.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-07-2021	80 - 80.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-07-2021	85 - 85.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-07-2021	90 - 90.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-07-2021	95 - 95.1		< 1.0 U		< 2.0 U		< 20.0 U		**0.33 J**		< 3.0 U	
	N	01-07-2021	100 - 100.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-407R-P3	N	08-12-2021		103.6 - 113.6		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-019	N	01-07-2021	105 - 105.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-08-2021	110 - 110.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	01-08-2021	115 - 115.1		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
MW-118	N	05-19-2021		38 - 48		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	FD	05-19-2021		38 - 48		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U
	N	08-19-2021		38 - 48		< 1.0 U		< 2.0 UJ		< 20.0 U		< 1.0 U		< 3.0 U
APS-021	N	03-20-2021	38.1 - 38.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-20-2021	48.1 - 48.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-20-2021	58.1 - 58.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-21-2021	68.1 - 68.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	
	N	03-21-2021	73.1 - 73.2		< 1.0 U		< 2.0 U		< 20.0 U		< 1.0 U		< 3.0 U	

Notes:
ft BGS = feet below ground surface
ppm = parts per million
mV = millivolts
SU = standard units
uS/cm = microSiemens per centimeter
ml = milliliter
ug/L = micrograms per liter
N = normal sample
FD = field duplicate
***Bold** = Detected*
Grey Shading = depths with overlapping well screens and APS points
See Tables 2a, 11, and 12 for other definitions

Table 3: WATERLOO APS™ Quality Control Sample Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS
Sample Depth (ft BGS)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Type		TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date		01-05-2021	01-06-2021	01-07-2021	01-08-2021	01-09-2021	01-11-2021	01-12-2021	01-12-2021	01-18-2021	01-19-2021	01-21-2021	01-22-2021	01-23-2021	01-25-2021	01-26-2021	03-05-2021	03-07-2021	03-08-2021	03-15-2021
Analyte	Unit																			
General Chemistry Parameters, Dissolved																				
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate Alkalinity as CaCO3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbonate Alkalinity as CaCO3	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate as N	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals, Dissolved																				
Barium	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Volatile Organic Compounds, Total																				
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U,L2	< 100 U,L2	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U	< 100 U	< 100 U,L1
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U,L1	< 5.0 U,L1	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions can be found on Page 4.

Table 3: WATERLOO APS™ Quality Control Sample Analytical Results
West Lake Landfill OU-3
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Sample Location		APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS	APS
Sample Depth (ft BGS)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Type		TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date		01-05-2021	01-06-2021	01-07-2021	01-08-2021	01-09-2021	01-11-2021	01-12-2021	01-12-2021	01-18-2021	01-19-2021	01-21-2021	01-22-2021	01-23-2021	01-25-2021	01-26-2021	03-05-2021	03-07-2021	03-08-2021	03-15-2021
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2,L2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2,L1
Methylene chloride	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

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Table 3: WATERLOO APS™ Quality Control Sample Analytical Results
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Sample Location		APS	APS	APS	APS	APS	APS-004B	APS-006	APS-007	APS-008	APS-011	APS-012	APS-013	APS-018	APS-019	APS-020	APS-021
Sample Depth (ft BGS)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Type		TB	TB	TB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB
Sample Date		01-05-2021	01-06-2021	03-17-2021	03-19-2021	03-20-2021	03-02-2021	01-08-2021	01-12-2021	01-18-2021	03-06-2021	03-15-2021	01-21-2021	03-03-2021	01-05-2021	01-23-2021	03-19-2021
Analyte	Unit																
General Chemistry Parameters, Dissolved																	
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA	NA	**2.6**	< 2.0 U	**3.3**	**1.5 J**	**1.2 J**	< 2.0 U	**1.6 J**	**1.3 J**	**1.8 J**	**2.0**	< 2.0 U
Bicarbonate Alkalinity as CaCO3	mg/L	NA	NA	NA	NA	NA	**2.6**	< 2.0 U	**3.3**	**1.5 J**	**1.2 J**	< 2.0 U	**1.6 J**	**1.3 J**	**1.8 J**	**2.0**	< 2.0 U
Carbonate Alkalinity as CaCO3	mg/L	NA	NA	NA	NA	NA	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrate as N	mg/L	NA	NA	NA	NA	NA	**0.029 J**	**0.0097 J**	**0.015 J**	< 0.050 U	< 0.050 U	< 0.050 U,H1	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.075**
Chloride	mg/L	NA	NA	NA	NA	NA	**0.065 J**	**0.078 J**	**0.044 J**	< 0.25 U	**0.062 J**	**0.042 J**	< 0.25 U	**0.051 J**	**0.25 J**	**0.18 J**	< 0.25 U
Sulfate	mg/L	NA	NA	NA	NA	NA	< 0.25 U	**0.60**	**0.46**	< 0.25 U	**0.080 J**	< 0.25 U	< 0.25 U	< 0.25 U	**0.047 J**	**0.13 J**	< 0.25 U
Metals, Dissolved																	
Barium	ug/L	NA	NA	NA	NA	NA	**0.79 J**	< 10.0 U	< 10.0 U	< 10.0 U	**0.64 J**	**2.3 J**	< 10.0 U	**4.0 J**	**2.3 J**	**2.1 J**	**0.88 J**
Calcium	ug/L	NA	NA	NA	NA	NA	**389 J**	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**203 J**	< 500 U	**746**	**292 J**
Iron	ug/L	NA	NA	NA	NA	NA	**42.4 J**	< 50.0 U	< 50.0 U	**30.4 J**	< 50.0 U	< 50.0 U	< 50.0 U	**54.8**	< 50.0 U	< 50.0 U	< 50.0 U
Magnesium	ug/L	NA	NA	NA	NA	NA	**110 J**	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**50.4 J**	< 500 U	**200 J**	**79.6 J**
Manganese	ug/L	NA	NA	NA	NA	NA	**2.6 J**	**0.95 J**	**0.55 J**	**0.51 J**	**1.0 J**	**1.2 J**	< 5.0 U	**2.2 J**	**1.2 J**	**2.4 J**	**1.3 J**
Volatile Organic Compounds, Total																	
1,1,1,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
1,2-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,L2	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	ug/L	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U	< 100 U	< 100 U	< 100 U,L1	< 100 U,L1	< 100 U	< 100 U,L1	< 100 U	< 100 U	< 100 U
Acrolein	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U
Acrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	ug/L	< 20.0 U	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U,L1	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Bromobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	ug/L	< 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,L1	< 5.0 U	< 5.0 U	< 5.0 U,L1	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.23 J**	**0.14 J**	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**	**0.48 J**	< 1.0 U
Chloromethane	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Dibromochloromethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U,L1	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions can be found on Page 4.

Table 3: WATERLOO APS™ Quality Control Sample Analytical Results
West Lake Landfill OU-3
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Sample Location		APS	APS	APS	APS	APS	APS-004B	APS-006	APS-007	APS-008	APS-011	APS-012	APS-013	APS-018	APS-019	APS-020	APS-021
Sample Depth (ft BGS)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Type		TB	TB	TB	TB	TB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB
Sample Date		01-05-2021	01-06-2021	03-17-2021	03-19-2021	03-20-2021	03-02-2021	01-08-2021	01-12-2021	01-18-2021	03-06-2021	03-15-2021	01-21-2021	03-03-2021	01-05-2021	01-23-2021	03-19-2021
Hexachlorobutadiene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	ug/L	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2	< 100 U,N2
Isopropylbenzene (Cumene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methyl iodide	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl methacrylate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	ug/L	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2,L1	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2	< 20.0 U,N2
Methylene chloride	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U,L1	< 1.0 U,L1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	**0.53 J**	< 1.0 U	< 1.0 U	**0.094 J**	< 1.0 U	**0.52 J**
trans-1,2-Dichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes:
ft BGS = feet below ground surface
ppm = parts per million
mV = millivolts
SU = standard units
uS/cm = microSiemens per centimeter
ml = milliliter
ug/L = micrograms per liter
Bold *= Detected*
NA = Not Available

Qualifier Definition
H1 = Analysis conducted outside the recognized method holding time.
J = Estimated concentration.
L1 = Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
L2 = Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
N2 = The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

Table 4: Borehole Logging Schedule
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Date	Well ID	Logging Methods	Lithology
1/21/2021	MW-405	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
1/22/2021	MW-407	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
1/23/2021	D-87	Induction, Natural Gamma, Spectral Gamma	Alluvium
1/25/2021	PZ-100-KS	Induction, Natural Gamma, Spectral Gamma	Bedrock
1/26/2021	D-85, D-12, D-6	Induction, Natural Gamma, Spectral Gamma	Alluvium
2/2/2021	PZ-109-SS	Induction, Natural Gamma, Spectral Gamma	Bedrock
2/3/2021	MW-400	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
2/4/2021	MW-304	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
2/5/2021	PZ-106-SD, MW-1204	Induction, Natural Gamma, Spectral Gamma	Bedrock
2/6/2021	PZ-104-SD, PZ-101-SS	Induction, Natural Gamma, Spectral Gamma	Bedrock
2/19/2021	MW-303	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
2/20/2021 - 2/21/2021	MW-400	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
2/22/2021	MW-302	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
3/2/2021 - 3/3/2021	MW-304	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
3/4/2021	MW-111	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
3/6/2021	MW-306	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
3/18/2021	MW-404	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
3/20/2021	MW-505	NMR, Induction, Natural Gamma, Spectral Gamma	Alluvium
3/22/2021 - 3/23/2021	MW-205	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
3/24/2021 - 3/25/2021	MW-404	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
4/15/2021	MW-404	Re-log NMR with new NMR tool	Bedrock
4/16/2021 - 4/17/2021	MW-113	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
4/19/2021 - 4/20/2021	MW-113	Re-log Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
5/3/2021	MW-400	Straddle Packer Testing	Alluvium/Bedrock
5/3/2021 - 5/4/2021	MW-605	Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	
5/11/2021 - 5/13/2021	MW-605	Re-log (deepened hole) Fluid Temp/Conductivity, Caliper, Acoustic/Optical Televiewer	Bedrock
		NMR, Induction, Natural Gamma, Spectral Gamma, CDFM, Depth-Specific Sampling	

Notes:
CDFM = Corehole Dynamic Flowmeter
NMR = Nuclear Magnetic Resonance

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-404	MW-404	MW-404	MW-404	MW-404	MW-404
Sample Depth (ft BGS)		130 - 131	135 - 135.5	148 - 148.8	154 - 155	163 - 163.5	175 - 175.8
Sample Type		N	N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021
Analyte	Unit						
General Chemistry Parameters							
Alkalinity, Total as CaCO3	mg/kg	**169 J**	**167 J**	**582 J**	**323 J**	**502 J**	**310 J**
Bicarbonate Alkalinity as CaCO3	mg/kg	< 205 R	**167 J**	**582 J**	**323 J**	**502 J**	**310 J**
Bromide	mg/kg	< 0.50 R	< 0.53 R	< 0.50 R	< 0.50 R	< 0.50 R	< 0.50 R
Ca Cation Exchange Capacity	meq/100g	**3.8 J**	**4.5 J**	**2.3 J**	**2.1 J**	**2.2 J**	**2.1 J**
Carbonate Alkalinity as CaCO3	mg/kg	**121 J**	< 212 R	< 205 R	< 198 R	< 201 R	< 199 R
Chloride	mg/kg	**6.6 J**	**5.0 J**	**3.4 J**	< 2.5 R	< 2.5 R	< 2.5 R
Fluoride	mg/kg	< 1.0 R	< 1.1 R	< 1.0 R	< 1.0 R	< 0.99 R	< 1.0 R
Iodide	mg/kg	< 5.0 R	< 5.3 R	< 5.0 R	< 5.0 R	< 5.0 R	< 5.0 R
Moisture	%	**1.0 J**	**6.1 J**	**0.43 J**	**0.32 J**	< 0.10 R	**0.34 J**
Organic Carbon, Total	mg/kg	**19,600 J**	**5,330 J**	**244 J**	**5,280 J**	**198 J**	**2,270 J**
pH, Lab	pH units	**7.7 J**	**7.5 J**	**7.6 J**	**7.2 J**	**7.2 J**	**7.2 J**
Solids, Total	%	**97.5 J**	**83.7 J**	**99.6 J**	**99.5 J**	**90.4 J**	**97.8 J**
Sulfate	mg/kg	**134 J**	**172 J**	**245 J**	**150 J**	**113 J**	**174 J**
Metals, Total							
Aluminum	mg/kg	**410 J**	**892 J**	**177 J**	**234 J**	**92.3 J**	**645 J**
Antimony	mg/kg	**0.64 J**	< 0.99 UJ	**0.39 J**	**0.71 J**	**0.42 J**	**0.58 J**
Arsenic	mg/kg	**3.4 J**	**2.0 J**	**1.8 J**	**2.3 J**	**0.95 J**	**4.8 J**
Barium	mg/kg	**3.9 J**	**3.5 J**	**2.2 J**	**2.2 J**	**2.5 J**	**4.0 J**
Beryllium	mg/kg	< 0.47 UJ	< 0.50 UJ	< 8.6 UJ	< 9.8 UJ	< 8.6 UJ	< 9.3 UJ
Boron	mg/kg	< 4.7 UJ	< 5.0 UJ	< 4.3 UJ	< 4.9 UJ	< 4.3 UJ	< 4.6 UJ
Cadmium	mg/kg	**1.8 J**	**0.42 J**	**0.24 J**	**1.1 J**	**0.22 J**	**1.1 J**
Calcium	mg/kg	**185,000 J**	**225,000 J**	**350,000 J**	**347,000 J**	**346,000 J**	**351,000 J**
Chromium	mg/kg	**5.2 J**	**6.5 J**	**5.0 J**	**6.9 J**	**3.8 J**	**4.8 J**
Cobalt	mg/kg	**0.32 J**	**0.49 J**	**0.22 J**	**0.45 J**	**0.13 J**	**0.85 J**
Copper	mg/kg	**1.0 J**	**1.1 J**	**0.55 J**	**0.96 J**	**0.50 J**	**1.4 J**
Iron	mg/kg	**2,390 J**	**2,460 J**	**1,280 J**	**1,370 J**	**717 J**	**2,710 J**
Lead	mg/kg	**0.17 J**	**0.21 J**	< 0.86 UJ	**0.48 J**	< 0.86 UJ	**1.9 J**
Lithium	mg/kg	< 4.7 UJ	**6.0 J**	< 4.3 UJ	< 4.9 UJ	< 4.3 UJ	**5.7 J**
Magnesium	mg/kg	**94,500 J**	**109,000 J**	**11,400 J**	**21,000 J**	**1,780 J**	**19,400 J**
Manganese	mg/kg	**126 J**	**92.7 J**	**43.4 J**	**44.6 J**	**36.4 J**	**69.3 J**
Molybdenum	mg/kg	**28.9 J**	**14.8 J**	**2.7 J**	**8.1 J**	**1.6 J**	**6.0 J**
Nickel	mg/kg	**6.0 J**	**7.0 J**	**1.5 J**	**7.0 J**	**1.1 J**	**5.4 J**
Potassium	mg/kg	**213 J**	**463 J**	**129 J**	**153 J**	**74.9 J**	**370 J**
Selenium	mg/kg	**0.38 J**	< 0.99 UJ	< 0.86 UJ	**1.5 J**	**0.31 J**	**0.76 J**
Silver	mg/kg	< 0.47 UJ	< 0.50 UJ	< 0.43 UJ	< 0.49 UJ	< 0.43 UJ	< 0.46 UJ
Sodium	mg/kg	**211 J**	**304 J**	**137 J**	**146 J**	**112 J**	**191 J**
Strontium	mg/kg	**74.1 J**	**85.7 J**	**352 J**	**321 J**	**427 J**	**307 J**
Thallium	mg/kg	< 0.94 UJ	< 0.99 UJ	< 0.86 UJ	< 0.98 UJ	< 0.86 UJ	< 0.93 UJ
Thorium	mg/kg	**0.30 J**	**0.62 J**	**0.18 J**	**0.23 J**	**0.21 J**	**0.56 J**
Tin	mg/kg	< 4.7 UJ	< 5.0 UJ	< 4.3 UJ	< 4.9 UJ	< 4.3 UJ	< 4.6 UJ
Titanium	mg/kg	**3.6 J**	**5.0 J**	**2.2 J**	**1.7 J**	**0.93 J**	**4.8 J**
Uranium	mg/kg	**0.95 J**	**0.60 J**	**0.94 J**	**1.7 J**	**1.1 J**	**1.6 J**
Vanadium	mg/kg	**0.68 J**	**2.9 J**	**2.7 J**	**4.4 J**	**2.7 J**	**10.0 J**
Zinc	mg/kg	**124 J**	**15.0 J**	**13.5 J**	**22.5 J**	**11.2 J**	**82.2 J**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
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Sample Location		MW-404	MW-404	MW-404	MW-404	MW-404	MW-404
Sample Depth (ft BGS)		130 - 131	135 - 135.5	148 - 148.8	154 - 155	163 - 163.5	175 - 175.8
Sample Type		N	N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021
Analyte	**Unit**						
Radiochemistry, Total							
Radium-226	pCi/g	**0.368 ± 0.231 (0.338)**	**0.329 ± 0.158 (0.241)**	**0.508 ± 0.159 (0.231)**	**0.417 ± 0.171 (0.209)**	**0.379 ± 0.135 (0.169)**	**0.442 ± 0.161 (0.307)**
Radium-228	pCi/g	0.106 ± 0.196 (0.645) U	0 ± 0.131 (0.397) U	0.228 ± 0.238 (0.328) U	0.087 ± 0.345 (0.407) U	0.115 ± 0.138 (0.642) U	0.079 ± 0.129 (0.616) U
Thorium-228	pCi/g	0.067 ± 0.102 (0.209) U	0.220 ± 0.196 (0.328) U	0.157 ± 0.132 (0.205) U	0.166 ± 0.154 (0.268) U	-0.012 ± 0.208 (0.402) UJ	0.075 ± 0.120 (0.253) U
Thorium-230	pCi/g	**0.241 ± 0.128 (0.044)**	**0.454 ± 0.217 (0.118)**	**0.368 ± 0.168 (0.121)**	**0.410 ± 0.184 (0.129)**	**0.414 ± 0.183 (0.148) J**	**0.528 ± 0.198 (0.078)**
Thorium-232	pCi/g	0.012 ± 0.058 (0.080) U	0.047 ± 0.085 (0.064) U	0 ± 0.060 (0.045) U	0.014 ± 0.064 (0.089) U	-0.016 ± 0.073 (0.148) UJ	0.041 ± 0.057 (0.042) U
Uranium-234	pCi/g	**0.361 ± 0.145 (0.065)**	**0.418 ± 0.159 (0.086)**	**0.353 ± 0.145 (0.099)**	**0.612 ± 0.200 (0.102)**	**0.349 ± 0.149 (0.130)**	**0.661 ± 0.208 (0.092)**
Uranium-235	pCi/g	0.060 ± 0.068 (0.101) U	0.030 ± 0.061 (0.084) U	0.061 ± 0.065 (0.083) U	0.036 ± 0.062 (0.046) U	**0.051 ± 0.062 (0.046)**	**0.132 ± 0.095 (0.046)**
Uranium-238	pCi/g	**0.312 ± 0.133 (0.035)**	**0.272 ± 0.123 (0.035)**	**0.462 ± 0.167 (0.085)**	**0.369 ± 0.149 (0.087)**	**0.349 ± 0.147 (0.109)**	**0.665 ± 0.208 (0.065)**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-404	MW-404	MW-404	MW-404	MW-404
Sample Depth (ft BGS)		186 - 186.6	194 - 194.6	202 - 202.9	211 - 211.6	219 - 219.8
Sample Type		N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021
Analyte	Unit					
General Chemistry Parameters						
Alkalinity, Total as CaCO3	mg/kg	**84.9 J**	**219 J**	**153 J**	**180 J**	**162 J**
Bicarbonate Alkalinity as CaCO3	mg/kg	**84.9 J**	**219 J**	**153 J**	**180 J**	**162 J**
Bromide	mg/kg	< 0.52 R	< 0.51 R	< 0.50 R	< 0.50 R	< 0.50 R
Ca Cation Exchange Capacity	meq/100g	**8.9 J**	**2.5 J**	**2.6 J**	**4.2 J**	**2.9 J**
Carbonate Alkalinity as CaCO3	mg/kg	< 205 R	< 208 R	< 204 R	< 205 R	< 202 R
Chloride	mg/kg	< 2.6 R	< 2.6 R	**3.8 J**	**7.4 J**	**6.7 J**
Fluoride	mg/kg	< 1.0 R	< 1.0 R	< 1.0 R	< 1.0 R	< 1.0 R
Iodide	mg/kg	**6.9 J**	**5.3 J**	< 5.0 R	< 5.0 R	< 5.0 R
Moisture	%	**3.3 J**	**2.7 J**	**0.51 J**	**0.67 J**	**0.70 J**
Organic Carbon, Total	mg/kg	**13,400 J**	**168 J**	< 302 R	**4,470 J**	**147 J**
pH, Lab	pH units	**7.3 J**	**7.4 J**	**7.4 J**	**7.9 J**	**7.6 J**
Solids, Total	%	**90.7 J**	**87.8 J**	**99.2 J**	**98.4 J**	**84.9 J**
Sulfate	mg/kg	**727 J**	**496 J**	**451 J**	**482 J**	**347 J**
Metals, Total						
Aluminum	mg/kg	**5,950 J**	**4,850 J**	**256 J**	**1,830 J**	**1,240 J**
Antimony	mg/kg	**0.35 J**	**0.37 J**	**0.54 J**	**0.55 J**	**0.38 J**
Arsenic	mg/kg	**5.8 J**	**5.8 J**	**8.0 J**	**9.6 J**	**11.9 J**
Barium	mg/kg	**11.0 J**	**9.3 J**	**2.9 J**	**5.8 J**	**4.2 J**
Beryllium	mg/kg	**0.060 J**	< 0.45 UJ	< 0.94 UJ	< 0.50 UJ	< 0.46 UJ
Boron	mg/kg	**12.5 J**	**11.6 J**	< 4.7 UJ	< 5.0 UJ	< 4.6 UJ
Cadmium	mg/kg	**0.17 J**	**0.17 J**	**0.63 J**	**0.085 J**	**0.86 J**
Calcium	mg/kg	**142,000 J**	**157,000 J**	**308,000 J**	**225,000 J**	**281,000 J**
Chromium	mg/kg	**11.3 J**	**9.0 J**	**3.9 J**	**4.5 J**	**3.8 J**
Cobalt	mg/kg	**5.2 J**	**4.3 J**	**2.2 J**	**1.6 J**	**1.9 J**
Copper	mg/kg	**6.6 J**	**5.6 J**	**1.4 J**	**2.2 J**	**3.2 J**
Iron	mg/kg	**14,100 J**	**11,500 J**	**3,720 J**	**6,300 J**	**5,390 J**
Lead	mg/kg	**5.1 J**	**4.4 J**	**2.4 J**	**1.4 J**	**6.4 J**
Lithium	mg/kg	**22.1 J**	**20.0 J**	< 4.7 UJ	**8.6 J**	**6.5 J**
Magnesium	mg/kg	**73,400 J**	**79,300 J**	**2,570 J**	**108,000 J**	**69,600 J**
Manganese	mg/kg	**154 J**	**144 J**	**97.7 J**	**200 J**	**204 J**
Molybdenum	mg/kg	**0.96 J**	**0.91 J**	**0.89 J**	**0.34 J**	**0.20 J**
Nickel	mg/kg	**18.0 J**	**15.2 J**	**3.8 J**	**4.9 J**	**7.2 J**
Potassium	mg/kg	**2,280 J**	**1,940 J**	**166 J**	**853 J**	**680 J**
Selenium	mg/kg	< 1.0 UJ	< 0.90 UJ	< 0.94 UJ	< 0.99 UJ	< 0.91 UJ
Silver	mg/kg	< 0.50 UJ	< 0.45 UJ	< 0.47 UJ	< 0.50 UJ	< 0.46 UJ
Sodium	mg/kg	**523 J**	**554 J**	**137 J**	**215 J**	**167 J**
Strontium	mg/kg	**142 J**	**143 J**	**283 J**	**82.6 J**	**146 J**
Thallium	mg/kg	< 1.0 UJ	< 0.90 UJ	< 0.94 UJ	< 0.99 UJ	< 0.91 UJ
Thorium	mg/kg	**3.0 J**	**2.6 J**	**0.62 J**	**0.99 J**	**3.3 J**
Tin	mg/kg	< 5.0 UJ	< 4.5 UJ	< 4.7 UJ	< 5.0 UJ	< 4.6 UJ
Titanium	mg/kg	**12.9 J**	**10.4 J**	**2.7 J**	**8.0 J**	**5.1 J**
Uranium	mg/kg	**1.1 J**	**0.89 J**	**0.35 J**	**0.25 J**	**0.35 J**
Vanadium	mg/kg	**12.7 J**	**9.8 J**	**4.7 J**	**7.2 J**	**6.0 J**
Zinc	mg/kg	**38.8 J**	**38.0 J**	**51.2 J**	**4.6 J**	**62.0 J**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-404	MW-404	MW-404	MW-404	MW-404
Sample Depth (ft BGS)		186 - 186.6	194 - 194.6	202 - 202.9	211 - 211.6	219 - 219.8
Sample Type		N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	03/19/2021	03/19/2021
Analyte	**Unit**					
Radiochemistry, Total						
Radium-226	pCi/g	**0.661 ± 0.181 (0.252)**	0.233 ± 0.151 (0.252) U	0.108 ± 0.269 (0.300) U	**0.399 ± 0.244 (0.333)**	**0.382 ± 0.262 (0.230)**
Radium-228	pCi/g	0.439 ± 0.452 (0.471) U	0 ± 0.125 (0.466) U	0.086 ± 0.171 (0.479) U	0.376 ± 0.409 (0.491) U	**0.356 ± 0.248 (0.316)**
Thorium-228	pCi/g	**0.423 ± 0.229 (0.309) J**	0.294 ± 0.338 (0.549) UJ	0.091 ± 0.115 (0.220) U	0.211 ± 0.285 (0.478) UJ	0.386 ± 0.290 (0.428) UJ
Thorium-230	pCi/g	**0.738 ± 0.214 (0.031) J**	0.170 ± 0.195 (0.306) UJ	0.115 ± 0.097 (0.132) U	0.189 ± 0.151 (0.195) UJ	**0.184 ± 0.138 (0.170) J**
Thorium-232	pCi/g	**0.436 ± 0.157 (0.083) J**	0.142 ± 0.149 (0.209) UJ	0.047 ± 0.061 (0.084) U	**0.168 ± 0.133 (0.154) J**	**0.203 ± 0.134 (0.135) J**
Uranium-234	pCi/g	**0.738 ± 0.225 (0.037)**	**0.364 ± 0.147 (0.065)**	**0.296 ± 0.141 (0.119)**	**0.251 ± 0.137 (0.121)**	**0.245 ± 0.121 (0.081)**
Uranium-235	pCi/g	0.031 ± 0.064 (0.105) U	**0.097 ± 0.081 (0.046)**	0.071 ± 0.075 (0.094) U	0.044 ± 0.079 (0.059) U	0.049 ± 0.064 (0.089) U
Uranium-238	pCi/g	**0.737 ± 0.226 (0.081)**	**0.238 ± 0.116 (0.065)**	**0.230 ± 0.118 (0.039)**	**0.414 ± 0.176 (0.083)**	**0.314 ± 0.136 (0.037)**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-404	MW-404	MW-404	MW-112	MW-407R	MW-407R
Sample Depth (ft BGS)		226 - 226.5	237 - 237.5	244 - 244.6	49 - 51	22 - 23	41 - 42
Sample Type		N	N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	05/19/2021	06/08/2021	06/08/2021
Analyte	**Unit**						
General Chemistry Parameters							
Alkalinity, Total as CaCO3	mg/kg	**168 J**	< 204 R	**156 J**	**115 J**	**195 J**	**279**
Bicarbonate Alkalinity as CaCO3	mg/kg	**168 J**	< 204 R	**156 J**	**115 J**	**195 J**	**279**
Bromide	mg/kg	< 0.50 R	< 0.51 R	< 0.51 R	< 0.53 R	< 0.59 U	< 0.65 U
Ca Cation Exchange Capacity	meq/100g	**2.9 J**	**11.0 J**	**4.6 J**	< 1.1 R	**3.3**	**3.1**
Carbonate Alkalinity as CaCO3	mg/kg	< 200 R	< 204 R	< 202 R	< 210 R	< 238 U	< 262 U
Chloride	mg/kg	**7.6 J**	**23.8 J**	**7.2 J**	< 2.7 R	< 3.0 U	**3.7**
Fluoride	mg/kg	< 1.0 R	**1.9 J**	< 1.0 R	< 1.1 R	< 1.2 U	< 1.3 U
Iodide	mg/kg	< 5.0 R	**8.4 J**	**6.0 J**	< 5.3 R	< 5.9 U	< 6.5 U
Moisture	%	**0.58 J**	**3.0 J**	**1.4 J**	**7.0**	**15.8 J**	**23.6**
Organic Carbon, Total	mg/kg	**2,330 J**	**19,700 J**	**21,000 J**	**611 J**	**635**	**492**
pH, Lab	pH units	**7.6 J**	**7.3 J**	**7.6 J**	**7.0 J**	**7.1 J**	**7.3 J**
Solids, Total	%	**95.3 J**	**96.7 J**	**98.8 J**	**88.8**	**82.0**	**79.4**
Sulfate	mg/kg	**245 J**	**2,150 J**	**2,650 J**	**18.1 J**	**16.5**	**51.6**
Metals, Total							
Aluminum	mg/kg	**1,130 J**	**9,860 J**	**1,470 J**	**759**	**2,030 J+**	**2,100**
Antimony	mg/kg	**0.41 J**	**0.56 J**	**2.4 J**	< 1.0 U	< 1.1 UJ	< 1.2 U
Arsenic	mg/kg	**5.6 J**	**902 J**	**210 J**	**1.3**	**3.5**	**1.9**
Barium	mg/kg	**205 J**	**13.5 J**	**2.9 J**	**16.2**	**48.4**	**102**
Beryllium	mg/kg	< 0.47 UJ	**0.33 J**	< 0.44 UJ	**0.059 J**	**0.17 J**	**0.12 J**
Boron	mg/kg	< 4.7 UJ	**10.8 J**	< 4.4 UJ	< 5.0 U	**0.51 J**	**0.79 J**
Cadmium	mg/kg	**0.39 J**	**1.4 J**	**1.6 J**	**0.031 J**	**0.10 J**	**0.056 J**
Calcium	mg/kg	**242,000 J**	**70,300 J**	**195,000 J**	**1,480**	**4,220**	**8,330**
Chromium	mg/kg	**4.7 J**	**13.7 J**	**14.2 J**	**1.7**	**4.4**	**4.8**
Cobalt	mg/kg	**1.4 J**	**10.1 J**	**14.0 J**	**1.8**	**3.7**	**2.5**
Copper	mg/kg	**1.5 J**	**15.5 J**	**2.8 J**	**0.64 J**	**3.0**	**1.4**
Iron	mg/kg	**8,140 J**	**48,200 J**	**117,000 J**	**2,010**	**5,710**	**4,990**
Lead	mg/kg	**2.7 J**	**23.9 J**	**94.3 J**	**1.5**	**4.3**	**2.9**
Lithium	mg/kg	**6.5 J**	**32.1 J**	**8.5 J**	**2.6 J**	**3.1 J**	**3.4 J**
Magnesium	mg/kg	**100,000 J**	**36,900 J**	**1,510 J**	**724**	**1,890 J+**	**3,830**
Manganese	mg/kg	**314 J**	**322 J**	**561 J**	**29.0**	**106**	**96.8**
Molybdenum	mg/kg	**0.084 J**	**3.4 J**	**4.6 J**	**0.073 J**	**0.14 J**	**0.13 J**
Nickel	mg/kg	**5.0 J**	**61.6 J**	**131 J**	**4.5**	**10.2**	**7.1**
Potassium	mg/kg	**599 J**	**2,850 J**	**1,070 J**	**172**	**356**	**372**
Selenium	mg/kg	< 0.94 UJ	**0.33 J**	< 0.89 UJ	< 1.0 U	< 1.1 U	< 1.2 U
Silver	mg/kg	< 0.47 UJ	< 0.48 UJ	< 0.44 UJ	< 0.50 U	< 0.53 U	< 0.62 U
Sodium	mg/kg	**194 J**	**423 J**	**202 J**	**29.4 J**	**53.9**	< 62.0 U
Strontium	mg/kg	**84.3 J**	**165 J**	**126 J**	**3.7**	**12.7**	**13.7**
Thallium	mg/kg	< 0.94 UJ	< 0.96 UJ	**0.49 J**	< 1.0 U	< 1.1 U	< 1.2 U
Thorium	mg/kg	**1.5 J**	**5.8 J**	**6.6 J**	**2.1**	**2.5**	**2.8**
Tin	mg/kg	< 4.7 UJ	< 4.8 UJ	< 4.4 UJ	< 5.0 U	< 5.3 U	< 6.2 U
Titanium	mg/kg	**6.4 J**	**20.3 J**	**10.3 J**	**47.8**	**73.4 J+**	**94.7**
Uranium	mg/kg	**0.35 J**	**0.91 J**	**0.12 J**	**0.42**	**0.36**	**0.36**
Vanadium	mg/kg	**9.5 J**	**17.2 J**	**47.6 J**	**2.7**	**7.7**	**8.1**
Zinc	mg/kg	**46.4 J**	**43.8 J**	**19.3 J**	**6.1**	**16.9**	**15.3**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-404	MW-404	MW-404	MW-112	MW-407R	MW-407R
Sample Depth (ft BGS)		226 - 226.5	237 - 237.5	244 - 244.6	49 - 51	22 - 23	41 - 42
Sample Type		N	N	N	N	N	N
Sample Date		03/19/2021	03/19/2021	03/19/2021	05/19/2021	06/08/2021	06/08/2021
Analyte	**Unit**						
Radiochemistry, Total							
Radium-226	pCi/g	**0.342 ± 0.202 (0.225)**	**1.027 ± 0.251 (0.265)**	0.115 ± 0.166 (0.241) U	**0.394 ± 0.117 (0.181)**	**0.581 ± 0.140 (0.102)**	**0.433 ± 0.109 (0.098)**
Radium-228	pCi/g	0.120 ± 0.235 (0.540) U	**1.027 ± 0.599 (0.563)**	**0.542 ± 0.261 (0.424)**	**0.360 ± 0.272 (0.431)**	**0.604 ± 0.154 (0.158)**	**0.528 ± 0.169 (0.196)**
Thorium-228	pCi/g	0.095 ± 0.109 (0.201) U	**1.02 ± 0.425 (0.479) J**	**0.755 ± 0.263 (0.186)**	0.207 ± 0.150 (0.229) U	**0.465 ± 0.259 (0.287)**	**0.708 ± 0.318 (0.339)**
Thorium-230	pCi/g	**0.154 ± 0.099 (0.042)**	**0.840 ± 0.306 (0.221) J**	**0.137 ± 0.097 (0.110)**	**0.378 ± 0.171 (0.087)**	**0.568 ± 0.265 (0.077)**	**0.440 ± 0.224 (0.131)**
Thorium-232	pCi/g	**0.135 ± 0.093 (0.077)**	**1.02 ± 0.335 (0.190) J**	**0.696 ± 0.230 (0.041)**	**0.377 ± 0.170 (0.047)**	**0.511 ± 0.250 (0.077)**	**0.394 ± 0.209 (0.071)**
Uranium-234	pCi/g	**0.232 ± 0.114 (0.065)**	**0.995 ± 0.268 (0.086)**	**0.211 ± 0.112 (0.102)**	**0.355 ± 0.155 (0.099)**	**0.342 ± 0.189 (0.156)**	**0.368 ± 0.199 (0.160)**
Uranium-235	pCi/g	0.043 ± 0.062 (0.101) U	**0.114 ± 0.090 (0.084)**	0.013 ± 0.062 (0.085) U	**0.082 ± 0.079 (0.052)**	0.077 ± 0.111 (0.181) U	0.031 ± 0.113 (0.085) U
Uranium-238	pCi/g	**0.235 ± 0.114 (0.035)**	**0.911 ± 0.252 (0.035)**	**0.120 ± 0.084 (0.087)**	**0.293 ± 0.138 (0.074)**	**0.415 ± 0.206 (0.117)**	**0.548 ± 0.244 (0.120)**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-407R	MW-407R	MW-407R	MW-407R	MW-407R
Sample Depth (ft BGS)		56 - 57	60 - 60.7	66 - 67	75 - 76	84 - 85
Sample Type		N	N	N	N	N
Sample Date		06/08/2021	06/08/2021	06/08/2021	06/08/2021	06/08/2021
Analyte	Unit					
General Chemistry Parameters						
Alkalinity, Total as CaCO3	mg/kg	**370**	**541**	**305**	**227 J**	**196 J**
Bicarbonate Alkalinity as CaCO3	mg/kg	**370**	**541**	**305**	**227 J**	**196 J**
Bromide	mg/kg	< 0.55 U	< 0.59 U	< 0.64 U	< 0.59 U	< 0.58 U
Ca Cation Exchange Capacity	meq/100g	**1.2**	**3.9**	**3.7**	**1.5**	**0.73 J**
Carbonate Alkalinity as CaCO3	mg/kg	< 219 U	< 239 U	< 256 U	< 234 U	< 234 U
Chloride	mg/kg	**3.4**	**6.2**	**6.1**	**5.9**	< 2.9 U
Fluoride	mg/kg	< 1.1 U	< 1.2 U	< 1.3 U	< 1.2 U	< 1.2 U
Iodide	mg/kg	< 5.5 U	< 5.9 U	< 6.4 U	< 5.9 U	< 5.8 U
Moisture	%	**9.2**	**16.6**	**21.9**	**15.3**	**14.3**
Organic Carbon, Total	mg/kg	**1,560**	**6,480**	**3,570**	**615**	**68.2 J**
pH, Lab	pH units	**7.8 J**	**7.9 J**	**8.0 J**	**8.4 J**	**8.7 J**
Solids, Total	%	**80.7**	**89.3**	**84.4**	**89.5**	**87.3**
Sulfate	mg/kg	**25.6**	**32.2**	**32.5**	**11.1**	**5.9**
Metals, Total						
Aluminum	mg/kg	**992**	**859**	**944**	**440**	**610**
Antimony	mg/kg	< 0.96 U	< 1.1 U	< 1.1 U	< 1.1 U	< 0.99 U
Arsenic	mg/kg	**9.7**	**12.6**	**6.5**	**1.5**	**1.8**
Barium	mg/kg	**15.4**	**20.8**	**20.4**	**4.8**	**7.4**
Beryllium	mg/kg	**0.070 J**	**0.13 J**	**0.089 J**	**0.047 J**	**0.042 J**
Boron	mg/kg	< 4.8 U	**0.61 J**	< 5.7 U	< 5.7 U	< 5.0 U
Cadmium	mg/kg	**0.037 J**	**0.18 J**	**0.053 J**	< 0.57 U	**0.022 J**
Calcium	mg/kg	**2,520**	**3,710**	**2,070**	**748**	**848**
Chromium	mg/kg	**5.4**	**2.8**	**2.3**	**1.2**	**2.3**
Cobalt	mg/kg	**1.8**	**1.9**	**1.8**	**1.8**	**2.6**
Copper	mg/kg	**0.79 J**	**1.9**	**1.4**	**0.38 J**	**0.52 J**
Iron	mg/kg	**3,630**	**3,320**	**2,820**	**1,450**	**1,830**
Lead	mg/kg	**1.8**	**2.9**	**2.7**	**0.84 J**	**0.95 J**
Lithium	mg/kg	**1.7 J**	**1.5 J**	**1.5 J**	**1.3 J**	**1.7 J**
Magnesium	mg/kg	**961**	**1,390**	**762**	**394**	**500**
Manganese	mg/kg	**36.6**	**54.3**	**31.4**	**25.5**	**29.5**
Molybdenum	mg/kg	**0.64 J**	**0.34 J**	**0.22 J**	**0.054 J**	**0.14 J**
Nickel	mg/kg	**4.8**	**6.8**	**5.4**	**4.7**	**6.7**
Potassium	mg/kg	**197**	**166**	**198**	**89.2**	**108**
Selenium	mg/kg	< 0.96 U	< 1.1 U	< 1.1 U	< 1.1 U	< 0.99 U
Silver	mg/kg	< 0.48 U	< 0.56 U	< 0.57 U	< 0.57 U	< 0.50 U
Sodium	mg/kg	< 48.2 U	< 55.9 U	< 57.2 U	< 57.5 U	< 49.6 U
Strontium	mg/kg	**6.0**	**9.2**	**6.1**	**1.7**	**2.2**
Thallium	mg/kg	< 0.96 U	< 1.1 U	< 1.1 U	< 1.1 U	< 0.99 U
Thorium	mg/kg	**1.4**	**3.5**	**1.4**	**2.2**	**0.88**
Tin	mg/kg	< 4.8 U	< 5.6 U	< 5.7 U	< 5.7 U	< 5.0 U
Titanium	mg/kg	**52.7**	**55.6**	**49.1**	**32.4**	**54.0**
Uranium	mg/kg	**0.34**	**0.63**	**0.52**	**0.55**	**0.22**
Vanadium	mg/kg	**3.6**	**4.3**	**3.7**	**1.9**	**3.9**
Zinc	mg/kg	**7.6**	**7.7**	**8.4**	**4.9**	**7.6**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-407R	MW-407R	MW-407R	MW-407R	MW-407R
Sample Depth (ft BGS)		56 - 57	60 - 60.7	66 - 67	75 - 76	84 - 85
Sample Type		N	N	N	N	N
Sample Date		06/08/2021	06/08/2021	06/08/2021	06/08/2021	06/08/2021
Analyte	**Unit**					
Radiochemistry, Total						
Radium-226	pCi/g	**0.334 ± 0.089 (0.070)**	**0.379 ± 0.097 (0.085)**	**0.311 ± 0.082 (0.091)**	**0.403 ± 0.097 (0.065)**	**0.280 ± 0.069 (0.077)**
Radium-228	pCi/g	**0.331 ± 0.121 (0.134)**	**0.555 ± 0.124 (0.120)**	**0.426 ± 0.133 (0.125)**	**0.510 ± 0.156 (0.148)**	**0.342 ± 0.109 (0.136)**
Thorium-228	pCi/g	**0.377 ± 0.195 (0.246)**	**0.356 ± 0.195 (0.269)**	**0.359 ± 0.176 (0.160)**	0.231 ± 0.167 (0.252) U	0.219 ± 0.161 (0.236) U
Thorium-230	pCi/g	**0.222 ± 0.128 (0.087)**	**0.135 ± 0.099 (0.087)**	**0.220 ± 0.132 (0.119)**	**0.259 ± 0.147 (0.054)**	**0.584 ± 0.234 (0.101)**
Thorium-232	pCi/g	**0.209 ± 0.123 (0.047)**	**0.301 ± 0.150 (0.047)**	**0.299 ± 0.152 (0.089)**	**0.438 ± 0.197 (0.099)**	**0.231 ± 0.142 (0.120)**
Uranium-234	pCi/g	**0.250 ± 0.129 (0.077)**	**0.443 ± 0.183 (0.108)**	**0.265 ± 0.148 (0.124)**	**0.268 ± 0.150 (0.125)**	**0.530 ± 0.189 (0.084)**
Uranium-235	pCi/g	0.036 ± 0.073 (0.102) U	0.014 ± 0.076 (0.102) U	0.0137 ± 0.087 (0.144) U	0.049 ± 0.088 (0.066) U	0.037 ± 0.066 (0.050) U
Uranium-238	pCi/g	**0.312 ± 0.145 (0.042)**	**0.395 ± 0.171 (0.108)**	**0.288 ± 0.153 (0.110)**	**0.338 ± 0.165 (0.051)**	**0.473 ± 0.177 (0.084)**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-407R	MW-407R	MW-407R	MW-407R
Sample Depth (ft BGS)		94.5 - 95.5	98 - 99	103 - 104	108 - 109
Sample Type		N	N	N	N
Sample Date		06/08/2021	06/08/2021	06/08/2021	06/08/2021
Analyte	Unit				
General Chemistry Parameters					
Alkalinity, Total as CaCO3	mg/kg	**460**	**132 J**	**662**	**443**
Bicarbonate Alkalinity as CaCO3	mg/kg	**460**	**132 J**	**662**	**443**
Bromide	mg/kg	< 0.75 U	< 0.59 U	< 0.53 U	< 0.58 U
Ca Cation Exchange Capacity	meq/100g	**60.6**	**4.0**	**4.1**	**7.8**
Carbonate Alkalinity as CaCO3	mg/kg	< 302 U	< 240 U	< 212 U	< 229 U
Chloride	mg/kg	**19.9**	**7.7**	**7.0**	**4.1**
Fluoride	mg/kg	**3.0**	< 1.2 U	< 1.1 U	**2.6**
Iodide	mg/kg	< 7.5 U	< 5.9 U	< 5.3 U	< 5.8 U
Moisture	%	**33.8 J**	**15.9**	**5.7**	**14.0**
Organic Carbon, Total	mg/kg	**65,200**	**2,810**	**226**	**12,000**
pH, Lab	pH units	**7.4 J**	**8.0 J**	**8.2 J**	**8.0 J**
Solids, Total	%	**69.1**	**89.8**	**88.5**	**90.3**
Sulfate	mg/kg	**83.2**	**5.7**	**11.7**	**7.9**
Metals, Total					
Aluminum	mg/kg	**1,980**	**1,230**	**878**	**1,160**
Antimony	mg/kg	**4.4**	< 1.1 U	**0.24 J**	< 1.1 U
Arsenic	mg/kg	**71.1**	**2.7**	**8.9**	**2.4**
Barium	mg/kg	**633**	**77.9**	**49.7**	**35.9**
Beryllium	mg/kg	**0.95**	**0.086 J**	**0.089 J**	**0.080 J**
Boron	mg/kg	**24.8**	< 5.5 U	**0.87 J**	**0.63 J**
Cadmium	mg/kg	**4.1**	**0.085 J**	**0.20 J**	**0.12 J**
Calcium	mg/kg	**13,000**	**2,100**	**3,110**	**1,980**
Chromium	mg/kg	**7.8**	**3.8**	**3.5**	**3.8**
Cobalt	mg/kg	**82.4**	**4.4**	**4.8**	**6.2**
Copper	mg/kg	**12.2**	**1.1 J**	**2.0**	**1.4**
Iron	mg/kg	**13,400**	**9,300**	**5,920**	**2,980**
Lead	mg/kg	**7.6**	**1.3**	**1.8**	**1.6**
Lithium	mg/kg	**2.3 J**	**1.9 J**	**1.4 J**	**2.4 J**
Magnesium	mg/kg	**2,120**	**760**	**772**	**869**
Manganese	mg/kg	**149**	**141**	**68.5**	**61.1**
Molybdenum	mg/kg	**2.0**	**0.15 J**	**0.31 J**	**0.11 J**
Nickel	mg/kg	**268**	**14.9**	**14.9**	**17.7**
Potassium	mg/kg	**282**	**140**	**162**	**212**
Selenium	mg/kg	**1.7**	< 1.1 U	< 0.91 U	< 1.1 U
Silver	mg/kg	< 0.73 U	< 0.55 U	< 0.45 U	< 0.53 U
Sodium	mg/kg	**239**	**70.7**	< 45.3 U	< 53.1 U
Strontium	mg/kg	**57.7**	**7.4**	**9.9**	**5.7**
Thallium	mg/kg	< 1.5 U	< 1.1 U	< 0.91 U	< 1.1 U
Thorium	mg/kg	**2.5**	**3.6**	**1.3**	**1.8**
Tin	mg/kg	< 7.3 U	< 5.5 U	< 4.5 U	< 5.3 U
Titanium	mg/kg	**260**	**89.3**	**38.1**	**86.3**
Uranium	mg/kg	**7.0**	**0.62**	**0.69**	**1.4**
Vanadium	mg/kg	**22.1**	**4.3**	**3.9**	**4.0**
Zinc	mg/kg	**52.5**	**8.9**	**10.9**	**10.8**

Notes and definitions are presented on Page 10

Table 5a: Validated Aquifer Matrix Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location		MW-407R	MW-407R	MW-407R	MW-407R
Sample Depth (ft BGS)		94.5 - 95.5	98 - 99	103 - 104	108 - 109
Sample Type		N	N	N	N
Sample Date		06/08/2021	06/08/2021	06/08/2021	06/08/2021
Analyte	Unit				
Radiochemistry, Total					
Radium-226	pCi/g	**1.029 ± 0.181 (0.119)**	**0.432 ± 0.117 (0.082)**	**0.656 ± 0.123 (0.076)**	**0.432 ± 0.129 (0.095)**
Radium-228	pCi/g	**0.883 ± 0.218 (0.128)**	**0.407 ± 0.129 (0.114)**	**0.454 ± 0.120 (0.109)**	**0.521 ± 0.141 (0.132)**
Thorium-228	pCi/g	**0.476 ± 0.204 (0.158)**	**0.460 ± 0.206 (0.186)**	**0.386 ± 0.207 (0.238)**	**0.459 ± 0.248 (0.311)**
Thorium-230	pCi/g	**0.688 ± 0.243 (0.089)**	**0.550 ± 0.215 (0.050)**	**0.542 ± 0.230 (0.126)**	**0.466 ± 0.223 (0.142)**
Thorium-232	pCi/g	**0.439 ± 0.188 (0.089)**	**0.348 ± 0.166 (0.050)**	**0.212 ± 0.136 (0.058)**	**0.351 ± 0.188 (0.065)**
Uranium-234	pCi/g	**1.91 ± 0.444 (0.090)**	**0.540 ± 0.200 (0.104)**	**0.608 ± 0.213 (0.078)**	**0.948 ± 0.263 (0.079) J**
Uranium-235	pCi/g	**0.079 ± 0.078 (0.053)**	0.031 ± 0.073 (0.121) U	**0.061 ± 0.074 (0.056)**	0.030 ± 0.062 (0.086) UJ
Uranium-238	pCi/g	**1.01 ± 0.287 (0.075)**	**0.340 ± 0.153 (0.078)**	**0.479 ± 0.192 (0.150)**	**0.861 ± 0.248 (0.098) J**

Notes:
ft BGS = feet below ground surface
meq/100g = milliequivalents per 100 grams of soil
mg/kg = milligram per kilogram
pCi/g = picocurie per gram
Bold = Detected
Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 5b: Validated Aquifer Matrix Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-MW-404-WQ-20210623
		Sample Type	EB
		Sample Date	06/23/2021
Analyte	Analytic Method	Unit	
General Chemistry Parameters			
Bromide	SW9056A	mg/L	< 0.050 R
Chloride	SW9056A	mg/L	< 0.25 R
Fluoride	SW9056A	mg/L	< 0.10 R
Iodide	SW9056A	mg/L	< 0.50 R
Sulfate	SW9056A	mg/L	< 0.25 R
Alkalinity, Total as CaCO3	SM2320B	mg/L	< 2.0 R
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 R
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 R
pH, Lab	SM4500-H-B	pH units	**7.6 J**
Organic Carbon, Total	SM5310C	mg/L	< 1.0 R
Metals, Total			
Aluminum	SW6010B	ug/L	< 200 U
Barium	SW6010B	ug/L	< 10.0 U
Boron	SW6010B	ug/L	< 100 U
Calcium	SW6010B	ug/L	< 500 U
Cobalt	SW6010B	ug/L	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U
Iron	SW6010B	ug/L	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U
Manganese	SW6010B	ug/L	< 5.0 U
Molybdenum	SW6010B	ug/L	< 10.0 U
Nickel	SW6010B	ug/L	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U
Silicon	SW6010B	ug/L	< 200 U
Sodium	SW6010B	ug/L	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U
Tin	SW6010B	ug/L	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U
Chromium	SW6020	ug/L	**0.26 J**
Copper	SW6020	ug/L	< 1.0 U
Lead	SW6020	ug/L	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U
Thorium	SW6020	ug/L	**0.13 J**
Uranium	SW6020	ug/L	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U

Table 5b: Validated Aquifer Matrix Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-MW-404-WQ-20210623
		Sample Type	EB
		Sample Date	06/23/2021
Analyte	**Analytic Method**	**Unit**	
Radiochemistry, Total			
Radium-226	E903.1	pCi/L	-0.123 ± 0.280 (0.660) U
Radium-228	E904.0	pCi/L	0.0967 ± 0.592 (1.35) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.0967 ± 0.872 (2.01) U
Thorium-228	HASL300	pCi/L	0.052 ± 0.143 (0.333) U
Thorium-230	HASL300	pCi/L	0.008 ± 0.095 (0.131) U
Thorium-232	HASL300	pCi/L	-0.007 ± 0.095 (0.135) U
Uranium-234	HASL300	pCi/L	0.067 ± 0.105 (0.194) U
Uranium-235	HASL300	pCi/L	-0.009 ± 0.137 (0.190) U
Uranium-238	HASL300	pCi/L	-0.014 ± 0.105 (0.173) U

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
pCi/L = picocuries per liter
***Bold** = Detected*
NA = Not Available
Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

Qualifier Definition
J = Estimated concentration.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit or minimum detectable concentration.

Table 6: Summary of Well Screen Selection
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	WATERLOO APS	Screen Number	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Screen Length (ft)	Screen Selection Rationale	Other Notes
MW-111	APS-020	1	39	49	10	Alluvial screen set below low transmissivity zone to capture increase in mobile porosity. Lower concentrations of VOCs, barium, and chloride relative to those in deeper screens.	
		2	54	64	10	Alluvial screen that captures second highest VOC concentration in the boring and relatively high specific conductivity.	
		3	79	89	10	Alluvial screen just above bedrock. Screened zone captures highest VOC, barium, chloride, and specific conductivity measured in this boring.	
MW-112	APS-021*	1	45	55	10	Alluvial screen near the top of the water table. Selected to capture first transmissive depth with higher hydraulic conductivity than the shallower alluvium. Based on nearby APS-021, this includes lower barium and chlorobenzene concentrations than the screen below.	Originally proposed screen depths adjusted based on field observations of the soil core. * APS-21 is located approximately 250 ft south of MW-112.
		2	70	80	10	Alluvial screen selected to capture high transmissivity zone. Includes the depth where the highest barium and chlorobenzene concentrations were measured in the nearby APS-021 samples.	
		3	90	100	10	Alluvial well screen selected to capture increased hydraulic conductivity compared to the 10 to 15 ft above the selected screen. No nearby analytical data available for this depth.	
MW-113	NA	1	170	180	10	Bedrock well screen in the Salem Formation that forms a couplet with the nearby monitoring well PZ-113-SS. Screen selected to capture depths of higher mobile porosity and hydraulic conductivity compared to PZ-113-SS above and the bedrock below. No geochemical data collected from target well screen, but samples from shallower and deeper locations show little variability.	
MW-118	APS-021	1	38	48	10	Top of screen set to just below the water table in accordance with OU-1 monitoring objectives.	Top of sand filter pack 1 foot below water table.
MW-205	N/A	1	160	170	10	Bedrock screen selected to capture high transmissive and high porosity zone. Higher VOC concentrations detected in shallow depths of borings will be captured by the nearby PZ-205-SS well screen.	

Table 6: Summary of Well Screen Selection
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	WATERLOO APS	Screen Number	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Screen Length (ft)	Screen Selection Rationale	Other Notes
MW-213	APS-12	*Note: Forms triplet with nearby shallow well I-67*					
		1	50	60	10	Screen selected to capture depth with higher hydraulic conductivity, deeper than I-67. The screen also intersects a slight increase in barium concentration and decrease in ORP.	
		2	75	85	10	Little variability in hydraulic conductivity over the deepest portion of boring. Screen selected to capture the portion of depth of higher hydraulic conductivity and the highest barium concentration and ORP measured below screen 1.	
MW-302	APS-001	*Note: Forms triplet with nearby shallow and intermediate alluvial wells PZ-302-AS and PZ-302-AS*					
		1	68	78	10	Alluvial screen set just above the top of bedrock. The screen intersects a peak in hydraulic conductivity and an increase in transmissivity at ~68 ft bgs. The screen also captures the zone of elevated barium, benzene, 1,4-dioxane, and chloride indicative of potential leachate impacts.	
MW-303	APS-002	*Note: Forms triplet with nearby shallow alluvial well PZ-303-AS*					
		1	68	78	10	Alluvial screen intersects the conductivity peak which correlates with a zone of relatively high chloride.	Transmissivity, VOC concentrations, and barium concentrations were all relatively consistent in depth at this location (below the shallow BTEX impacts at PZ-303-AS). Therefore, screen intervals were selected based on peaks in conductivity which correlate to relatively elevated chloride.
		2	93	103	10	Alluvial screen set at the top of bedrock; intersects the conductivity peak which correlates with a zone of relatively high chloride.	
MW-304	APS-003	1	106	116	10	Alluvial screen just above bedrock, screened to capture increasing chloride and barium concentrations when compared to samples just above selected screen depth. Hydraulic conductivity/transmissivity was higher than the zone just above selected interval. Elevated barium, VOCs, and 1,4-dioxane in shallow portion of APS boring can be monitored by existing nearby monitoring wells PZ-304-S (17 to 27 ft bgs) and PZ-304-AI (39 to 49 ft bgs).	
		2	126	136	10	Bedrock screen near top of bedrock. Screened to capture high transmissivity zone. Large fracture observed at this depth. Little variation in analytical results across multiple bedrock samples.	
		3	221	231	10	Bedrock screen. Screened depth captures slightly elevated hydraulic conductivity compared with bedrock above and below with higher capillary and mobile porosity. Little variation in analytical results across multiple bedrock samples.	

Table 6: Summary of Well Screen Selection
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	WATERLOO APS	Screen Number	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Screen Length (ft)	Screen Selection Rationale	Other Notes
MW-306	APS-004/ APS-004B	1	25	35	10	Alluvial screen set below the low transmissivity zone to capture the increase in hydraulic conductivity. Screened to capture distinct VOC signature (primarily chlorobenzene) and relatively higher VOC and barium concentrations.	
		2	80	90	10	Alluvial screen selected to capture high transmissivity zone. VOC concentrations within the screened zone lower relative to the unscreened portion above, but screen selected captures the single 1,4-dioxane detection in the boring.	
		3	110	120	10	Alluvial screen just above bedrock. Screened zone has relatively lower transmissivity but was selected to capture the highest chloride concentrations and relatively high VOC concentrations (higher concentrations of cDCE relative to the intermediate screen).	
MW-400	APS-007	1	20	30	10	Alluvial screen captures a different signature than lower screens (lower barium and chloride relative to the deeper screens and the presence of tetrachloroethene). Screened just above decrease in hydraulic conductivity.	
		2	55	65	10	Alluvial screen captures the highest chloride concentration measured in boring and distinct VOC signature (characterized by highest proportion of chlorobenzene observed in boring). Screened to capture the region of relatively higher hydraulic conductivity/transmissivity and to observe the change in hydraulic conductivity.	
		3	90	100	10	Alluvial screen captures the highest barium concentration measured in boring and distinct VOC signature (characterized by higher proportion of vinyl chloride than in shallower screens). Screened to capture region of high hydraulic conductivity/transmissivity and observed changed in hydraulic conductivity.	
		4	145	155	10	Bedrock screen in zone of relatively high transmissivity and high water content.	Limited analytical data available for bedrock. Barium, chloride, and VOC distributions show little variability between bedrock samples; therefore, screen intervals were selected based on transmissivity.
		5	195	205	10	Bedrock screen in zone of relatively high transmissivity and moderate water content zone.	

Table 6: Summary of Well Screen Selection
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	WATERLOO APS	Screen Number	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Screen Length (ft)	Screen Selection Rationale	Other Notes
MW-401	APS-008	1	32	42	10	Alluvial screen includes region of high mobile porosity at ~41 ft bgs. VOC and barium concentrations are lower than in the deeper screened intervals and we anticipate this well screen will be used to demonstrate relatively clean groundwater at this location and depth.	
		2	62	72	10	Alluvial screen interval captures zone of high transmissivity and the highest concentration of chlorobenzene, though VOC concentrations are relatively low at this location (less than 10 ug/L).	
		3	92	102	10	Alluvial screen interval captures zone of high transmissivity and the highest barium concentration measured. The VOC concentrations are relatively low in screens two and three and are also different signatures.	
MW-404	APS-005	1	48	58	10	Alluvial screen selected to capture detections of 1,4-dioxane and chlorobenzene within a depth of high mobile porosity and conductivity.	
		2	73	83	10	Alluvial screen selected to capture high mobile porosity and hydraulic conductivity; located just above a depth with a sudden decrease in these parameters, which may isolate this depth from the depths below.	
		3	103	113	10	Alluvial screen selected to capture depths of highest mobile porosity and hydraulic conductivity below screen 2. Captures higher concentrations of VOCs that were measured at depths below screen 2.	
		4	143	154	11	Bedrock screen. We installed only 1 screen in the bedrock in the Salem Formation from 143-153 instead of the originally proposed 2 bedrock screens. This is because the St. Louis Formation and much of the Salem Formation have been eroded by alluvium in this portion of the Site. As a result, 1 bedrock screen was also installed in the Warsaw Formation (183-193) following discussions with EPA.	
MW-405	APS-006	1	30	40	10	Alluvial screen—lower chloride and barium concentration relative to deeper screen intervals at this location. The screen captures intervals with the presence of chlorobenzene.	
		2	70	80	10	Alluvial screen captures the zone of relatively higher transmissivity at ~75 ft bgs and the highest barium concentration measured at this location. Screen also captures the presence of chloride and relatively elevated 1,4-dioxane concentrations. The VOC signature (no DCE or chlorobenzene) is different from the shallower and deeper VOC signatures at this location.	
		3	90	100	10	Alluvial screen—relative to screen two, barium and 1,4-dioxane concentrations are lower in screen three. The VOC signature (DCE) is different from the shallower screens.	

Table 6: Summary of Well Screen Selection
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	WATERLOO APS	Screen Number	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Screen Length (ft)	Screen Selection Rationale	Other Notes
MW-407R	APS-019	1	52	62	10	Alluvial screen captures the zone of higher transmissivity and relatively low chloride, barium, and VOC concentrations. We anticipate this screen will be used to demonstrate relatively clean groundwater at this location and depth.	
		2	72	82	10	Alluvial screen captures the zone of higher transmissivity and higher barium and 1,4-dioxane concentrations relative to other screen intervals. The VOC signature is different between screens one and three.	
		3	102	112	10	Alluvial screen captures the presence of 1,4-dioxane and lower barium concentrations relative to screen two.	
MW-505	APS-013	1	15	25	10	Alluvial screen just below top of water table. Selected screen to capture toluene detections despite lower transmissivity than deeper screens. Little variability in other concentrations with depth.	
		2	40	50	10	Alluvial screen. Screened near center of alluvium. Little variability in hydraulic conductivity or analyte concentrations across intermediate alluvium.	
		3	65	75	10	Alluvial screen near the top of bedrock. Screened to capture higher specific conductivity, iron, and chloride in the deepest APS-013 samples despite decreasing hydraulic conductivity and transmissivity in this portion. Lower porosities above and below selected screen depth is indicative of separate transmissive zone. Also captures single detection of methyl tertiary-butyl ether at the bottom of APS-013.	
MW-605	NA	1	110	120	10	Background bedrock screen in the St. Louis Formation. No geochemical data collected. Depth selected based on high mobile porosity and hydraulic conductivity relative to rock above and below.	
		2	230	240	10	Background bedrock screen in the Salem Formation. No geochemical data collected. Screen depth selected to capture sudden increase in mobile porosity and hydraulic conductivity prior to shift in formation.	

Notes:
bgs = below ground surface; BTEX = benzene, toluene, ethylbenzene ,and xylene; cDCE = cis-1,2-dichloroethene; DCE = 1,2-Dichloroethane; ft = feet; ug/L = micrograms per liter; ORP = oxidation reduction potential; VOC = volatile organic compound
NA = Not applicable. Bedrock only well with no corresponding APS boring
NA2 = Not applicable. Background alluvium well with no corresponding APS boring

Table 7a: Summary of All Wells—Construction Details
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Install Date	Borehole Diameter (in)	Pipe Size (in)	Pipe Type	Perforation Detail	Locking steel protective cover	Boring Depth (ft bgs)	Screen Length (ft)	Screen From (ft bgs)	Screen To (ft bgs)	Construction Source
Active Wells - Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program											
D-12*	10/1/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	143.7	10	133.7	143.7	As-built
D-13*	10/1/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	133	10	123	133	As-built
D-3*	8/1/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	106.5	10	96.5	106.5	As-built
D-6*	8/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	106.5	10	96.5	106.5	As-built
D-81	8/13/1984	5 (0–15 ft), 4.5 (15–61.5 ft)	2	PVC	0.010 slotted	NA	61.5	15	45	60	RIA
D-83*	8/16/1984	5 (0–15 ft), 4.5 (15–115.3 ft)	2	PVC	0.010 slotted	NA	115.3	20	77	97	RIA
D-85	8/1/1984	5 (0–10 ft), 4.5 (10–84.1 ft)	2	PVC	0.010 slotted	NA	84.1	20	62	82	RIA
D-87	8/1/1984	5 (0–30 ft), 4.5 (30–111.7 ft)	2	PVC	0.010 slotted	NA	111.7	20	91	111	RIA
D-89	8/27/1984	5 (0–25 ft), 4.5 (25–49 ft)	2	PVC	0.010 slotted	NA	49	15	33	48	RIA
D-93*	4/18/1985	6 (0–8 ft), 4.875 (8–119.2ft)	2	PVC	0.010 slotted	NA	119.2	20	92	112	RIA
I-11*	8/1/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	93	10	80.5	90.5	As-built
I-62*	10/1/1983	NA	NA	NA	NA	NA	44	10	34	44	RIA
I-65	10/1/1983	NA	NA	NA	NA	NA	36	10	26	36	RIA
I-66	10/1/1983	NA	NA	NA	NA	NA	36.9	10	26.9	36.9	RIA
I-67	10/1/1983	NA	NA	NA	NA	NA	35.4	10	25.4	35.4	RIA
I-68	10/1/1983	NA	NA	NA	NA	NA	31.2	10	21.2	31.2	RIA
I-73	6/1/1978	NA	NA	NA	NA	NA	50	3	43.2	46.2	RIA
I-9*	9/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	55.6	10	43.1	53.1	As-built
LR-100	10/4/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	26	4.8	19.7	24.5	As-built
MW-111-P1	3/8/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	94	10	39	49	ERM
MW-111-P2	3/8/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	94	10	54	64	ERM
MW-111-P3	3/8/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	94	10	79	89	ERM
MW-112-P1	5/16/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	107.5	10	45	55	ERM
MW-112-P2	5/16/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	107.5	10	70	80	ERM
MW-112-P3	5/16/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	107.5	10	90	100	ERM
MW-113	5/4/2021	9	2	Sch. 80 PVC	0.010 slotted	Yes	270	10	170.2	180.2	ERM
MW-117	3/9/2021	6	2	Sch. 80 PVC	0.010 slotted	Yes	35	10	25	35	ERM
MW-118	4/17/2021	8	2	Sch. 80 PVC	0.010 slotted	Yes	48	10	38	48	ERM
MW-205	4/2/2021	8	2	Sch. 80 PVC	0.010 slotted	Yes	300	10	160	170	ERM
MW-213-P1	5/17/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	90	10	50	60	ERM
MW-213-P2	5/17/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	90	10	75	85	ERM
MW-302	3/1/2021	6	2	Sch. 80 PVC	0.010 slotted	Yes	85.2	10	68	78	ERM
MW-303-P1	2/23/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	108	10	68	78	ERM
MW-303-P2	2/23/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	108	10	93	103	ERM
MW-304-P1	4/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	257	10	106	116	ERM
MW-304-P2	4/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	257	10	126	136	ERM
MW-304-P3	4/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	257	10	221	231	ERM
MW-306-P1	3/15/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	125.2	10	25	35	ERM
MW-306-P2	3/15/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	125.2	10	80	90	ERM
MW-306-P3	3/15/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	125.2	10	110	120	ERM
MW-400-P1	3/6/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	210	10	20	30	ERM
MW-400-P2	3/6/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	210	10	55	65	ERM
MW-400-P3	3/6/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	210	10	90	100	ERM
MW-400-P4	3/6/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	210	10	145	155	ERM
MW-400-P5	3/6/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	210	10	195	205	ERM
MW-401-P1	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	112	10	32	42	ERM
MW-401-P2	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	112	10	62	72	ERM
MW-401-P3	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	112	10	92	102	ERM
MW-404-P1	5/24/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	198	10	48	58	ERM
MW-404-P2	5/24/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	198	10	73	83	ERM
MW-404-P3	5/24/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	198	10	103	113	ERM
MW-404-P4	5/24/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	198	10	143	153	ERM
MW-404-P5	5/24/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	198	10	183	193	ERM
MW-405-P1	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	110	10	30	40	ERM
MW-405-P2	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	110	10	70	80	ERM
MW-405-P3	1/27/2021	9	4	Sch. 80 PVC	0.010 slotted	Yes	110	10	90	100	ERM
MW-407R-P1	6/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	124.2	10	53.6	63.6	ERM
MW-407R-P2	6/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	124.2	10	73.6	83.6	ERM
MW-407R-P3	6/1/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	124.2	10	103.6	113.6	ERM
MW-408	1/24/2021	6	2	Sch. 80 PVC	0.010 slotted	Yes	119	10	109	119	ERM
MW-409	1/24/2021	6	2	Sch. 80 PVC	0.010 slotted	Yes	37	10	23	33	ERM
MW-505-P1	3/23/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	81.1	10	15	25	ERM
MW-505-P2	3/23/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	81.1	10	40	50	ERM
MW-505-P3	3/23/2021	8	4	Sch. 80 PVC	0.010 slotted	Yes	81.1	10	65	75	ERM
MW-605-P1	5/25/2021	9	4	Sch. 80 PVC	0.010 slotted	Flushmount	245	10	110	120	ERM
MW-605-P2	5/25/2021	9	4	Sch. 80 PVC	0.010 slotted	Flushmount	245	10	230	240	ERM
MW-1204	4/1/1991	8	2	Sch. 80 PVC	0.010 slotted	Yes	227	10	213.5	223.5	As-built
PZ-100-KS	2/17/1995	10.25 (0–34 ft), 5.875 (34–391 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	391.2	9.8	374	383.8	As-built
PZ-100-SD	2/23/1995	10.25 (0–51 ft), 5.875 (51–246 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	246	9.8	234.8	244.6	As-built
PZ-100-SS	2/25/1995	10.25 (0–51 ft), 5.875 (51–94.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	94.5	19.64	73.96	93.6	As-built
PZ-101-SS	3/6/1995	10.25 (0–14 ft), 5.875 (14–140 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	140	9.8	129.48	139.28	As-built
PZ-102R-SS	6/18/1995	10.25 (0–35 ft), 5.875 (35–90.3 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90.3	9.8	79.83	89.63	As-built
PZ-102-SS	3/12/1995	10.25 (0–37 ft), 5.875 (37–90.4 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90.4	9.8	79.7	89.5	As-built
PZ-103-SS	2/26/1995	10.25 (0–51 ft), 5.875 (51–145.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	145.5	9.8	134.7	144.5	As-built
PZ-104-KS	6/19/1995	10.25 (0–249 ft), 5.875 (249–408 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	408	9.8	397.37	407.17	As-built
PZ-104-SD	6/17/1995	10.25 (0–38 ft), 5.875 (38–252.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	252.5	9.8	235.2	245	As-built
PZ-104-SS	6/4/1995	10.25 (0–37 ft), 5.875 (37–145 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	145	9.8	134.5	144.3	As-built
PZ-105-SS	5/24/1995	10.25 (0–45 ft), 5.875 (45–149 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	149	9.8	138.5	148.3	As-built

Notes and definitions are presented on Page 3

Table 7a: Summary of All Wells—Construction Details
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Install Date	Borehole Diameter (in)	Pipe Size (in)	Pipe Type	Perforation Detail	Locking steel protective cover	Boring Depth (ft bgs)	Screen Length (ft)	Screen From (ft bgs)	Screen To (ft bgs)	Construction Source
PZ-106-KS	3/23/1995	10.25 (0–204 ft), 5.875 (204–375 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	375	9.8	363.75	373.57	As-built
PZ-106-SD	3/24/1995	10.25 (0–26 ft), 5.875 (26–201.1 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	201.1	9.8	190.79	200.59	As-built
PZ-106-SS	4/5/1995	10.25 (0–23 ft), 5.875 (23–165.4 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	165.4	9.8	155.3	165.1	As-built
PZ-107-SS	5/22/1995	10.25 (0–32 ft), 5.875 (32–103 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	103	9.8	92.6	102.4	As-built
PZ-109-SS	4/25/1995	10.25 (0–15 ft), 5.875 (15–135.7 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	135.7	9.8	125.7	135.5	As-built
PZ-111-KS	5/6/1995	14.75 (0–84 ft), 10 (84.0–215.5), 5.875 (215.5–368.8 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	368.8	9.8	357.15	366.96	As-built
PZ-111-SD	4/21/1995	10 (0–98 ft), 5.875 (98–210 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	210	9.8	199.4	209.2	As-built
PZ-111-SS	8/29/2017	8	2	Sch. 80 PVC	0.010 slotted	Yes	113	10	462.11	462.11	RIA
PZ-113-AD	5/3/1995	10.25	2	Sch. 80 PVC	0.010 slotted	Yes	108.7	9.8	98.6	108.4	As-built
PZ-113-AS	4/11/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	40	9.8	28.9	38.7	As-built
PZ-113-SS	5/20/1995	9.75 (0–115 ft), 5.875 (115–159 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	159	9.8	148.57	158.37	As-built
PZ-114-AS	4/20/1995	10.25	2	Sch. 80 PVC	0.010 slotted	Yes	30.5	9.8	19.9	29.7	As-built
PZ-115-SS	5/21/1995	9.875 (0–39 ft), 5.875 (39–85 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	85	9.8	74.68	84.48	As-built
PZ-116-SS	6/20/1995	10.25 (0–33ft), 5.875 (33–162 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	162	9.8	151.4	161	As-built
PZ-200-SS	2/28/1995	10.25 (0–27.5 ft) 5.875 (27.5–98.3 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	98.7	88.02	9.62	97.64	As-built
PZ-201A-SS	4/23/1995	10.25 (0–33ft) 5.875 (33–90 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90	9.8	80	89.8	As-built
PZ-202-SS	3/12/1995	10.25 (0–33.5 ft), 5.875 (33.5–90 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90	48.9	40.2	89.1	As-built
PZ-203-SS	6/3/1995	10.25 (0–56 ft), 5.875 (56–110 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	110	9.8	99.6	109.4	As-built
PZ-204A-SS	8/21/1995	10.25 (0.0–14 ft), 5.875 (14–90 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90	9.6	79.5	89.1	As-built
PZ-204-SS	3/10/1995	10.25 (0–14 ft), 5.875 (14–90.3 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	90.3	78.4	10.95	89.35	As-built
PZ-205-AS	5/5/1995	14.75 (0–29ft) 8.25 (29–49ft)	2	Sch. 80 PVC	0.010 slotted	Yes	49	9.8	38.55	48.35	As-built
PZ-205-SS	5/21/1995	9.75 (0–54 ft), 5.875 (54–90 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	99	9.8	88.57	98.37	As-built
PZ-206-SS	4/24/1995	10 (0–52 ft), 5.875 (52–125.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	125.5	9.8	115	124.8	As-built
PZ-207-AS	4/10/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	40	4.8	34.9	39.7	As-built
PZ-208-SS	6/18/1995	10.25 (0–17 ft), 5.875 (17–99.2 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	99.2	9.8	88.7	98.5	As-built
PZ-209-SD	10/4/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	250	10	240	250	As-built
PZ-209-SS	10/15/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	150	10	140	150	As-built
PZ-210-SD	10/16/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	248	10	238	248	As-built
PZ-210-SS	10/16/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	148	10	138	148	As-built
PZ-211-SD	10/7/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	247	10	237	247	As-built
PZ-211-SS	10/8/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	147	10	137	147	As-built
PZ-212-SD	10/21/2013	7.25	2	Sch. 80 PVC	0.010 slotted	Yes	245	10	234	244	As-built
PZ-212-SS	10/18/2013	9 for soil, 6 for rock	2	Sch. 80 PVC	0.010 slotted	Yes	150	10	134	144	As-built
PZ-302-AI	9/26/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	43	9.8	32.6	42.4	As-built
PZ-302-AS	9/25/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	22.3	9.8	12.2	22	As-built
PZ-303-AS	10/5/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	26.5	9.8	16	25.8	As-built
PZ-304-AI	10/2/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	50	9.8	39	48.8	As-built
PZ-304-AS	9/27/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	28	9.8	17.1	26.9	As-built
S-10*	9/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	54.5	20	32	52	As-built
S-5*	8/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	49.3	10	30	40	As-built
S-8	9/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	29.3	20	6.8	26.8	As-built
S-82*	8/27/1984	5	2	PVC	0.010 slotted	NA	26.5	10	15.5	25.5	RIA
S-84	8/1/1984	5	2	PVC	0.010 slotted	NA	31.5	10	20.9	30.9	RIA
MO-1-SDR	8/4/2015	5.875	2	PVC	NA	Yes	254.82	20	233.7	253.7	MDNR**
MO-3-SS	8/12/2015	5.875	2	PVC	NA	Yes	170.4	20	150.1	170.1	MDNR**
MO-3-SDR	8/14/2015	5.875	2	PVC	NA	Yes	210.4	20	188.6	208.6	MDNR**
Inactive Wells - Not Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program											
I-4	8/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	79	10	66.5	76.5	As-built
LR-103	10/20/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	40	9.8	28.6	38.4	As-built
LR-105	10/3/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	38	9.8	26.2	36	As-built
MO-1-SS	8/6/2015	5.875	2	PVC	NA	Yes	157.37	20	133	153	MDNR**
MO-2-SD	8/8/2015	5.875	2	PVC	NA	Yes	251.54	20	229.1	249.1	MDNR**
MW-103	4/1/1990	8	2	PVC	0.010 slotted	Yes	18	10	8.4	18.4	As-built
MW-104	4/1/1990	8	2	PVC	0.010 slotted	Yes	17	10	9.9	19.9	As-built
PZ-112-AS*	4/10/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	36	4.8	29.6	34.4	As-built
S-53	1981	NA	NA	NA	NA	NA	23.7	3	20.7	23.7	RIA
Abandoned Wells											
D-14	10/1/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	58.5	5	53.5	58.5	As-built
D-90	8/7/1985	4 and 3.875	2	PVC	0.010 slotted	NA	47	NA	37	47	RIA
D-91	8/1/1985	4 and 3.875	2	Sch. 50 PVC Riser, Sch. 20 PVC Screen	200 slots	NA	45	10	35	45	RIA
D-92	4/9/1985	4 (0–40 ft), 3.875 (40–143.6 ft)	2	PVC	0.010 slotted	NA	143.6	20	123	143	RIA
D-94	4/1/1985	3.875	2	PVC	0.010 slotted	NA	109	20	86	106	RIA
D-95	4/1/1985	3.875	2	PVC	0.010 slotted	NA	101	20	81	101	RIA
F-1-D	8/1/1990	8	2	Sch. 40 PVC	0.010 slotted	Yes	79.5	5	NA	NA	RIA
F-1-S	8/1/1990	8	2	Sch. 40 PVC	0.010 slotted	Yes	32.9	10	22.5	32.5	As-built
F-2	8/10/1990	8	2	Sch. 40 PVC	0.010 slotted	Yes	25.7	15	10.3	25.3	As-built
F-3	8/1/1990	8	2	Sch. 40 PVC	0.010 slotted	Yes	46	10	32.8	42.8	As-built
I-2	Unknown	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	52	10	39.5	49.5	As-built
I-50	10/1/1983	NA	NA	NA	NA	NA	40.6	10	30.6	40.6	RIA
I-55	6/26/1978	6	2	PVC	NA	NA	60	NA	NA	NA	RIA
I-56	6/27/1978	6	2	PVC	NA	NA	60	NA	NA	NA	RIA
I-58	6/28/1978	6	2	PVC	NA	NA	60	NA	NA	NA	RIA
I-59	10/1/1983	NA	NA	NA	NA	NA	43.5	NA	NA	NA	RIA
I-72	6/1/1978	NA	NA	NA	NA	NA	50	3	47	50	RIA
LR-101	10/10/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	RIA
LR-102	10/8/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	76	4.8	54.9	59.7	As-built
LR-104	10/18/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	40	9.8	28.4	38.2	As-built

Notes and definitions are presented on Page 3

Table 7a: Summary of All Wells—Construction Details
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Install Date	Borehole Diameter (in)	Pipe Size (in)	Pipe Type	Perforation Detail	Locking steel protective cover	Boring Depth (ft bgs)	Screen Length (ft)	Screen From (ft bgs)	Screen To (ft bgs)	Construction Source
MW-101	4/1/1990	8	2	PVC	0.010 slotted	Yes	25	10	17.3	27.3	As-built
MW-102	4/1/1990	8	2	PVC	0.010 slotted	Yes	25	10	16.8	26.8	As-built
MW-105	4/12/1990	8	2	PVC	0.010 slotted	Yes	15	10	5	15	As-built
MW-106	4/12/1990	8	2	PVC	0.010 slotted	Yes	15	10	5	15	As-built
MW-107	4/1/1990	8	2	PVC	0.010 slotted	Yes	15	10	5	10	As-built
MW-1202	3/1/1985	NA	NA	NA	NA	NA	250	NA	NA	NA	RIA
MW-1203	7/1/1985	NA	NA	NA	NA	NA	250	NA	NA	NA	RIA
MW-1205	4/1/1991	11 (0–110 ft), and 6 (110–132 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	132	10	113	123	As-built
MW-1206	3/1/1991	8	2	Sch. 80 PVC	0.010 slotted	Yes	73	10	63	73	As-built
PZ-108-SS	3/29/1995	10.25 (0–20 ft), 5.875 (20–143.9 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	143.9	9.8	133.54	143.35	As-built
PZ-110-SS	5/20/1995	10.25 (0–61 ft), 5.875 (61–111.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	111.5	9.8	100.9	110.7	As-built
PZ-1201-SS	7/7/1995	Unknown (0–53 ft), 5.875 (53–250)	2	Sch. 80 PVC	0.010 slotted	Yes	250	9.6	137.69	147.29	RIA
PZ-201-SS	3/6/1995	10.25 (0–33ft) 5.875 (33–39 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	89	78.56	9.75	88.31	As-built
PZ-300-AD	9/24/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	42.2	4.8	37.1	41.9	As-built
PZ-300-AS	9/26/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	20	9.8	9.9	19.7	As-built
PZ-300-SS	9/26/1995	9.875 (0–46 ft), 5.875 (46–93 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	94.5	9.8	83.88	93.7	As-built
PZ-301-SS	9/23/1995	8.25 (0–19 ft), 5.875 (19–161.5 ft)	2	Sch. 80 PVC	0.010 slotted	Yes	161.5	9.8	150.9	160.7	As-built
PZ-305-AI	10/19/1995	8.25	2	Sch. 80 PVC	0.010 slotted	Yes	64	9.8	53.2	63	As-built
S-1	8/2/1995	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	25	20	2.5	22.5	As-built
S-52	1981	NA	NA	NA	NA	NA	25.2	3	22.2	25.2	RIA
S-54	Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	RIA
S-60	7/1/1981	NA	NA	NA	NA	NA	21	NA	NA	21	RIA
S-61	7/1/1981	NA	NA	NA	NA	NA	21.5	NA	NA	21.5	RIA
S-75	Unknown	NA	NA	NA	NA	NA	26	3	23	26	RIA
S-76	6/1/1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	RIA
S-80	8/28/1984	5	2	PVC	0.010 slotted	NA	22	10	10	20	RIA
S-88	8/1/1984	5 (0–30 ft), 4.5 (30–41.5)	2	PVC	0.010 slotted	NA	41.5	10	30	40	RIA
Unknown Wells											
I-7	Unknown	8.25	2	Sch. 40 PVC	0.010 slotted	Yes	50	10	37.5	47.5	As-built
MW-1201	3/1/1985	NA	NA	NA	NA	NA	250	197	53	250	RIA
MW-41	6/1/1978	NA	NA	NA	NA	NA	NA	NA	NA	NA	RIA
S-51	1981	NA	NA	NA	NA	NA	25.8	3	22.8	25.8	RIA

Notes:

* = Monitoring well may be in the footprint of OU-1 removal activities and potentially scheduled for future decommissioning.

** = Screen intervals for MDNR series wells have been updated based on observed depths during downhole camera survey inspections.

Abbreviations:

NA = not available
ft = feet
in = inches
ags = above ground surface
bgs = below ground surface
PVC = polyvinyl chloride
Sch. = schedule
MDNR = Missouri Department of Natural Resources
RIA = Remedial Investigation Addendum

Table 7b: Summary of All Wells—Survey Data
West Lake Landfill OU-3
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Well ID	Northing (feet)	Easting (feet)	Measuring Point Elevation (feet amsl)	Ground Surface Elevation (feet amsl)
Active Wells - Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program				
D-12	1069877.70	835111.07	479.71	478.05
D-13	1070527.19	835776.71	469.64	467.59
D-3	1069178.06	836047.59	467.52	464.82
D-6	1070235.25	834724.37	447.18	446.90
D-81	1067379.45	834638.51	450.62	448.18
D-83	1070970.89	834808.12	448.31	444.31
D-85	1069667.41	836605.11	456.88	454.73
D-87	1069252.71	835579.53	464.61	461.61
D-89	1067022.08	835261.57	456.82	455.28
D-93	1069358.89	834444.48	449.60	448.03
I-11	1069860.67	835100.02	479.57	478.43
I-62	1070979.24	834821.79	445.59	445.31
I-65	1070994.32	835508.16	441.49	438.99
I-66	1070645.68	836025.98	441.79	439.77
I-67	1070142.42	836418.99	441.63	439.48
I-68	1069613.17	836861.25	450.31	447.82
I-73	1067736.85	835745.11	461.61	459.08
I-9	1069370.17	834443.73	450.63	449.64
LR-100	1067335.00	835068.76	467.69	465.90
MO-1-SDR	1066857.75	837111.69	487.49	485.04
MO-3-SDR	1066547.43	835637.12	460.89	461.10
MO-3-SS	1066537.14	835640.76	461.65	461.85
MW-111-P1	1068622.31	835979.05	464.57	462.27
MW-111-P2	1068622.31	835979.05	464.46	462.27
MW-111-P3	1068622.31	835979.05	464.48	462.27
MW-112-P1	1069078.52	835752.05	461.22	458.38
MW-112-P2	1069078.52	835752.05	461.18	458.38
MW-112-P3	1069078.52	835752.05	461.26	458.38
MW-113	1069309.62	835896.85	461.77	459.99
MW-117	1069476.57	836092.48	457.45	456.08
MW-118	1068849.47	835721.61	461.22	459.48
MW-1204	1066461.84	835998.49	472.45	471.06
MW-205	1067514.36	835644.35	462.77	461.09
MW-213-P1	1070120.68	836433.07	443.30	440.47
MW-213-P2	1070120.68	836433.07	443.32	440.47
MW-302	1067224.35	834918.64	450.32	448.33
MW-303-P1	1067689.00	834590.90	454.65	452.53
MW-303-P2	1067689.00	834590.90	454.55	452.53
MW-304-P1	1068246.77	834600.46	455.68	453.06
MW-304-P2	1068246.77	834600.46	455.75	453.06
MW-304-P3	1068246.77	834600.46	455.77	453.06
MW-306-P1	1068686.97	834585.87	453.76	451.34
MW-306-P2	1068686.97	834585.87	453.73	451.34
MW-306-P3	1068686.97	834585.87	453.70	451.34
MW-400-P1	1070548.32	834238.72	446.60	443.74
MW-400-P2	1070548.32	834238.72	446.53	443.74
MW-400-P3	1070548.32	834238.72	446.62	443.74
MW-400-P4	1070548.32	834238.72	446.59	443.74

Table 7b: Summary of All Wells—Survey Data
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Well ID	Northing (feet)	Easting (feet)	Measuring Point Elevation (feet amsl)	Ground Surface Elevation (feet amsl)
MW-400-P5	1070548.32	834238.72	446.58	443.74
MW-401-P1	1070931.03	834756.07	448.24	445.74
MW-401-P2	1070931.03	834756.07	448.25	445.74
MW-401-P3	1070931.03	834756.07	448.21	445.74
MW-404-P1	1069071.46	834540.92	455.20	452.67
MW-404-P2	1069071.46	834540.92	455.17	452.67
MW-404-P3	1069071.46	834540.92	455.12	452.67
MW-404-P4	1069071.46	834540.92	455.16	452.67
MW-404-P5	1069071.46	834540.92	455.21	452.67
MW-405-P1	1069667.25	834326.78	447.54	444.61
MW-405-P2	1069667.25	834326.78	447.34	444.61
MW-405-P3	1069667.25	834326.78	447.42	444.61
MW-407R-P1	1069997.97	834504.94	449.14	446.20
MW-407R-P2	1069997.97	834504.94	449.08	446.20
MW-407R-P3	1069997.97	834504.94	449.12	446.20
MW-408	1070270.73	834648.15	448.54	446.17
MW-409	1070276.22	834651.13	449.07	446.60
MW-505-P1	1066615.69	834539.86	454.36	450.56
MW-505-P2	1066615.69	834539.86	454.30	450.56
MW-505-P3	1066615.69	834539.86	454.33	450.56
MW-605-P1	1065750.76	836671.28	Not surveyed*	517.70
MW-605-P2	1065750.76	836671.28	Not surveyed*	517.70
PZ-100-KS	1068883.38	837386.17	485.37	484.98
PZ-100-SD	1068893.16	837370.07	485.48	484.70
PZ-100-SS	1068909.14	837349.64	485.54	484.95
PZ-101-SS	1068514.47	836797.21	492.77	491.32
PZ-102R-SS	1068172.94	837033.22	488.17	485.91
PZ-102-SS	1068128.82	837062.52	483.58	482.28
PZ-103-SS	1067701.71	836897.86	483.26	480.92
PZ-104-KS	1067034.40	836994.88	483.59	482.27
PZ-104-SD	1067054.45	837008.91	483.19	481.85
PZ-104-SS	1067069.27	837021.63	483.28	481.93
PZ-105-SS	1066462.70	836404.53	483.21	480.88
PZ-106-KS	1066745.22	835606.68	463.99	463.04
PZ-106-SD	1066756.47	835590.58	463.10	462.47
PZ-106-SS	1066767.62	835574.51	462.41	461.52
PZ-107-SS	1067204.72	835429.42	464.20	461.30
PZ-109-SS	1068052.76	836318.69	459.86	457.38
PZ-111-KS	1068661.96	836025.04	465.38	461.51
PZ-111-SD	1068679.44	836009.28	466.05	461.99
PZ-111-SS	1068632.28	835989.62	464.11	461.80
PZ-113-AD	1069274.74	835934.72	461.22	459.68
PZ-113-AS	1069265.72	835922.49	461.12	459.74
PZ-113-SS	1069283.80	835951.22	461.57	459.74
PZ-114-AS	1069460.22	836943.02	451.11	449.78
PZ-115-SS	1069449.90	836929.98	451.98	450.46
PZ-116-SS	1066451.97	836018.18	472.77	470.70
PZ-200-SS	1068537.34	837146.34	485.45	483.85
PZ-201A-SS	1067873.20	837021.18	480.00	479.92

Table 7b: Summary of All Wells—Survey Data
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Well ID	Northing (feet)	Easting (feet)	Measuring Point Elevation (feet amsl)	Ground Surface Elevation (feet amsl)
PZ-202-SS	1067361.46	837275.99	480.90	479.72
PZ-203-SS	1066702.91	836782.02	485.94	484.20
PZ-204A-SS	1066468.34	835708.06	462.24	462.69
PZ-204-SS	1066471.49	835730.97	464.51	464.96
PZ-205-AS	1067504.99	835637.43	464.41	460.95
PZ-205-SS	1067525.32	835651.82	464.81	461.30
PZ-206-SS	1068072.35	835984.03	463.19	459.98
PZ-207-AS	1069685.73	836212.61	461.95	459.89
PZ-208-SS	1069260.51	837344.07	473.91	472.70
PZ-209-SD	1067116.93	837278.79	489.16	487.12
PZ-209-SS	1067112.99	837283.09	489.25	487.25
PZ-210-SD	1066865.50	836947.60	486.58	484.27
PZ-210-SS	1066869.88	836951.69	486.49	484.41
PZ-211-SD	1067098.29	837190.98	486.99	484.58
PZ-211-SS	1067102.77	837195.23	487.04	484.75
PZ-212-SD	1067536.98	838154.91	482.27	480.14
PZ-212-SS	1067532.30	838150.86	482.43	480.08
PZ-302-AI	1067251.61	834895.76	450.87	450.04
PZ-302-AS	1067239.09	834912.72	451.19	449.56
PZ-303-AS	1067704.49	834600.57	453.13	451.34
PZ-304-AI	1068167.02	834609.60	453.67	451.99
PZ-304-AS	1068187.71	834609.74	453.35	451.99
S-10	1069869.15	835106.11	479.84	477.80
S-5	1069197.01	836075.51	465.27	463.55
S-8	1071085.01	834899.24	443.67	441.89
S-82	1069353.13	834447.77	449.62	448.84
S-84	1069674.40	836614.38	456.56	454.73
Inactive Wells - Not Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program				
I-4	1069189.83	836064.65	464.37	463.98
LR-103	1068567.54	835392.18	470.24	466.87
LR-105	1067750.35	834699.95	485.21	482.36
MO-1-SS	1066850.81	837105.25	487.39	485.18
MO-2-SD	1066352.47	836665.31	493.15	490.71
MW-103	1068669.64	834509.43	438.95	437.93
MW-104	1067566.50	834513.70	440.66	438.23
PZ-112-AS	1069043.23	835849.46	461.67	459.17
S-53	1066911.94	834672.01	444.08	441.19
Abandoned Wells				
D-14	1068988.87	836700.02	482.97	480.71
D-90	1066200.97	834474.70	450.20	445.60
D-91	1065260.97	833944.70	452.97	447.60
D-92	1069800.97	835264.70	474.99	475.10
D-94	1070685.97	835994.70	442.28	438.10
D-95	1070861.55	836524.52	452.69	449.60
F-1-D	1068649.65	836034.74	461.23	458.38
F-1-S	1068643.97	836040.05	429.84	458.70
F-2	1067725.97	834591.70	449.70	447.50
F-3	1070530.77	835994.53	468.83	466.53
I-2	1069739.23	834386.88	446.01	442.80

Table 7b: Summary of All Wells—Survey Data
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Well ID	Northing (feet)	Easting (feet)	Measuring Point Elevation (feet amsl)	Ground Surface Elevation (feet amsl)
I-50	1065231.29	834006.66	453.26	448.60
I-55	1067827.97	834649.70	474.70	471.50
I-56	1068097.97	834661.70	478.00	474.70
I-58	1068914.97	834632.70	480.10	477.10
I-59	1069372.97	834463.70	430.44	444.50
I-72	1067930.97	835519.70	465.00	462.30
LR-101	1068443.22	834893.11	NA	NA
LR-102	1068978.18	834962.83	453.67	511.60
LR-104	1068105.76	835808.49	459.65	457.79
MW-101	1070871.45	834598.70	446.43	444.96
MW-102	1070135.68	834707.41	447.83	445.66
MW-105	1067565.65	833405.95	439.77	442.07
MW-106	1065996.72	833791.62	443.38	439.77
MW-107	1064711.71	833775.82	447.74	NA
MW-1202	1067383.97	837049.70	482.18	480.10
MW-1203	1067229.97	837129.70	483.61	480.70
MW-1205	1067428.36	835795.45	386.37	384.10
MW-1206	1067437.24	835799.07	388.08	385.80
PZ-108-SS	1067719.34	836147.31	356.65	453.70
PZ-110-SS	1068376.97	836094.30	461.06	458.03
PZ-1201-SS	1067343.39	837078.26	482.02	480.00
PZ-201-SS	1067860.52	837036.76	479.93	477.60
PZ-300-AD	1065254.81	834002.76	449.22	447.70
PZ-300-AS	1065539.41	834042.53	450.26	448.10
PZ-300-SS	1065245.72	834024.51	449.20	448.00
PZ-301-SS	1064842.65	835691.69	514.31	512.70
PZ-305-AI	1068119.66	835797.89	459.98	458.09
S-1	1069726.80	834379.71	446.11	442.90
S-52	1066510.97	834374.70	436.50	444.30
S-54	1067646.97	834642.70	431.60	469.60
S-60	1069790.97	834484.70	445.90	442.70
S-61	1070200.94	834754.56	449.20	445.50
S-75	1067291.38	834893.45	461.68	458.40
S-76	1067446.97	834743.70	477.10	474.00
S-80	1065232.74	834033.05	452.71	448.00
S-88	1068439.36	835408.73	462.36	459.60
Unknown Wells				
I-7	1070784.02	834474.57	446.57	444.10
MW-1201	1067343.97	837077.70	482.44	480.20
MW-41	1069327.97	834551.70	NA	NA
S-51	1066202.28	834495.42	449.17	445.90

Notes:
All surveys of active wells were conducted by Weaver Consultants Group of Collinsville, Illinois between 2020 and Q3 2021.
** = The measuring point elevation was not surveyed for MW-605-P1 and -P2 during the 2021 reporting period pending troubleshooting at this location. This location was not gauged or sampled during the 2021 reporting period.*
amsl = above mean sea level
NA = Not available

Table 8a: Summary of Well Development Information—Single-Screen Wells
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Well Development Dates	Minimum Volume to Purge (gallons)	Approximate Total Volume Purged (gallons)	Final Turbidity (NTU)	Well Development Results
MW-113	5/11, 5/25-5/27, 6/7/2021	346	602	9.49	Met minimum volume and turbidity criteria
MW-117	3/29/2021	64	71.5	2.77	Met minimum volume and turbidity criteria
MW-118	5/2/2021	63	65	0.79	Met minimum volume and turbidity criteria
MW-205	4/8, 4/19, 4/20, 4/21/2021	164	382	529	Met minimum volume criterion; did not meet turbidity criterion
MW-302	3/30/2021	35	195	6.59	Met minimum volume and turbidity criteria
MW-408	3/4/2021	42	73	5.40	Met minimum volume and turbidity criteria
MW-409	3/4/2021	27	65	2.87	Met minimum volume and turbidity criteria

Notes:
NTU = Nephelometric Turbidity Units

Table 8b: Summary of Well Development Information—Multi-Level Wells
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Port ID	Well Development Dates		Phase 1 Minimum Volume to Purge (gallons)	Total Volume Purged (gallons)		Final Turbidity (NTU unless otherwise specified)		Well Development Results
		Phase 1	Phase 2		Phase 1	Phase 2	Phase 1	Phase 2	
MW-111	1	4/27/2021	4/30/2021	71	240	4	75.8	3.49	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	4/28/2021	4/30/2021	71	132	3.6	49.1	8.32	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	4/28/2021	4/30/2021	117	350	3.9	76	3.38	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-112	1	6/26/2021	7/8/2021	150	160	3	22.5	9.46	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	6/26/2021	7/8/2021	127	210	3	58.7	9.08	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	6/26/2021	7/8/2021	144	210	6	71.1	6.52	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-213	1	6/28/2021	7/8/2021	199	350	3	25.8	3.18	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	6/28/2021	7/8/2021	296	350	3	7.0	2.95	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-303	1	5/1/2021	5/14/2021	148	255	3	71.4	2.72 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	5/1/2021	5/14/2021	163	270	3	61.0	2.46 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-304	1	5/19/2021	5/24/2021	252	254	3	62.6	4.70 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	5/19/2021	5/24/2021	251	258	3	50.4	7.01 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	5/19/2021	5/24, 5/26/2021	407	418	9	36.9	33.70 FNU	Met minimum volume and turbidity criteria in Phase 1; did not meet turbidity criterion in Phase 2
MW-306	1	5/2/2021	5/13/2021	55	225	3	8.7	3.10 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	5/2/2021	5/13/2021	141	275	3	50.1	4.14 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	5/2/2021	5/13/2021	201	470	3	25.4	9.03 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-400	1	4/29/2021	5/12/2021	146	168	3	14.6	5.91 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	4/29/2021	5/12/2021	146	165	3	20.7	5.87 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	4/30/2021	5/12/2021	168	260	3	55.6	6.11 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	4	4/30/2021	5/12/2021	278	379	3	53.0	3.45 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	5	4/30/2021	5/12/2021	376	410	3	51.7	4.22 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-401	1	3/18, 3/19/2021	3/22/2021	49	120	3	85.5	5.83 FNU	Met minimum volume and turbidity criteria in Phase 2; did not meet turbidity criterion in Phase 1
	2	3/18, 3/19/2021	3/22/2021	108	405	3	70.1	0.43 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	3/18, 3/19/2021	3/22/2021	167	450	3	138.0	2.14 FNU	Met minimum volume and turbidity criteria in Phase 2; did not meet turbidity criterion in Phase 1
MW-404	1	6/23/2021	7/13/2021	140	483	3	68.8	4.61	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	6/23/2021	7/13/2021	140	205	3	71.6	3.30	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	6/23/2021	7/13/2021	180	300	3	72.7	3.53	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	4	6/24/2021	7/13/2021	255	490	3	43.2	5.98	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	5	6/24/2021	7/13/2021	333	395	6	41.6	50.54	Met minimum volume and turbidity criteria in Phase 1; did not meet turbidity criterion in Phase 2
MW-405	1	3/16/2021	3/23/2021	49	60	3	563	4.90 FNU	Met minimum volume and turbidity criteria in Phase 2; did not meet turbidity criterion in Phase 1
	2	3/16/2021	3/23/2021	127	215	3	139	7.05 FNU	Met minimum volume and turbidity criteria in Phase 2; did not meet turbidity criterion in Phase 1
	3	3/16/2021	3/23/2021	166	725	3	49.3	0.35 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2

Notes:
FNU = Formazin Nephelometric Units
NTU = Nephelometric Turbidity Units

Table 8b: Summary of Well Development Information—Multi-Level Wells
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Port ID	Well Development Dates		Phase 1 Minimum Volume to Purge (gallons)	Total Volume Purged (gallons)		Final Turbidity (NTU unless otherwise specified)		Well Development Results
		Phase 1	Phase 2		Phase 1	Phase 2	Phase 1	Phase 2	
MW-407R	1	6/22/2021	7/12/2021	120	172	3	50.7	6.83	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	6/22/2021	7/12/2021	132	180	3	31.5	3.01	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	6/22/2021	7/12/2021	192	300	3	23.5	7.22	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-505	1	5/21/2021	5/25/2021	110	135	3	51.0	0.87 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	2	5/21/2021	5/25/2021	110	152	3	51.4	1.52 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
	3	5/21, 5/22/2021	5/25/2021	113	270	3	6.0	9.79 FNU	Met minimum volume and turbidity criteria in Phase 1 and Phase 2
MW-605	1	6/25/2021	7/12/2021	592	25	3	72.3	5.84	Met turbidity criteria in Phase 1 and Phase 2; did not meet minimum volume criterion in Phase 1
	2	6/27/2021	7/12, 7/13/2021	592	130	12	>1000	244.5	Did not meet minimum volume or turbidity criteria in Phase 1 and Phase 2

Notes:
FNU = Formazin Nephelometric Units
NTU = Nephelometric Turbidity Units

Table 9: Summary of Monthly Groundwater Gauging Data
West Lake Landfill OU-3
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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
D-12	Alluvium	1/7/2021	479.71	49.93	429.78
D-12	Alluvium	2/1/2021	479.71	50.11	429.60
D-12	Alluvium	3/24/2021	479.71	49.78	429.93
D-12	Alluvium	4/14/2021	479.71	47.52	432.19
D-12	Alluvium	5/3/2021	479.71	47.03	432.68
D-12	Alluvium	6/3/2021	479.71	46.89	432.82
D-12	Alluvium	7/6/2021	479.71	47.46	432.25
D-12	Alluvium	8/2/2021	479.71	45.96	433.75
D-12	Alluvium	9/9/2021	479.71	47.12	432.59
D-13	Alluvium	1/7/2021	469.64	39.94	429.70
D-13	Alluvium	2/1/2021	469.64	40.18	429.46
D-13	Alluvium	3/24/2021	469.64	38.82	430.82
D-13	Alluvium	4/14/2021	469.64	37.54	432.10
D-13	Alluvium	5/3/2021	469.64	37.02	432.62
D-13	Alluvium	6/3/2021	469.64	36.93	432.71
D-13	Alluvium	7/6/2021	469.64	36.52	433.12
D-13	Alluvium	8/2/2021	469.64	35.70	433.94
D-13	Alluvium	9/9/2021	469.64	36.98	432.66
D-3	Alluvium	1/7/2021	467.52	37.68	429.84
D-3	Alluvium	2/1/2021	467.52	38.02	429.50
D-3	Alluvium	3/24/2021	467.52	36.79	430.73
D-3	Alluvium	4/14/2021	467.52	35.47	432.05
D-3	Alluvium	5/3/2021	467.52	34.93	432.59
D-3	Alluvium	6/3/2021	467.52	34.81	432.71
D-3	Alluvium	7/6/2021	467.52	34.40	433.12
D-3	Alluvium	8/2/2021	467.52	33.79	433.73
D-3	Alluvium	9/9/2021	467.52	34.98	432.54
D-6	Alluvium	1/7/2021	447.18	17.71	429.47
D-6	Alluvium	2/1/2021	447.18	17.80	429.38
D-6	Alluvium	3/24/2021	447.18	16.43	430.75
D-6	Alluvium	4/14/2021	447.18	15.20	431.98
D-6	Alluvium	5/3/2021	447.18	14.70	432.48
D-6	Alluvium	6/3/2021	447.18	14.55	432.63
D-6	Alluvium	7/6/2021	447.18	14.02	433.16
D-6	Alluvium	8/2/2021	447.18	15.59	431.59
D-6	Alluvium	9/9/2021	447.18	14.84	432.34
D-81	Alluvium	1/7/2021	450.62	20.70	429.92
D-81	Alluvium	2/1/2021	450.62	20.65	429.97
D-81	Alluvium	3/24/2021	450.62	19.41	431.21
D-81	Alluvium	4/14/2021	450.62	18.49	432.13
D-81	Alluvium	5/3/2021	450.62	17.89	432.73
D-81	Alluvium	6/3/2021	450.62	17.80	432.82
D-81	Alluvium	7/6/2021	450.62	17.44	433.18
D-81	Alluvium	8/2/2021	450.62	17.33	433.29
D-81	Alluvium	9/9/2021	450.62	18.23	432.39
D-83	Alluvium	1/7/2021	448.31	15.72	432.59
D-83	Alluvium	2/1/2021	448.31	18.77	429.54
D-83	Alluvium	3/24/2021	448.31	17.41	430.90
D-83	Alluvium	4/14/2021	448.31	16.09	432.22
D-83	Alluvium	5/3/2021	448.31	15.60	432.71
D-83	Alluvium	6/3/2021	448.31	15.60	432.71
D-83	Alluvium	7/6/2021	448.31	14.98	433.33
D-83	Alluvium	8/2/2021	448.31	14.42	433.89
D-83	Alluvium	9/9/2021	448.31	15.75	432.56

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
D-85	Alluvium	1/7/2021	456.88	26.86	430.02
D-85	Alluvium	2/1/2021	456.88	26.98	429.90
D-85	Alluvium	3/24/2021	456.88	25.79	431.09
D-85	Alluvium	4/14/2021	456.88	24.56	432.32
D-85	Alluvium	5/3/2021	456.88	24.11	432.77
D-85	Alluvium	6/3/2021	456.88	24.03	432.85
D-85	Alluvium	7/6/2021	456.88	23.74	433.14
D-85	Alluvium	8/2/2021	456.88	22.81	434.07
D-85	Alluvium	9/9/2021	456.88	23.99	432.89
D-87	Alluvium	1/7/2021	464.61	34.81	429.80
D-87	Alluvium	2/1/2021	464.61	35.01	429.60
D-87	Alluvium	3/24/2021	464.61	33.77	430.84
D-87	Alluvium	4/14/2021	464.61	32.60	432.01
D-87	Alluvium	5/3/2021	464.61	31.98	432.63
D-87	Alluvium	6/3/2021	464.61	31.85	432.76
D-87	Alluvium	7/6/2021	464.61	31.48	433.13
D-87	Alluvium	8/2/2021	464.61	30.91	433.70
D-87	Alluvium	9/9/2021	464.61	32.04	432.57
D-89	Alluvium	1/7/2021	456.82	26.83	429.99
D-89	Alluvium	2/1/2021	456.82	26.97	429.85
D-89	Alluvium	3/24/2021	456.82	25.64	431.18
D-89	Alluvium	4/14/2021	456.82	24.66	432.16
D-89	Alluvium	5/3/2021	456.82	24.09	432.73
D-89	Alluvium	6/3/2021	456.82	24.00	432.82
D-89	Alluvium	7/6/2021	456.82	23.65	433.17
D-89	Alluvium	8/2/2021	456.82	23.50	433.32
D-89	Alluvium	9/9/2021	456.82	24.40	432.42
D-93	Alluvium	1/7/2021	449.60	20.12	429.48
D-93	Alluvium	2/1/2021	449.60	20.09	429.51
D-93	Alluvium	3/24/2021	449.60	18.77	430.83
D-93	Alluvium	4/14/2021	449.60	17.72	431.88
D-93	Alluvium	5/3/2021	449.60	17.13	432.47
D-93	Alluvium	6/3/2021	449.60	17.08	432.52
D-93	Alluvium	7/6/2021	449.60	16.59	433.01
D-93	Alluvium	8/2/2021	449.60	16.30	433.30
D-93	Alluvium	9/9/2021	449.60	17.39	432.21
I-11	Alluvium	1/7/2021	479.57	50.06	429.51
I-11	Alluvium	2/1/2021	479.57	50.21	429.36
I-11	Alluvium	3/24/2021	479.57	48.90	430.67
I-11	Alluvium	4/14/2021	479.57	47.70	431.87
I-11	Alluvium	5/3/2021	479.57	47.14	432.43
I-11	Alluvium	6/3/2021	479.57	47.03	432.54
I-11	Alluvium	7/6/2021	479.57	46.57	433.00
I-11	Alluvium	8/2/2021	479.57	46.05	433.52
I-11	Alluvium	9/9/2021	479.57	47.24	432.33
I-4	Alluvium	1/7/2021	464.37	34.64	429.73
I-4	Alluvium	2/1/2021	464.37	34.96	429.41
I-4	Alluvium	3/24/2021	464.37	33.58	430.79
I-4	Alluvium	4/14/2021	464.37	32.28	432.09
I-4	Alluvium	5/3/2021	464.37	31.74	432.63
I-4	Alluvium	6/3/2021	464.37	31.70	432.67
I-4	Alluvium	7/6/2021	464.37	31.29	433.08
I-4	Alluvium	8/2/2021	464.37	30.63	433.74
I-4	Alluvium	9/9/2021	464.37	31.82	432.55

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
I-62	Alluvium	1/7/2021	445.59	16.00	429.59
I-62	Alluvium	2/1/2021	445.59	16.13	429.46
I-62	Alluvium	3/24/2021	445.59	14.80	430.79
I-62	Alluvium	4/14/2021	445.59	13.46	432.13
I-62	Alluvium	5/3/2021	445.59	13.01	432.58
I-62	Alluvium	6/3/2021	445.59	12.88	432.71
I-62	Alluvium	7/6/2021	445.59	14.35	431.24
I-62	Alluvium	8/2/2021	445.59	11.71	433.88
I-62	Alluvium	9/9/2021	445.59	13.01	432.58
I-65	Alluvium	1/7/2021	441.49	11.80	429.69
I-65	Alluvium	2/1/2021	441.49	11.93	429.56
I-65	Alluvium	3/24/2021	441.49	10.63	430.86
I-65	Alluvium	4/14/2021	441.49	9.33	432.16
I-65	Alluvium	5/3/2021	441.49	8.82	432.67
I-65	Alluvium	6/3/2021	441.49	8.72	432.77
I-65	Alluvium	7/6/2021	441.49	8.30	433.19
I-65	Alluvium	8/2/2021	441.49	7.40	434.09
I-65	Alluvium	9/9/2021	441.49	8.74	432.75
I-66	Alluvium	1/7/2021	441.79	11.83	429.96
I-66	Alluvium	2/1/2021	441.79	11.97	429.82
I-66	Alluvium	3/24/2021	441.79	10.72	431.07
I-66	Alluvium	4/14/2021	441.79	9.43	432.36
I-66	Alluvium	5/3/2021	441.79	8.93	432.86
I-66	Alluvium	6/3/2021	441.79	8.87	432.92
I-66	Alluvium	7/6/2021	441.79	8.52	433.27
I-66	Alluvium	8/2/2021	441.79	7.53	434.26
I-66	Alluvium	9/9/2021	441.79	8.78	433.01
I-67	Alluvium	1/7/2021	441.63	11.70	429.93
I-67	Alluvium	2/1/2021	441.63	11.84	429.79
I-67	Alluvium	3/24/2021	441.63	10.57	431.06
I-67	Alluvium	4/14/2021	441.63	9.36	432.27
I-67	Alluvium	5/3/2021	441.63	8.89	432.74
I-67	Alluvium	6/3/2021	441.63	8.80	432.83
I-67	Alluvium	7/6/2021	441.63	8.49	433.14
I-67	Alluvium	8/2/2021	441.63	7.52	434.11
I-67	Alluvium	9/9/2021	441.63	8.74	432.89
I-68	Alluvium	1/7/2021	450.31	20.06	430.25
I-68	Alluvium	2/1/2021	450.31	19.96	430.35
I-68	Alluvium	3/24/2021	450.31	18.76	431.55
I-68	Alluvium	4/14/2021	450.31	17.65	432.66
I-68	Alluvium	5/3/2021	450.31	17.30	433.01
I-68	Alluvium	6/3/2021	450.31	17.30	433.01
I-68	Alluvium	7/6/2021	450.31	17.09	433.22
I-68	Alluvium	8/2/2021	450.31	16.08	434.23
I-68	Alluvium	9/9/2021	450.31	17.23	433.08
I-73	Alluvium	1/7/2021	461.61	30.76	430.85
I-73	Alluvium	2/1/2021	461.61	32.03	429.58
I-73	Alluvium	3/24/2021	461.61	30.79	430.82
I-73	Alluvium	4/14/2021	461.61	29.65	431.96
I-73	Alluvium	5/3/2021	461.61	29.03	432.58
I-73	Alluvium	6/3/2021	461.61	28.90	432.71
I-73	Alluvium	7/6/2021	461.61	28.67	432.94
I-73	Alluvium	8/2/2021	461.61	28.23	433.38
I-73	Alluvium	9/9/2021	461.61	29.26	432.35

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
I-9	Alluvium	1/7/2021	450.63	21.10	429.53
I-9	Alluvium	2/1/2021	450.63	21.11	429.52
I-9	Alluvium	3/24/2021	450.63	19.80	430.83
I-9	Alluvium	4/14/2021	450.63	18.70	431.93
I-9	Alluvium	5/3/2021	450.63	18.14	432.49
I-9	Alluvium	6/3/2021	450.63	18.00	432.63
I-9	Alluvium	7/6/2021	450.63	17.55	433.08
I-9	Alluvium	8/2/2021	450.63	17.27	433.36
I-9	Alluvium	9/9/2021	450.63	18.39	432.24
LR-100	Leachate Riser	1/7/2021	467.69	16.16	451.53
LR-100	Leachate Riser	2/1/2021	467.69	16.05	451.64
LR-100	Leachate Riser	3/24/2021	467.69	14.86	452.83
LR-100	Leachate Riser	4/14/2021	467.69	15.49	452.20
LR-100	Leachate Riser	5/3/2021	467.69	15.23	452.46
LR-100	Leachate Riser	6/3/2021	467.69	15.42	452.27
LR-100	Leachate Riser	7/6/2021	467.69	16.50	451.19
LR-100	Leachate Riser	8/2/2021	467.69	15.39	452.30
LR-100	Leachate Riser	9/9/2021	467.69	15.37	452.32
MO-1-SDR	Salem Formation	3/24/2021	487.49	24.76	462.73
MO-1-SDR	Salem Formation	4/14/2021	487.49	25.10	462.39
MO-1-SDR	Salem Formation	5/3/2021	487.49	24.80	462.69
MO-1-SDR	Salem Formation	6/3/2021	487.49	25.56	461.93
MO-1-SDR	Salem Formation	7/6/2021	487.49	26.15	461.34
MO-1-SDR	Salem Formation	8/2/2021	487.49	25.95	461.54
MO-1-SDR	Salem Formation	9/9/2021	487.49	26.18	461.31
MO-2-SD	Salem Formation	3/24/2021	493.15	32.32	460.83
MO-2-SD	Salem Formation	6/3/2021	493.15	33.02	460.13
MO-2-SD	Salem Formation	7/6/2021	493.15	33.55	459.60
MO-2-SD	Salem Formation	8/2/2021	493.15	30.70	462.45
MO-2-SD	Salem Formation	9/9/2021	493.15	30.49	462.66
MO-3-SDR	Salem Formation	3/24/2021	460.89	8.86	452.03
MO-3-SDR	Salem Formation	6/3/2021	460.89	9.10	451.79
MO-3-SDR	Salem Formation	7/6/2021	460.89	9.50	451.39
MO-3-SDR	Salem Formation	8/2/2021	460.89	9.08	451.81
MO-3-SDR	Salem Formation	9/9/2021	460.89	8.04	452.85
MO-3-SS	Salem Formation	3/24/2021	461.65	9.43	452.22
MO-3-SS	Salem Formation	6/3/2021	461.65	9.85	451.80
MO-3-SS	Salem Formation	7/6/2021	461.65	10.14	451.51
MO-3-SS	Salem Formation	8/2/2021	461.65	9.00	452.65
MO-3-SS	Salem Formation	9/9/2021	461.65	8.80	452.85
MW-111-P1	Alluvium	6/3/2021	464.57	31.58	432.99
MW-111-P1	Alluvium	7/6/2021	464.57	29.65	434.92
MW-111-P2	Alluvium	6/3/2021	464.46	31.77	432.69
MW-111-P2	Alluvium	7/6/2021	464.46	29.68	434.78
MW-111-P3	Alluvium	6/3/2021	464.48	31.78	432.70
MW-111-P3	Alluvium	7/6/2021	464.48	30.30	434.18
MW-113	Salem Formation	6/3/2021	461.77	28.82	432.95
MW-113	Salem Formation	7/6/2021	461.77	28.50	433.27
MW-113	Salem Formation	8/2/2021	461.77	27.94	433.83
MW-113	Salem Formation	9/9/2021	461.77	29.00	432.77

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
MW-117	Alluvium	4/14/2021	457.45	25.35	432.10
MW-117	Alluvium	5/3/2021	457.45	24.80	432.65
MW-117	Alluvium	6/3/2021	457.45	24.70	432.75
MW-117	Alluvium	7/6/2021	457.45	24.33	433.12
MW-117	Alluvium	8/2/2021	457.45	23.63	433.82
MW-117	Alluvium	9/9/2021	457.45	24.79	432.66
MW-118	Alluvium	6/3/2021	461.22	28.50	432.72
MW-118	Alluvium	7/6/2021	461.22	28.16	433.06
MW-118	Alluvium	8/2/2021	461.22	27.66	433.56
MW-118	Alluvium	9/9/2021	461.22	28.72	432.50
MW-1204	Salem Formation	1/7/2021	472.45	22.10	450.35
MW-1204	Salem Formation	2/1/2021	472.45	22.83	449.62
MW-1204	Salem Formation	3/24/2021	472.45	21.15	451.30
MW-1204	Salem Formation	4/14/2021	472.45	21.32	451.13
MW-1204	Salem Formation	5/3/2021	472.45	20.55	451.90
MW-1204	Salem Formation	6/3/2021	472.45	21.50	450.95
MW-1204	Salem Formation	7/6/2021	472.45	22.49	449.96
MW-1204	Salem Formation	8/2/2021	472.45	21.79	450.66
MW-1204	Salem Formation	9/9/2021	472.45	21.66	450.79
MW-205	Salem Formation	6/3/2021	462.77	28.95	433.82
MW-205	Salem Formation	7/6/2021	462.77	28.85	433.92
MW-205	Salem Formation	8/2/2021	462.77	28.42	434.35
MW-205	Salem Formation	9/9/2021	462.77	28.64	434.13
MW-302	Alluvium	4/14/2021	450.32	17.95	432.37
MW-302	Alluvium	5/3/2021	450.32	17.38	432.94
MW-302	Alluvium	6/3/2021	450.32	17.35	432.97
MW-302	Alluvium	7/6/2021	450.32	16.97	433.35
MW-302	Alluvium	8/2/2021	450.32	16.82	433.50
MW-302	Alluvium	9/9/2021	450.32	17.73	432.59
MW-303-P1	Alluvium	6/3/2021	454.65	21.76	432.89
MW-303-P1	Alluvium	7/6/2021	454.65	21.39	433.26
MW-303-P1	Alluvium	8/2/2021	454.65	21.30	433.35
MW-303-P2	Alluvium	6/3/2021	454.55	21.84	432.71
MW-303-P2	Alluvium	7/6/2021	454.55	21.47	433.08
MW-303-P2	Alluvium	8/2/2021	454.55	21.35	433.20
MW-304-P1	Alluvium	6/3/2021	455.68	22.93	432.75
MW-304-P1	Alluvium	7/6/2021	455.68	23.42	432.26
MW-304-P1	Alluvium	8/2/2021	455.68	22.11	433.57
MW-304-P2	Salem Formation	6/3/2021	455.75	22.93	432.82
MW-304-P2	Salem Formation	7/6/2021	455.75	23.20	432.55
MW-304-P2	Salem Formation	8/2/2021	455.75	22.30	433.45
MW-304-P3	Warsaw Formation	6/3/2021	455.77	22.66	433.11
MW-304-P3	Warsaw Formation	7/6/2021	455.77	22.32	433.45
MW-304-P3	Warsaw Formation	8/2/2021	455.77	22.18	433.59
MW-306-P1	Alluvium	6/3/2021	453.76	20.95	432.81
MW-306-P1	Alluvium	7/6/2021	453.76	--	433.11*
MW-306-P1	Alluvium	8/2/2021	453.76	21.32	432.44
MW-306-P1	Alluvium	9/9/2021	453.76	21.30	432.46
MW-306-P2	Alluvium	6/3/2021	453.73	20.90	432.83
MW-306-P2	Alluvium	7/6/2021	453.73	--	433.01*
MW-306-P2	Alluvium	8/2/2021	453.73	20.33	433.40
MW-306-P2	Alluvium	9/9/2021	453.73	21.35	432.38

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
MW-306-P3	Alluvium	6/3/2021	453.70	20.84	432.86
MW-306-P3	Alluvium	7/6/2021	453.70	20.74	432.96
MW-306-P3	Alluvium	8/2/2021	453.70	20.36	433.34
MW-306-P3	Alluvium	9/9/2021	453.70	21.37	432.33
MW-400-P1	Alluvium	6/3/2021	446.60	14.78	431.82
MW-400-P1	Alluvium	7/6/2021	446.60	12.98	433.62
MW-400-P1	Alluvium	8/2/2021	446.60	12.77	433.83
MW-400-P1	Alluvium	9/9/2021	446.60	14.03	432.57
MW-400-P2	Alluvium	6/3/2021	446.53	13.80	432.73
MW-400-P2	Alluvium	7/6/2021	446.53	13.04	433.49
MW-400-P2	Alluvium	8/2/2021	446.53	12.82	433.71
MW-400-P2	Alluvium	9/9/2021	446.53	14.10	432.43
MW-400-P3	Alluvium	6/3/2021	446.62	13.80	432.82
MW-400-P3	Alluvium	7/6/2021	446.62	13.05	433.57
MW-400-P3	Alluvium	8/2/2021	446.62	12.80	433.82
MW-400-P3	Alluvium	9/9/2021	446.62	14.18	432.44
MW-400-P4	Salem Formation	6/3/2021	446.59	13.72	432.87
MW-400-P4	Salem Formation	7/6/2021	446.59	12.92	433.67
MW-400-P4	Salem Formation	8/2/2021	446.59	12.85	433.74
MW-400-P4	Salem Formation	9/9/2021	446.59	14.20	432.39
MW-400-P5	Warsaw Formation	6/3/2021	446.58	13.68	432.90
MW-400-P5	Warsaw Formation	7/6/2021	446.58	12.98	433.60
MW-400-P5	Warsaw Formation	8/2/2021	446.58	12.90	433.68
MW-400-P5	Warsaw Formation	9/9/2021	446.58	14.08	432.50
MW-401-P1	Alluvium	4/14/2021	448.24	16.08	432.16
MW-401-P1	Alluvium	5/3/2021	448.24	15.67	432.57
MW-401-P1	Alluvium	6/3/2021	448.24	15.41	432.83
MW-401-P1	Alluvium	7/6/2021	448.24	15.01	433.23
MW-401-P1	Alluvium	9/9/2021	448.24	15.65	432.59
MW-401-P2	Alluvium	4/14/2021	448.25	16.84	431.41
MW-401-P2	Alluvium	5/3/2021	448.25	15.42	432.83
MW-401-P2	Alluvium	6/3/2021	448.25	15.21	433.04
MW-401-P2	Alluvium	7/6/2021	448.25	14.98	433.27
MW-401-P2	Alluvium	9/9/2021	448.25	15.71	432.54
MW-401-P3	Alluvium	4/14/2021	448.21	15.78	432.43
MW-401-P3	Alluvium	5/3/2021	448.21	15.60	432.61
MW-401-P3	Alluvium	6/3/2021	448.21	15.43	432.78
MW-401-P3	Alluvium	7/6/2021	448.21	14.87	433.34
MW-401-P3	Alluvium	9/9/2021	448.21	15.72	432.49
MW-404-P1	Alluvium	7/6/2021	455.20	22.05	433.15
MW-404-P1	Alluvium	8/2/2021	455.20	21.66	433.54
MW-404-P1	Alluvium	9/9/2021	455.20	22.75	432.45
MW-404-P2	Alluvium	7/6/2021	455.17	21.94	433.23
MW-404-P2	Alluvium	8/2/2021	455.17	21.62	433.55
MW-404-P2	Alluvium	9/9/2021	455.17	22.78	432.39
MW-404-P3	Alluvium	7/6/2021	455.12	22.00	433.12
MW-404-P3	Alluvium	8/2/2021	455.12	21.73	433.39
MW-404-P3	Alluvium	9/9/2021	455.12	22.79	432.33
MW-404-P4	Salem Formation	7/6/2021	455.16	21.95	433.21
MW-404-P4	Salem Formation	8/2/2021	455.16	21.80	433.36
MW-404-P4	Salem Formation	9/9/2021	455.16	22.90	432.26

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Table 9: Summary of Monthly Groundwater Gauging Data
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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
MW-404-P5	Warsaw Formation	7/6/2021	455.21	22.01	433.20
MW-404-P5	Warsaw Formation	8/2/2021	455.21	21.77	433.44
MW-404-P5	Warsaw Formation	9/9/2021	455.21	22.79	432.42
MW-405-P1	Alluvium	4/14/2021	447.54	15.41	432.13
MW-405-P1	Alluvium	5/3/2021	447.54	14.87	432.67
MW-405-P1	Alluvium	6/3/2021	447.54	14.73	432.81
MW-405-P1	Alluvium	7/6/2021	447.54	14.08	433.46
MW-405-P1	Alluvium	8/2/2021	447.54	13.91	433.63
MW-405-P1	Alluvium	9/9/2021	447.54	14.76	432.78
MW-405-P2	Alluvium	4/14/2021	447.34	15.35	431.99
MW-405-P2	Alluvium	5/3/2021	447.34	14.83	432.51
MW-405-P2	Alluvium	6/3/2021	447.34	14.70	432.64
MW-405-P2	Alluvium	7/6/2021	447.34	13.96	433.38
MW-405-P2	Alluvium	8/2/2021	447.34	13.83	433.51
MW-405-P2	Alluvium	9/9/2021	447.34	15.02	432.32
MW-405-P3	Alluvium	4/14/2021	447.42	15.17	432.25
MW-405-P3	Alluvium	5/3/2021	447.42	14.79	432.63
MW-405-P3	Alluvium	6/3/2021	447.42	14.96	432.46
MW-405-P3	Alluvium	7/6/2021	447.42	13.91	433.51
MW-405-P3	Alluvium	8/2/2021	447.42	13.78	433.64
MW-405-P3	Alluvium	9/9/2021	447.42	15.00	432.42
MW-407R-P1	Alluvium	7/6/2021	449.14	15.89	433.25
MW-407R-P1	Alluvium	8/2/2021	449.14	15.53	433.61
MW-407R-P1	Alluvium	9/9/2021	449.14	16.81	432.33
MW-407R-P2	Alluvium	7/6/2021	449.08	15.90	433.18
MW-407R-P2	Alluvium	8/2/2021	449.08	15.58	433.50
MW-407R-P2	Alluvium	9/9/2021	449.08	16.76	432.32
MW-407R-P3	Alluvium	7/6/2021	449.12	15.90	433.22
MW-407R-P3	Alluvium	8/2/2021	449.12	15.51	433.61
MW-407R-P3	Alluvium	9/9/2021	449.12	16.82	432.30
MW-408	Alluvium	3/24/2021	448.54	17.55	430.99
MW-408	Alluvium	4/14/2021	448.54	16.32	432.22
MW-408	Alluvium	5/3/2021	448.54	15.81	432.73
MW-408	Alluvium	6/3/2021	448.54	15.72	432.82
MW-408	Alluvium	7/6/2021	448.54	15.21	433.33
MW-408	Alluvium	8/2/2021	448.54	14.80	433.74
MW-408	Alluvium	9/9/2021	448.54	16.03	432.51
MW-409	Alluvium	3/24/2021	449.07	18.26	430.81
MW-409	Alluvium	4/14/2021	449.07	16.94	432.13
MW-409	Alluvium	5/3/2021	449.07	16.47	432.60
MW-409	Alluvium	6/3/2021	449.07	16.35	432.72
MW-409	Alluvium	7/6/2021	449.07	15.83	433.24
MW-409	Alluvium	8/2/2021	449.07	15.37	433.70
MW-409	Alluvium	9/9/2021	449.07	16.62	432.45
MW-505-P1	Alluvium	6/3/2021	454.36	20.28	434.08
MW-505-P1	Alluvium	7/6/2021	454.36	20.11	434.25
MW-505-P1	Alluvium	8/2/2021	454.36	20.07	434.29
MW-505-P1	Alluvium	9/9/2021	454.36	20.78	433.58
MW-505-P2	Alluvium	6/3/2021	454.30	21.24	433.06
MW-505-P2	Alluvium	7/6/2021	454.30	20.88	433.42
MW-505-P2	Alluvium	8/2/2021	454.30	20.36	433.94
MW-505-P2	Alluvium	9/9/2021	454.30	21.67	432.63

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
MW-505-P3	Alluvium	6/3/2021	454.33	21.23	433.10
MW-505-P3	Alluvium	7/6/2021	454.33	20.86	433.47
MW-505-P3	Alluvium	8/2/2021	454.33	20.81	433.52
MW-505-P3	Alluvium	9/9/2021	454.33	21.68	432.65
PZ-100-KS	Keokuk Formation	1/7/2021	485.37	24.43	460.94
PZ-100-KS	Keokuk Formation	2/1/2021	485.37	27.20	458.17
PZ-100-KS	Keokuk Formation	3/24/2021	485.37	23.69	461.68
PZ-100-KS	Keokuk Formation	4/14/2021	485.37	24.07	461.30
PZ-100-KS	Keokuk Formation	5/3/2021	485.37	23.49	461.88
PZ-100-KS	Keokuk Formation	6/3/2021	485.37	23.58	461.79
PZ-100-KS	Keokuk Formation	7/6/2021	485.37	23.82	461.55
PZ-100-KS	Keokuk Formation	8/2/2021	485.37	23.44	461.93
PZ-100-KS	Keokuk Formation	9/9/2021	485.37	23.52	461.85
PZ-100-SD	Salem Formation	1/7/2021	485.48	38.42	447.06
PZ-100-SD	Salem Formation	2/1/2021	485.48	38.84	446.64
PZ-100-SD	Salem Formation	3/24/2021	485.48	38.60	446.88
PZ-100-SD	Salem Formation	4/14/2021	485.48	38.73	446.75
PZ-100-SD	Salem Formation	5/3/2021	485.48	37.92	447.56
PZ-100-SD	Salem Formation	6/3/2021	485.48	37.14	448.34
PZ-100-SD	Salem Formation	7/6/2021	485.48	37.92	447.56
PZ-100-SD	Salem Formation	8/2/2021	485.48	37.95	447.53
PZ-100-SD	Salem Formation	9/9/2021	485.48	38.60	446.88
PZ-100-SS	St Louis Formation	1/7/2021	485.54	35.67	449.87
PZ-100-SS	St Louis Formation	2/1/2021	485.54	36.67	448.87
PZ-100-SS	St Louis Formation	3/24/2021	485.54	37.03	448.51
PZ-100-SS	St Louis Formation	4/14/2021	485.54	37.10	448.44
PZ-100-SS	St Louis Formation	5/3/2021	485.54	37.04	448.50
PZ-100-SS	St Louis Formation	6/3/2021	485.54	36.59	448.95
PZ-100-SS	St Louis Formation	7/6/2021	485.54	38.14	447.40
PZ-100-SS	St Louis Formation	8/2/2021	485.54	37.70	447.84
PZ-100-SS	St Louis Formation	9/9/2021	485.54	38.34	447.20
PZ-101-SS	St Louis Formation	1/7/2021	492.77	56.60	436.17
PZ-101-SS	St Louis Formation	2/1/2021	492.77	57.66	435.11
PZ-101-SS	St Louis Formation	3/24/2021	492.77	54.80	437.97
PZ-101-SS	St Louis Formation	4/14/2021	492.77	53.95	438.82
PZ-101-SS	St Louis Formation	5/3/2021	492.77	52.48	440.29
PZ-101-SS	St Louis Formation	6/3/2021	492.77	49.10	443.67
PZ-101-SS	St Louis Formation	7/6/2021	492.77	48.71	444.06
PZ-101-SS	St Louis Formation	8/2/2021	492.77	48.14	444.63
PZ-101-SS	St Louis Formation	9/9/2021	492.77	48.63	444.14
PZ-102R-SS	St Louis Formation	1/7/2021	488.17	28.96	459.21
PZ-102R-SS	St Louis Formation	2/1/2021	488.17	29.30	458.87
PZ-102R-SS	St Louis Formation	3/24/2021	488.17	30.93	457.24
PZ-102R-SS	St Louis Formation	4/14/2021	488.17	29.92	458.25
PZ-102R-SS	St Louis Formation	5/3/2021	488.17	29.45	458.72
PZ-102R-SS	St Louis Formation	6/3/2021	488.17	29.87	458.30
PZ-102R-SS	St Louis Formation	7/6/2021	488.17	29.95	458.22
PZ-102R-SS	St Louis Formation	8/2/2021	488.17	29.65	458.52
PZ-102R-SS	St Louis Formation	9/9/2021	488.17	30.85	457.32

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-102-SS	St Louis Formation	1/7/2021	483.58	27.55	456.03
PZ-102-SS	St Louis Formation	2/1/2021	483.58	27.38	456.20
PZ-102-SS	St Louis Formation	3/24/2021	483.58	29.17	454.41
PZ-102-SS	St Louis Formation	4/14/2021	483.58	28.57	455.01
PZ-102-SS	St Louis Formation	5/3/2021	483.58	27.07	456.51
PZ-102-SS	St Louis Formation	6/3/2021	483.58	28.20	455.38
PZ-102-SS	St Louis Formation	7/6/2021	483.58	28.33	455.25
PZ-102-SS	St Louis Formation	8/2/2021	483.58	28.81	454.77
PZ-102-SS	St Louis Formation	9/9/2021	483.58	29.34	454.24
PZ-103-SS	St Louis Formation	1/7/2021	483.26	23.09	460.17
PZ-103-SS	St Louis Formation	2/1/2021	483.26	23.25	460.01
PZ-103-SS	St Louis Formation	3/24/2021	483.26	22.50	460.76
PZ-103-SS	St Louis Formation	4/14/2021	483.26	23.20	460.06
PZ-103-SS	St Louis Formation	5/3/2021	483.26	22.86	460.40
PZ-103-SS	St Louis Formation	6/3/2021	483.26	23.35	459.91
PZ-103-SS	St Louis Formation	7/6/2021	483.26	23.27	459.99
PZ-103-SS	St Louis Formation	8/2/2021	483.26	23.10	460.16
PZ-103-SS	St Louis Formation	9/9/2021	483.26	23.06	460.20
PZ-104-KS	Keokuk Formation	1/7/2021	483.59	16.95	466.64
PZ-104-KS	Keokuk Formation	2/1/2021	483.59	16.98	466.61
PZ-104-KS	Keokuk Formation	3/24/2021	483.59	16.24	467.35
PZ-104-KS	Keokuk Formation	4/14/2021	483.59	16.60	466.99
PZ-104-KS	Keokuk Formation	5/3/2021	483.59	15.22	468.37
PZ-104-KS	Keokuk Formation	6/3/2021	483.59	16.89	466.70
PZ-104-KS	Keokuk Formation	7/6/2021	483.59	17.05	466.54
PZ-104-KS	Keokuk Formation	8/2/2021	483.59	16.90	466.69
PZ-104-KS	Keokuk Formation	9/9/2021	483.59	16.80	466.79
PZ-104-SD	Salem Formation	1/7/2021	483.19	24.30	458.89
PZ-104-SD	Salem Formation	2/1/2021	483.19	24.25	458.94
PZ-104-SD	Salem Formation	3/24/2021	483.19	22.74	460.45
PZ-104-SD	Salem Formation	4/14/2021	483.19	23.04	460.15
PZ-104-SD	Salem Formation	5/3/2021	483.19	22.64	460.55
PZ-104-SD	Salem Formation	6/3/2021	483.19	23.55	459.64
PZ-104-SD	Salem Formation	7/6/2021	483.19	23.98	459.21
PZ-104-SD	Salem Formation	8/2/2021	483.19	23.70	459.49
PZ-104-SD	Salem Formation	9/9/2021	483.19	23.90	459.29
PZ-104-SS	St Louis Formation	1/7/2021	483.28	24.51	458.77
PZ-104-SS	St Louis Formation	2/1/2021	483.28	24.37	458.91
PZ-104-SS	St Louis Formation	3/24/2021	483.28	23.60	459.68
PZ-104-SS	St Louis Formation	4/14/2021	483.28	23.34	459.94
PZ-104-SS	St Louis Formation	5/3/2021	483.28	23.25	460.03
PZ-104-SS	St Louis Formation	6/3/2021	483.28	23.82	459.46
PZ-104-SS	St Louis Formation	7/6/2021	483.28	24.07	459.21
PZ-104-SS	St Louis Formation	8/2/2021	483.28	23.47	459.81
PZ-104-SS	St Louis Formation	9/9/2021	483.28	23.92	459.36
PZ-105-SS	St Louis Formation	1/7/2021	483.21	24.21	459.00
PZ-105-SS	St Louis Formation	2/1/2021	483.21	24.10	459.11
PZ-105-SS	St Louis Formation	3/24/2021	483.21	22.47	460.74
PZ-105-SS	St Louis Formation	4/14/2021	483.21	22.70	460.51
PZ-105-SS	St Louis Formation	5/3/2021	483.21	22.40	460.81
PZ-105-SS	St Louis Formation	6/3/2021	483.21	23.30	459.91
PZ-105-SS	St Louis Formation	7/6/2021	483.21	23.80	459.41
PZ-105-SS	St Louis Formation	8/2/2021	483.21	23.71	459.50
PZ-105-SS	St Louis Formation	9/9/2021	483.21	23.72	459.49

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-106-KS	Keokuk Formation	1/7/2021	463.99	2.89	461.10
PZ-106-KS	Keokuk Formation	2/1/2021	463.99	2.97	461.02
PZ-106-KS	Keokuk Formation	3/24/2021	463.99	2.23	461.76
PZ-106-KS	Keokuk Formation	4/14/2021	463.99	2.57	461.42
PZ-106-KS	Keokuk Formation	5/3/2021	463.99	1.85	462.14
PZ-106-KS	Keokuk Formation	6/3/2021	463.99	2.44	461.55
PZ-106-KS	Keokuk Formation	7/6/2021	463.99	2.64	461.35
PZ-106-KS	Keokuk Formation	8/2/2021	463.99	2.14	461.85
PZ-106-KS	Keokuk Formation	9/9/2021	463.99	2.00	461.99
PZ-106-SD	Salem Formation	1/7/2021	463.10	20.20	442.90
PZ-106-SD	Salem Formation	2/1/2021	463.10	20.30	442.80
PZ-106-SD	Salem Formation	3/24/2021	463.10	19.55	443.55
PZ-106-SD	Salem Formation	4/14/2021	463.10	20.06	443.04
PZ-106-SD	Salem Formation	5/3/2021	463.10	20.16	442.94
PZ-106-SD	Salem Formation	6/3/2021	463.10	21.28	441.82
PZ-106-SD	Salem Formation	7/6/2021	463.10	21.02	442.08
PZ-106-SD	Salem Formation	8/2/2021	463.10	20.05	443.05
PZ-106-SD	Salem Formation	9/9/2021	463.10	19.30	443.80
PZ-106-SS	Salem Formation	1/7/2021	462.41	19.70	442.71
PZ-106-SS	Salem Formation	2/1/2021	462.41	19.71	442.70
PZ-106-SS	Salem Formation	3/24/2021	462.41	19.08	443.33
PZ-106-SS	Salem Formation	4/14/2021	462.41	19.59	442.82
PZ-106-SS	Salem Formation	5/3/2021	462.41	19.71	442.70
PZ-106-SS	Salem Formation	6/3/2021	462.41	20.90	441.51
PZ-106-SS	Salem Formation	7/6/2021	462.41	20.60	441.81
PZ-106-SS	Salem Formation	8/2/2021	462.41	19.63	442.78
PZ-106-SS	Salem Formation	9/9/2021	462.41	18.74	443.67
PZ-107-SS	St Louis Formation	1/7/2021	464.20	34.10	430.10
PZ-107-SS	St Louis Formation	2/1/2021	464.20	34.34	429.86
PZ-107-SS	St Louis Formation	3/24/2021	464.20	33.02	431.18
PZ-107-SS	St Louis Formation	4/14/2021	464.20	32.00	432.20
PZ-107-SS	St Louis Formation	5/3/2021	464.20	31.38	432.82
PZ-107-SS	St Louis Formation	6/3/2021	464.20	31.32	432.88
PZ-107-SS	St Louis Formation	7/6/2021	464.20	31.00	433.20
PZ-107-SS	St Louis Formation	8/2/2021	464.20	30.80	433.40
PZ-107-SS	St Louis Formation	9/9/2021	464.20	31.72	432.48
PZ-109-SS	St Louis Formation	1/7/2021	459.86	34.77	425.09
PZ-109-SS	St Louis Formation	2/1/2021	459.86	35.62	424.24
PZ-109-SS	St Louis Formation	3/24/2021	459.86	34.45	425.41
PZ-109-SS	St Louis Formation	4/14/2021	459.86	31.74	428.12
PZ-109-SS	St Louis Formation	5/3/2021	459.86	29.73	430.13
PZ-109-SS	St Louis Formation	6/3/2021	459.86	25.98	433.88
PZ-109-SS	St Louis Formation	7/6/2021	459.86	24.73	435.13
PZ-109-SS	St Louis Formation	8/2/2021	459.86	24.29	435.57
PZ-109-SS	St Louis Formation	9/9/2021	459.86	24.71	435.15
PZ-111-KS	Keokuk Formation	1/7/2021	465.38	7.45	457.93
PZ-111-KS	Keokuk Formation	2/1/2021	465.38	7.58	457.80
PZ-111-KS	Keokuk Formation	3/24/2021	465.38	6.80	458.58
PZ-111-KS	Keokuk Formation	4/14/2021	465.38	7.06	458.32
PZ-111-KS	Keokuk Formation	5/3/2021	465.38	6.43	458.95
PZ-111-KS	Keokuk Formation	6/3/2021	465.38	7.84	457.54
PZ-111-KS	Keokuk Formation	7/6/2021	465.38	7.08	458.30
PZ-111-KS	Keokuk Formation	8/2/2021	465.38	6.61	458.77
PZ-111-KS	Keokuk Formation	9/9/2021	465.38	6.43	458.95

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-111-SD	Salem Formation	1/7/2021	466.05	36.08	429.97
PZ-111-SD	Salem Formation	2/1/2021	466.05	36.25	429.80
PZ-111-SD	Salem Formation	3/24/2021	466.05	41.54	424.51
PZ-111-SD	Salem Formation	4/14/2021	466.05	35.64	430.41
PZ-111-SD	Salem Formation	5/3/2021	466.05	34.05	432.00
PZ-111-SD	Salem Formation	6/3/2021	466.05	41.36	424.69
PZ-111-SD	Salem Formation	7/6/2021	466.05	33.70	432.35
PZ-111-SD	Salem Formation	8/2/2021	466.05	32.20	433.85
PZ-111-SD	Salem Formation	9/9/2021	466.05	38.66	427.39
PZ-111-SS	St Louis Formation	1/7/2021	464.11	34.06	430.05
PZ-111-SS	St Louis Formation	2/1/2021	464.11	34.40	429.71
PZ-111-SS	St Louis Formation	3/24/2021	464.11	33.26	430.85
PZ-111-SS	St Louis Formation	4/14/2021	464.11	32.00	432.11
PZ-111-SS	St Louis Formation	5/3/2021	464.11	31.44	432.67
PZ-111-SS	St Louis Formation	6/3/2021	464.11	31.10	433.01
PZ-111-SS	St Louis Formation	7/6/2021	464.11	30.89	433.22
PZ-111-SS	St Louis Formation	8/2/2021	464.11	30.35	433.76
PZ-111-SS	St Louis Formation	9/9/2021	464.11	31.44	432.67
PZ-113-AD	Alluvium	1/7/2021	461.22	31.43	429.79
PZ-113-AD	Alluvium	2/1/2021	461.22	31.70	429.52
PZ-113-AD	Alluvium	3/24/2021	461.22	30.39	430.83
PZ-113-AD	Alluvium	4/14/2021	461.22	29.27	431.95
PZ-113-AD	Alluvium	5/3/2021	461.22	28.61	432.61
PZ-113-AD	Alluvium	6/3/2021	461.22	28.48	432.74
PZ-113-AD	Alluvium	7/6/2021	461.22	28.14	433.08
PZ-113-AD	Alluvium	8/2/2021	461.22	27.51	433.71
PZ-113-AD	Alluvium	9/9/2021	461.22	28.62	432.60
PZ-113-AS	Alluvium	1/7/2021	461.12	31.35	429.77
PZ-113-AS	Alluvium	2/1/2021	461.12	31.63	429.49
PZ-113-AS	Alluvium	3/24/2021	461.12	30.37	430.75
PZ-113-AS	Alluvium	4/14/2021	461.12	29.14	431.98
PZ-113-AS	Alluvium	5/3/2021	461.12	28.57	432.55
PZ-113-AS	Alluvium	6/3/2021	461.12	28.40	432.72
PZ-113-AS	Alluvium	7/6/2021	461.12	28.05	433.07
PZ-113-AS	Alluvium	8/2/2021	461.12	27.46	433.66
PZ-113-AS	Alluvium	9/9/2021	461.12	28.57	432.55
PZ-113-SS	Salem Formation	1/7/2021	461.57	31.56	430.01
PZ-113-SS	Salem Formation	2/1/2021	461.57	31.82	429.75
PZ-113-SS	Salem Formation	3/24/2021	461.57	30.53	431.04
PZ-113-SS	Salem Formation	4/14/2021	461.57	29.34	432.23
PZ-113-SS	Salem Formation	5/3/2021	461.57	28.75	432.82
PZ-113-SS	Salem Formation	6/3/2021	461.57	28.63	432.94
PZ-113-SS	Salem Formation	7/6/2021	461.57	28.27	433.30
PZ-113-SS	Salem Formation	8/2/2021	461.57	27.69	433.88
PZ-113-SS	Salem Formation	9/9/2021	461.57	28.77	432.80
PZ-114-AS	Shallow Alluvium Fill	1/7/2021	451.11	20.63	430.48
PZ-114-AS	Shallow Alluvium Fill	2/1/2021	451.11	20.50	430.61
PZ-114-AS	Shallow Alluvium Fill	3/24/2021	451.11	19.24	431.87
PZ-114-AS	Shallow Alluvium Fill	4/14/2021	451.11	18.10	433.01
PZ-114-AS	Shallow Alluvium Fill	5/3/2021	451.11	17.86	433.25
PZ-114-AS	Shallow Alluvium Fill	6/3/2021	451.11	17.95	433.16
PZ-114-AS	Shallow Alluvium Fill	7/6/2021	451.11	17.62	433.49
PZ-114-AS	Shallow Alluvium Fill	8/2/2021	451.11	16.65	434.46
PZ-114-AS	Shallow Alluvium Fill	9/9/2021	451.11	17.81	433.30

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-115-SS	St Louis Formation	1/7/2021	451.98	18.36	433.62
PZ-115-SS	St Louis Formation	2/1/2021	451.98	17.39	434.59
PZ-115-SS	St Louis Formation	3/24/2021	451.98	15.25	436.73
PZ-115-SS	St Louis Formation	4/14/2021	451.98	15.55	436.43
PZ-115-SS	St Louis Formation	5/3/2021	451.98	15.62	436.36
PZ-115-SS	St Louis Formation	6/3/2021	451.98	15.04	436.94
PZ-115-SS	St Louis Formation	7/6/2021	451.98	14.76	437.22
PZ-115-SS	St Louis Formation	8/2/2021	451.98	13.82	438.16
PZ-115-SS	St Louis Formation	9/9/2021	451.98	14.58	437.40
PZ-116-SS	St Louis Formation	1/7/2021	472.77	21.79	450.98
PZ-116-SS	St Louis Formation	2/1/2021	472.77	22.42	450.35
PZ-116-SS	St Louis Formation	3/24/2021	472.77	22.13	450.64
PZ-116-SS	St Louis Formation	4/14/2021	472.77	20.70	452.07
PZ-116-SS	St Louis Formation	5/3/2021	472.77	20.50	452.27
PZ-116-SS	St Louis Formation	6/3/2021	472.77	22.49	450.28
PZ-116-SS	St Louis Formation	7/6/2021	472.77	21.90	450.87
PZ-116-SS	St Louis Formation	8/2/2021	472.77	21.45	451.32
PZ-116-SS	St Louis Formation	9/9/2021	472.77	22.47	450.30
PZ-200-SS	St Louis Formation	1/7/2021	485.45	25.46	459.99
PZ-200-SS	St Louis Formation	2/1/2021	485.45	25.90	459.55
PZ-200-SS	St Louis Formation	3/24/2021	485.45	26.25	459.20
PZ-200-SS	St Louis Formation	4/14/2021	485.45	26.40	459.05
PZ-200-SS	St Louis Formation	5/3/2021	485.45	26.42	459.03
PZ-200-SS	St Louis Formation	6/3/2021	485.45	26.57	458.88
PZ-200-SS	St Louis Formation	7/6/2021	485.45	27.05	458.40
PZ-200-SS	St Louis Formation	8/2/2021	485.45	27.13	458.32
PZ-200-SS	St Louis Formation	9/9/2021	485.45	27.31	458.14
PZ-201A-SS	St Louis Formation	1/7/2021	480.00	15.60	464.40
PZ-201A-SS	St Louis Formation	2/1/2021	480.00	15.61	464.39
PZ-201A-SS	St Louis Formation	3/24/2021	480.00	14.74	465.26
PZ-201A-SS	St Louis Formation	4/14/2021	480.00	15.18	464.82
PZ-201A-SS	St Louis Formation	5/3/2021	480.00	15.23	464.77
PZ-201A-SS	St Louis Formation	6/3/2021	480.00	15.85	464.15
PZ-201A-SS	St Louis Formation	7/6/2021	480.00	15.33	464.67
PZ-201A-SS	St Louis Formation	8/2/2021	480.00	15.21	464.79
PZ-201A-SS	St Louis Formation	9/9/2021	480.00	14.92	465.08
PZ-202-SS	St Louis Formation	1/7/2021	480.90	11.80	469.10
PZ-202-SS	St Louis Formation	2/1/2021	480.90	11.65	469.25
PZ-202-SS	St Louis Formation	3/24/2021	480.90	10.99	469.91
PZ-202-SS	St Louis Formation	4/14/2021	480.90	11.10	469.80
PZ-202-SS	St Louis Formation	5/3/2021	480.90	11.06	469.84
PZ-202-SS	St Louis Formation	6/3/2021	480.90	11.76	469.14
PZ-202-SS	St Louis Formation	7/6/2021	480.90	11.96	468.94
PZ-202-SS	St Louis Formation	8/2/2021	480.90	12.18	468.72
PZ-202-SS	St Louis Formation	9/9/2021	480.90	11.98	468.92
PZ-203-SS	St Louis Formation	1/7/2021	485.94	27.02	458.92
PZ-203-SS	St Louis Formation	2/1/2021	485.94	27.08	458.86
PZ-203-SS	St Louis Formation	3/24/2021	485.94	25.26	460.68
PZ-203-SS	St Louis Formation	4/14/2021	485.94	25.25	460.69
PZ-203-SS	St Louis Formation	5/3/2021	485.94	24.85	461.09
PZ-203-SS	St Louis Formation	6/3/2021	485.94	25.84	460.10
PZ-203-SS	St Louis Formation	7/6/2021	485.94	26.37	459.57
PZ-203-SS	St Louis Formation	8/2/2021	485.94	26.02	459.92
PZ-203-SS	St Louis Formation	9/9/2021	485.94	26.36	459.58

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-204A-SS	St Louis Formation	1/7/2021	462.24	4.96	457.28
PZ-204A-SS	St Louis Formation	2/1/2021	462.24	4.51	457.73
PZ-204A-SS	St Louis Formation	3/24/2021	462.24	5.43	456.81
PZ-204A-SS	St Louis Formation	4/14/2021	462.24	4.55	457.69
PZ-204A-SS	St Louis Formation	5/3/2021	462.24	4.70	457.54
PZ-204A-SS	St Louis Formation	6/3/2021	462.24	5.03	457.21
PZ-204A-SS	St Louis Formation	7/6/2021	462.24	5.00	457.24
PZ-204A-SS	St Louis Formation	8/2/2021	462.24	4.73	457.51
PZ-204A-SS	St Louis Formation	9/9/2021	462.24	4.77	457.47
PZ-204-SS	St Louis Formation	1/7/2021	464.51	11.40	453.11
PZ-204-SS	St Louis Formation	2/1/2021	464.51	11.40	453.11
PZ-204-SS	St Louis Formation	3/24/2021	464.51	10.77	453.74
PZ-204-SS	St Louis Formation	4/14/2021	464.51	10.70	453.81
PZ-204-SS	St Louis Formation	5/3/2021	464.51	10.62	453.89
PZ-204-SS	St Louis Formation	6/3/2021	464.51	11.30	453.21
PZ-204-SS	St Louis Formation	7/6/2021	464.51	11.71	452.80
PZ-204-SS	St Louis Formation	8/2/2021	464.51	10.84	453.67
PZ-204-SS	St Louis Formation	9/9/2021	464.51	10.37	454.14
PZ-205-AS	Shallow Alluvium Fill	1/7/2021	464.41	34.05	430.36
PZ-205-AS	Shallow Alluvium Fill	2/1/2021	464.41	34.31	430.10
PZ-205-AS	Shallow Alluvium Fill	3/24/2021	464.41	32.97	431.44
PZ-205-AS	Shallow Alluvium Fill	4/14/2021	464.41	32.24	432.17
PZ-205-AS	Shallow Alluvium Fill	5/3/2021	464.41	31.38	433.03
PZ-205-AS	Shallow Alluvium Fill	6/3/2021	464.41	31.22	433.19
PZ-205-AS	Shallow Alluvium Fill	7/6/2021	464.41	31.18	433.23
PZ-205-AS	Shallow Alluvium Fill	8/2/2021	464.41	30.70	433.71
PZ-205-AS	Shallow Alluvium Fill	9/9/2021	464.41	31.52	432.89
PZ-205-SS	St Louis Formation	1/7/2021	464.81	34.31	430.50
PZ-205-SS	St Louis Formation	2/1/2021	464.81	34.63	430.18
PZ-205-SS	St Louis Formation	3/24/2021	464.81	34.34	430.47
PZ-205-SS	St Louis Formation	4/14/2021	464.81	32.59	432.22
PZ-205-SS	St Louis Formation	5/3/2021	464.81	31.90	432.91
PZ-205-SS	St Louis Formation	6/3/2021	464.81	31.80	433.01
PZ-205-SS	St Louis Formation	7/6/2021	464.81	31.62	433.19
PZ-205-SS	St Louis Formation	8/2/2021	464.81	31.26	433.55
PZ-205-SS	St Louis Formation	9/9/2021	464.81	32.06	432.75
PZ-206-SS	St Louis Formation	1/7/2021	463.19	33.11	430.08
PZ-206-SS	St Louis Formation	2/1/2021	463.19	33.71	429.48
PZ-206-SS	St Louis Formation	3/24/2021	463.19	32.39	430.80
PZ-206-SS	St Louis Formation	4/14/2021	463.19	31.24	431.95
PZ-206-SS	St Louis Formation	5/3/2021	463.19	30.20	432.99
PZ-206-SS	St Louis Formation	6/3/2021	463.19	29.58	433.61
PZ-206-SS	St Louis Formation	7/6/2021	463.19	29.33	433.86
PZ-206-SS	St Louis Formation	8/2/2021	463.19	28.94	434.25
PZ-206-SS	St Louis Formation	9/9/2021	463.19	29.55	433.64
PZ-207-AS	Alluvium	1/7/2021	461.95	32.14	429.81
PZ-207-AS	Alluvium	2/1/2021	461.95	32.34	429.61
PZ-207-AS	Alluvium	3/24/2021	461.95	31.10	430.85
PZ-207-AS	Alluvium	4/14/2021	461.95	29.80	432.15
PZ-207-AS	Alluvium	5/3/2021	461.95	29.29	432.66
PZ-207-AS	Alluvium	6/3/2021	461.95	29.21	432.74
PZ-207-AS	Alluvium	8/2/2021	461.95	28.10	433.85
PZ-207-AS	Alluvium	9/9/2021	461.95	29.27	432.68

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-208-SS	St Louis Formation	1/7/2021	473.91	20.95	452.96
PZ-208-SS	St Louis Formation	2/1/2021	473.91	20.40	453.51
PZ-208-SS	St Louis Formation	3/24/2021	473.91	20.30	453.61
PZ-208-SS	St Louis Formation	4/14/2021	473.91	20.81	453.10
PZ-208-SS	St Louis Formation	5/3/2021	473.91	20.83	453.08
PZ-208-SS	St Louis Formation	6/3/2021	473.91	20.94	452.97
PZ-208-SS	St Louis Formation	7/6/2021	473.91	20.98	452.93
PZ-208-SS	St Louis Formation	8/2/2021	473.91	21.10	452.81
PZ-208-SS	St Louis Formation	9/9/2021	473.91	21.15	452.76
PZ-209-SD	Salem Formation	1/7/2021	489.16	24.15	465.01
PZ-209-SD	Salem Formation	2/1/2021	489.16	24.30	464.86
PZ-209-SD	Salem Formation	3/24/2021	489.16	23.16	466.00
PZ-209-SD	Salem Formation	4/14/2021	489.16	23.53	465.63
PZ-209-SD	Salem Formation	5/3/2021	489.16	23.20	465.96
PZ-209-SD	Salem Formation	6/3/2021	489.16	23.95	465.21
PZ-209-SD	Salem Formation	7/6/2021	489.16	24.21	464.95
PZ-209-SD	Salem Formation	8/2/2021	489.16	24.36	464.80
PZ-209-SD	Salem Formation	9/9/2021	489.16	24.56	464.60
PZ-209-SS	St Louis Formation	1/7/2021	489.25	22.14	467.11
PZ-209-SS	St Louis Formation	2/1/2021	489.25	22.21	467.04
PZ-209-SS	St Louis Formation	3/24/2021	489.25	21.35	467.90
PZ-209-SS	St Louis Formation	4/14/2021	489.25	21.52	467.73
PZ-209-SS	St Louis Formation	5/3/2021	489.25	21.25	468.00
PZ-209-SS	St Louis Formation	6/3/2021	489.25	21.90	467.35
PZ-209-SS	St Louis Formation	7/6/2021	489.25	22.20	467.05
PZ-209-SS	St Louis Formation	8/2/2021	489.25	21.90	467.35
PZ-209-SS	St Louis Formation	9/9/2021	489.25	22.36	466.89
PZ-210-SD	Salem Formation	1/7/2021	486.58	27.64	458.94
PZ-210-SD	Salem Formation	2/1/2021	486.58	27.63	458.95
PZ-210-SD	Salem Formation	3/24/2021	486.58	26.06	460.52
PZ-210-SD	Salem Formation	4/14/2021	486.58	26.32	460.26
PZ-210-SD	Salem Formation	5/3/2021	486.58	25.98	460.60
PZ-210-SD	Salem Formation	6/3/2021	486.58	26.94	459.64
PZ-210-SD	Salem Formation	7/6/2021	486.58	27.34	459.24
PZ-210-SD	Salem Formation	8/2/2021	486.58	27.20	459.38
PZ-210-SD	Salem Formation	9/9/2021	486.58	27.31	459.27
PZ-210-SS	St Louis Formation	1/7/2021	486.49	27.75	458.74
PZ-210-SS	St Louis Formation	2/1/2021	486.49	27.61	458.88
PZ-210-SS	St Louis Formation	3/24/2021	486.49	26.65	459.84
PZ-210-SS	St Louis Formation	4/14/2021	486.49	25.83	460.66
PZ-210-SS	St Louis Formation	5/3/2021	486.49	25.84	460.65
PZ-210-SS	St Louis Formation	6/3/2021	486.49	26.90	459.59
PZ-210-SS	St Louis Formation	7/6/2021	486.49	27.16	459.33
PZ-210-SS	St Louis Formation	8/2/2021	486.49	26.65	459.84
PZ-210-SS	St Louis Formation	9/9/2021	486.49	27.49	459.00
PZ-211-SD	Salem Formation	1/7/2021	486.99	23.41	463.58
PZ-211-SD	Salem Formation	2/1/2021	486.99	23.40	463.59
PZ-211-SD	Salem Formation	3/24/2021	486.99	22.82	464.17
PZ-211-SD	Salem Formation	4/14/2021	486.99	22.81	464.18
PZ-211-SD	Salem Formation	5/3/2021	486.99	22.67	464.32
PZ-211-SD	Salem Formation	6/3/2021	486.99	23.45	463.54
PZ-211-SD	Salem Formation	7/6/2021	486.99	23.70	463.29
PZ-211-SD	Salem Formation	8/2/2021	486.99	23.93	463.06
PZ-211-SD	Salem Formation	9/9/2021	486.99	23.97	463.02

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Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-211-SS	St Louis Formation	1/7/2021	487.04	20.59	466.45
PZ-211-SS	St Louis Formation	2/1/2021	487.04	20.73	466.31
PZ-211-SS	St Louis Formation	3/24/2021	487.04	19.96	467.08
PZ-211-SS	St Louis Formation	4/14/2021	487.04	19.87	467.17
PZ-211-SS	St Louis Formation	5/3/2021	487.04	19.65	467.39
PZ-211-SS	St Louis Formation	6/3/2021	487.04	20.33	466.71
PZ-211-SS	St Louis Formation	7/6/2021	487.04	20.63	466.41
PZ-211-SS	St Louis Formation	8/2/2021	487.04	20.26	466.78
PZ-211-SS	St Louis Formation	9/9/2021	487.04	20.78	466.26
PZ-212-SD	Salem Formation	1/7/2021	482.27	13.52	468.75
PZ-212-SD	Salem Formation	2/1/2021	482.27	13.42	468.85
PZ-212-SD	Salem Formation	3/24/2021	482.27	12.74	469.53
PZ-212-SD	Salem Formation	4/14/2021	482.27	13.22	469.05
PZ-212-SD	Salem Formation	5/3/2021	482.27	12.94	469.33
PZ-212-SD	Salem Formation	6/3/2021	482.27	13.74	468.53
PZ-212-SD	Salem Formation	7/6/2021	482.27	14.25	468.02
PZ-212-SD	Salem Formation	8/2/2021	482.27	14.21	468.06
PZ-212-SD	Salem Formation	9/9/2021	482.27	14.79	467.48
PZ-212-SS	St Louis Formation	1/7/2021	482.43	13.14	469.29
PZ-212-SS	St Louis Formation	2/1/2021	482.43	11.28	471.15
PZ-212-SS	St Louis Formation	3/24/2021	482.43	10.00	472.43
PZ-212-SS	St Louis Formation	4/14/2021	482.43	11.25	471.18
PZ-212-SS	St Louis Formation	5/3/2021	482.43	11.62	470.81
PZ-212-SS	St Louis Formation	6/3/2021	482.43	12.57	469.86
PZ-212-SS	St Louis Formation	7/6/2021	482.43	13.14	469.29
PZ-212-SS	St Louis Formation	8/2/2021	482.43	13.63	468.80
PZ-212-SS	St Louis Formation	9/9/2021	482.43	13.71	468.72
PZ-302-AI	Alluvium	1/7/2021	450.87	20.90	429.97
PZ-302-AI	Alluvium	2/1/2021	450.87	20.95	429.92
PZ-302-AI	Alluvium	3/24/2021	450.87	19.66	431.21
PZ-302-AI	Alluvium	4/14/2021	450.87	18.70	432.17
PZ-302-AI	Alluvium	5/3/2021	450.87	18.01	432.86
PZ-302-AI	Alluvium	6/3/2021	450.87	17.97	432.90
PZ-302-AI	Alluvium	7/6/2021	450.87	17.65	433.22
PZ-302-AI	Alluvium	8/2/2021	450.87	17.50	433.37
PZ-302-AI	Alluvium	9/9/2021	450.87	18.44	432.43
PZ-302-AS	Alluvium	1/7/2021	451.19	21.02	430.17
PZ-302-AS	Alluvium	2/1/2021	451.19	21.13	430.06
PZ-302-AS	Alluvium	3/24/2021	451.19	19.72	431.47
PZ-302-AS	Alluvium	4/14/2021	451.19	18.25	432.94
PZ-302-AS	Alluvium	5/3/2021	451.19	18.04	433.15
PZ-302-AS	Alluvium	6/3/2021	451.19	18.11	433.08
PZ-302-AS	Alluvium	7/6/2021	451.19	17.90	433.29
PZ-302-AS	Alluvium	8/2/2021	451.19	17.52	433.67
PZ-302-AS	Alluvium	9/9/2021	451.19	18.48	432.71
PZ-303-AS	Alluvium	1/7/2021	453.13	23.20	429.93
PZ-303-AS	Alluvium	2/1/2021	453.13	23.09	430.04
PZ-303-AS	Alluvium	3/24/2021	453.13	21.80	431.33
PZ-303-AS	Alluvium	4/14/2021	453.13	20.83	432.30
PZ-303-AS	Alluvium	5/3/2021	453.13	20.19	432.94
PZ-303-AS	Alluvium	6/3/2021	453.13	20.05	433.08
PZ-303-AS	Alluvium	7/6/2021	453.13	19.70	433.43
PZ-303-AS	Alluvium	8/2/2021	453.13	19.55	433.58
PZ-303-AS	Alluvium	9/9/2021	453.13	20.71	432.42

Notes and definitions are presented on Page 17

Table 9: Summary of Monthly Groundwater Gauging Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
PZ-304-AI	Alluvium	1/7/2021	453.67	23.89	429.78
PZ-304-AI	Alluvium	2/1/2021	453.67	23.87	429.80
PZ-304-AI	Alluvium	3/24/2021	453.67	22.64	431.03
PZ-304-AI	Alluvium	4/14/2021	453.67	21.80	431.87
PZ-304-AI	Alluvium	5/3/2021	453.67	21.07	432.60
PZ-304-AI	Alluvium	6/3/2021	453.67	20.94	432.73
PZ-304-AI	Alluvium	7/6/2021	453.67	20.57	433.10
PZ-304-AI	Alluvium	8/2/2021	453.67	20.41	433.26
PZ-304-AI	Alluvium	9/9/2021	453.67	21.10	432.57
PZ-304-AS	Alluvium	1/7/2021	453.35	23.65	429.70
PZ-304-AS	Alluvium	2/1/2021	453.35	23.65	429.70
PZ-304-AS	Alluvium	3/24/2021	453.35	22.44	430.91
PZ-304-AS	Alluvium	4/14/2021	453.35	21.52	431.83
PZ-304-AS	Alluvium	5/3/2021	453.35	20.80	432.55
PZ-304-AS	Alluvium	6/3/2021	453.35	20.70	432.65
PZ-304-AS	Alluvium	7/6/2021	453.35	20.32	433.03
PZ-304-AS	Alluvium	8/2/2021	453.35	20.15	433.20
PZ-304-AS	Alluvium	9/9/2021	453.35	21.10	432.25
S-10	Alluvium	1/7/2021	479.84	50.32	429.52
S-10	Alluvium	2/1/2021	479.84	50.48	429.36
S-10	Alluvium	3/24/2021	479.84	49.13	430.71
S-10	Alluvium	4/14/2021	479.84	47.90	431.94
S-10	Alluvium	5/3/2021	479.84	47.39	432.45
S-10	Alluvium	6/3/2021	479.84	47.29	432.55
S-10	Alluvium	7/6/2021	479.84	46.80	433.04
S-10	Alluvium	8/2/2021	479.84	46.27	433.57
S-10	Alluvium	9/9/2021	479.84	47.49	432.35
S-5	Alluvium	1/7/2021	465.27	34.70	430.57
S-5	Alluvium	2/1/2021	465.27	34.97	430.30
S-5	Alluvium	3/24/2021	465.27	33.55	431.72
S-5	Alluvium	4/14/2021	465.27	32.20	433.07
S-5	Alluvium	5/3/2021	465.27	31.68	433.59
S-5	Alluvium	6/3/2021	465.27	31.82	433.45
S-5	Alluvium	7/6/2021	465.27	31.72	433.55
S-5	Alluvium	8/2/2021	465.27	31.07	434.20
S-5	Alluvium	9/9/2021	465.27	32.04	433.23
S-53	Alluvium	1/7/2021	444.08	13.98	430.10
S-53	Alluvium	2/1/2021	444.08	13.98	430.10
S-53	Alluvium	3/24/2021	444.08	12.69	431.39
S-53	Alluvium	4/14/2021	444.08	11.71	432.37
S-53	Alluvium	5/3/2021	444.08	11.05	433.03
S-53	Alluvium	6/3/2021	444.08	11.10	432.98
S-53	Alluvium	7/6/2021	444.08	10.73	433.35
S-53	Alluvium	8/2/2021	444.08	10.65	433.43
S-53	Alluvium	9/9/2021	444.08	11.53	432.55
S-8	Alluvium	1/7/2021	443.67	14.14	429.53
S-8	Alluvium	2/1/2021	443.67	14.22	429.45
S-8	Alluvium	3/24/2021	443.67	12.93	430.74
S-8	Alluvium	4/14/2021	443.67	11.60	432.07
S-8	Alluvium	5/3/2021	443.67	11.18	432.49
S-8	Alluvium	6/3/2021	443.67	11.02	432.65
S-8	Alluvium	7/6/2021	443.67	10.58	433.09
S-8	Alluvium	8/2/2021	443.67	9.87	433.80
S-8	Alluvium	9/9/2021	443.67	11.12	432.55

Notes and definitions are presented on Page 17

Table 9: Summary of Monthly Groundwater Gauging Data
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well Name	Geologic Interval	Measurement Date	Top of Casing Elevation (ft amsl)	DTW (ft btoc)	Groundwater Elevation (ft amsl)
S-82	Shallow Alluvium Fill	1/7/2021	449.62	20.24	429.38
S-82	Shallow Alluvium Fill	2/1/2021	449.62	20.27	429.35
S-82	Shallow Alluvium Fill	3/24/2021	449.62	18.89	430.73
S-82	Shallow Alluvium Fill	4/14/2021	449.62	17.85	431.77
S-82	Shallow Alluvium Fill	5/3/2021	449.62	17.25	432.37
S-82	Shallow Alluvium Fill	6/3/2021	449.62	17.14	432.48
S-82	Shallow Alluvium Fill	7/6/2021	449.62	16.70	432.92
S-82	Shallow Alluvium Fill	8/2/2021	449.62	16.42	433.20
S-82	Shallow Alluvium Fill	9/9/2021	449.62	17.49	432.13
S-84	Alluvium	1/7/2021	456.56	26.68	429.88
S-84	Alluvium	2/1/2021	456.56	26.76	429.80
S-84	Alluvium	3/24/2021	456.56	25.51	431.05
S-84	Alluvium	4/14/2021	456.56	24.35	432.21
S-84	Alluvium	5/3/2021	456.56	23.86	432.70
S-84	Alluvium	6/3/2021	456.56	23.81	432.75
S-84	Alluvium	7/6/2021	456.56	23.50	433.06
S-84	Alluvium	8/2/2021	456.56	22.60	433.96
S-84	Alluvium	9/9/2021	456.56	23.75	432.81

Notes:

DTW = depth to water

ft btoc = feet below top of casing

ft amsl = feet above mean sea level

** = Transducer data used in place of hand-measured groundwater elevation due to data quality issues; no associated DTW measurement.*

LR-100 is gauged as part of the OU-3 well network but is not included on any potentiometric surface maps because it is screened in refuse.

For the purpose of creating groundwater contour maps, ERM changed the geologic unit of PZ-106-SS and PZ-113-SS from the St. Louis formation to the Salem formation. Based on the updated OU-3 geologic model and review of boring logs and well screen elevations, these two wells are installed in the Salem formation, but were historically designated as part of the St. Louis formation.

For the purpose of creating groundwater contour maps, ERM excluded monitoring wells PZ-114-AS, PZ-205-AS, PZ-207-AS, PZ-302-AS, PZ-304-AS, S-5, S-8, S-10, S-53, S-82, and S-84 from the alluvium maps. Based on review of boring logs, NMR data and well screens, these wells are installed in fill materials, silts and clays, and are partially saturated water table wells not representative of alluvium at the Site. These wells are assigned the Geologic Interval of "Shallow Alluvium/Fill." These Shallow Alluvium/Fill wells were gauged during the reporting period but are not included on the alluvium contour maps.

ERM also excluded I-4 and PZ-112-AS from groundwater contour maps during this reporting period, as these wells were identified to be obstructed and beyond repair.

Table 10: Summary of Quarterly Sampling Events
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Q1 2021	Q2 2021	Q3 2021
Active Wells - Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program			
D-12	x	x	x
D-13	x	x	x
D-3	x	x	x
D-6	x	x	x
D-81	x	x	x
D-83	x	x	x
D-85	x	x	x
D-87	x	x	x
D-89	x	x	x
D-93	x	x	x
I-11	x	x	x
I-62	x	x	x
I-65	x	x	x
I-66	x	x	x
I-67	x	x	x
I-68	x	x	x
I-73	x	x	x
I-9	x	x	x
LCS-3D	x	x	x
LCS-5A	x	x	x
LR-100	x	x	x
MO-1-SDR	NS - pending assessment	x	x
MO-2-SD	NS - pending assessment	NS - pending troubleshooting	NS - pending troubleshooting
MO-3-SDR	NS - pending assessment	x	x
MO-3-SS	NS - pending assessment	x	x
MW-111-P1	NS - not installed	x	x
MW-111-P2	NS - not installed	x	x
MW-111-P3	NS - not installed	x	x
MW-112-P1	NS - not installed	NS - not installed	x
MW-112-P2	NS - not installed	NS - not installed	x
MW-112-P3	NS - not installed	NS - not installed	x
MW-113	NS - not installed	NS - not installed	x
MW-117	NS - not installed	x	x
MW-118	NS - not installed	x	x
MW-1204	x	x	x
MW-205	NS - not installed	x	x
MW-213-P1	NS - not installed	NS - not installed	x
MW-213-P2	NS - not installed	NS - not installed	x
MW-302	NS - not installed	x	x
MW-306-P1	NS - not installed	x	x
MW-306-P2	NS - not installed	x	x
MW-306-P3	NS - not installed	x	x
MW-400-P1	NS - not installed	x	x
MW-400-P2	NS - not installed	x	x
MW-400-P3	NS - not installed	x	x
MW-400-P4	NS - not installed	x	x
MW-400-P5	NS - not installed	x	x
MW-404-P1	NS - not installed	x	x
MW-404-P2	NS - not installed	x	x
MW-404-P3	NS - not installed	x	x

Notes and definitions are presented on Page 3

Table 10: Summary of Quarterly Sampling Events
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Q1 2021	Q2 2021	Q3 2021
MW-404-P4	NS - not installed	x	NS - newly installed bedrock port
MW-404-P5	NS - not installed	x	NS - newly installed bedrock port
MW-405-P1	NS - not installed	x	x
MW-405-P2	NS - not installed	x	x
MW-405-P3	NS - not installed	x	x
MW-407R-P1	NS - not installed	x	x
MW-407R-P2	NS - not installed	x	x
MW-407R-P3	NS - not installed	x	x
MW-408	x	x	x
MW-409	x	x	x
MW-405-P1	NS - not installed	NS - not installed	x
MW-405-P2	NS - not installed	NS - not installed	x
MW-405-P3	NS - not installed	NS - not installed	x
MW-407R-P1	NS - not installed	NS - not installed	x
MW-407R-P2	NS - not installed	NS - not installed	x
MW-407R-P3	NS - not installed	NS - not installed	x
MW-505-P1	NS - not installed	x	x
MW-505-P2	NS - not installed	x	x
MW-505-P3	NS - not installed	x	x
MW-605-P1	NS - not installed	NS - not installed	NS - newly installed bedrock port
MW-605-P2	NS - not installed	NS - not installed	NS - newly installed bedrock port
PZ-100-KS	x	x	x
PZ-100-SD	x	x	x
PZ-100-SS	x	x	x
PZ-101-SS	x	x	x
PZ-102R-SS	x	x	x
PZ-102-SS	x	x	x
PZ-103-SS	x	x	x
PZ-104-KS	x	x	x
PZ-104-SD	x	x	x
PZ-104-SS	x	x	x
PZ-105-SS	x	x	x
PZ-106-KS	x	x	x
PZ-106-SD	x	x	x
PZ-106-SS	x	x	x
PZ-107-SS	x	x	x
PZ-109-SS	x	x	x
PZ-111-KS	x	x	x
PZ-111-SD	x	x	x
PZ-111-SS	x	x	x
PZ-113-AD	x	x	x
PZ-113-AS	x	x	x
PZ-113-SS	x	x	x
PZ-114-AS	x	x	x
PZ-115-SS	x	x	x
PZ-116-SS	x	x	x
PZ-200-SS	x	x	x
PZ-201A-SS	x	x	x
PZ-202-SS	x	x	x
PZ-203-SS	x	x	x
PZ-204A-SS	x	x	x

Notes and definitions are presented on Page 3

Table 10: Summary of Quarterly Sampling Events
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Well ID	Q1 2021	Q2 2021	Q3 2021
PZ-204-SS	x	x	x
PZ-205-AS	x	x	x
PZ-205-SS	x	x	x
PZ-206-SS	x	x	x
PZ-207-AS	x	x	x
PZ-208-SS	x	x	x
PZ-209-SD	x	x	x
PZ-209-SS	x	x	x
PZ-210-SD	x	x	x
PZ-210-SS	x	x	x
PZ-211-SD	x	x	x
PZ-211-SS	x	x	x
PZ-212-SD	x	x	x
PZ-212-SS	x	x	x
PZ-302-AI	x	x	x
PZ-302-AS	x	x	x
PZ-303-AS	x	x	x
PZ-304-AI	x	x	x
PZ-304-AS	x	x	x
S-10	x	x	x
S-5	x	x	x
S-8	x	x	x
S-82	x	x	x
S-84	x	x	x
Inactive Wells - Not Currently Sampled in the OU-3 Quarterly Groundwater Monitoring Program			
I-4	Proposed for abandonment, cannot be sampled due to obstruction - replaced by intermediate screen of multi-level well MW-112		
LR-103	Inactive		
LR-105	Inactive		
MO-1-SS	Not sampled in Q1 2021 pending assessment - not sampled in Q2 through Q3 2021 due to bentonite observed in screen during assessment, proposed for abandonment		
MW-103	No legal access as of end of Q3 2021		
MW-104	No legal access as of end of Q3 2021		
PZ-112-AS	Proposed for abandonment, cannot be sampled due to obstruction - replaced by shallow screen of multi-level well MW-112		
S-53	Proposed for abandonment, cannot be sampled due to excess sediment in screen		
LCS-1D	Not operational		
LCS-2D	Not operational		
LCS-4B	Not operational		
LCS-5B	No sampling port as of end of Q3 2021		
LCS-6B	Not sampled due to low flow as of end of Q3 2021		

Notes:
NS = not sampled

Table 11: Summary of Field Water Quality Parameters
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Field Water Quality Parameters					
				Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
D-3	Single-screen well	96.5-106.5	3/8/2021	0.01	-116.1	6.88	2766	16.5	2.07
D-3	Single-screen well	96.5-106.5	5/12/2021	0.02	-131.3	6.81	2828	16.5	2.40
D-3	Single-screen well	96.5-106.5	8/17/2021	1.25	-149.9	6.84	2508	17.5	5.50
D-6	Single-screen well	96.5-106.5	3/3/2021	0.04	-108.6	7.12	1493	16.1	2.27
D-6	Single-screen well	96.5-106.5	5/7/2021	0.08	-120.2	7.01	1685	16.9	2.14
D-6	Single-screen well	96.5-106.5	8/12/2021	1.22	-102.2	6.98	1485	17.8	3.85
D-12	Single-screen well	133.7-143.7	3/2/2021	0.11	-75.8	6.83	1931	17.0	2.84
D-12	Single-screen well	133.7-143.7	5/11/2021	0.13	-83.5	6.78	2212	17.4	3.03
D-12	Single-screen well	133.7-143.7	8/10/2021	1.18	-98.6	6.83	1792	19.0	3.82
D-13	Single-screen well	123-133	2/26/2021	0.13	-111.1	7.12	1132	15.0	1.49
D-13	Single-screen well	123-133	5/5/2021	0.00	-118.5	6.98	1099	15.8	8.08
D-13	Single-screen well	123-133	8/6/2021	1.18	-102.2	6.94	1013	16.7	6.53
D-81	Single-screen well	45-60	3/9/2021	0.90	-49.4	6.19	1219	13.6	0.00
D-81	Single-screen well	45-60	5/5/2021	0.11	-18.2	6.48	1178	14.3	2.69
D-81	Single-screen well	45-60	8/9/2021	0.66	-56.2	6.49	787	14.9	1.31
D-83	Single-screen well	77-97	3/2/2021	0.03	-103.7	7.02	951	14.9	5.50
D-83	Single-screen well	77-97	5/10/2021	0.05	-110.9	7.08	1040	15.0	2.06
D-83	Single-screen well	77-97	8/10/2021	1.73	-121.8	7.10	838	16.5	9.36
D-85	Single-screen well	62-82	2/26/2021	0.70	-320.6	6.69	2488	14.7	16.40
D-85	Single-screen well	62-82	5/19/2021	1.04	-133.3	6.83	2337	15.9	8.87
D-85	Single-screen well	62-82	8/18/2021	3.76	-124.6	6.78	2097	16.4	15.97
D-87	Single-screen well	91-111	3/10/2021	1.13	-114.4	6.71	2035	15.3	9.54
D-87	Single-screen well	91-111	5/14/2021	0.06	-116.4	6.99	2233	16.5	3.23
D-87	Single-screen well	91-111	8/13/2021	2.17	-117.4	7.00	2047	17.0	4.11
D-89	Single-screen well	33-48	3/10/2021	0.18	-91.7	6.57	5642	15.5	8.52
D-89	Single-screen well	33-48	5/19/2021	1.05	-125.3	6.46	5062	16.2	5.55
D-89	Single-screen well	33-48	8/24/2021	3.54	-120.2	6.54	4163	16.1	3.20
D-93	Single-screen well	92-112	3/8/2021	0.00	-102.6	6.90	2642	19.2	5.71
D-93	Single-screen well	92-112	5/13/2021	0.04	-126.0	6.84	2622	18.9	3.12
D-93	Single-screen well	92-112	8/16/2021	1.20	-129.5	6.93	2505	19.8	5.94
I-9	Single-screen well	43.1-53.1	3/8/2021	0.06	-129.3	6.85	2999	19.6	5.75
I-9	Single-screen well	43.1-53.1	5/13/2021	0.01	-153.8	6.79	2999	19.7	4.15
I-9	Single-screen well	43.1-53.1	8/16/2021	1.19	-157.4	6.90	2792	20.8	5.41
I-11	Single-screen well	80.5-90.5	3/2/2021	0.13	-94.6	6.90	1531	17.2	2.52
I-11	Single-screen well	80.5-90.5	5/11/2021	0.25	-101.4	6.88	1751	17.3	2.78
I-11	Single-screen well	80.5-90.5	8/12/2021	1.21	-123.6	6.95	1638	19.8	6.26
I-62	Single-screen well	34-44	3/2/2021	0.05	-97.8	7.11	689	15.0	3.25
I-62	Single-screen well	34-44	5/10/2021	0.29	-114.7	7.09	818	15.3	3.07
I-62	Single-screen well	34-44	8/10/2021	1.25	-138.2	7.18	683	16.2	5.35
I-65	Single-screen well	26-36	2/23/2021	0.04	113.2	6.96	1402	14.5	1.62
I-65	Single-screen well	26-36	5/5/2021	0.00	137.5	6.91	1401	13.6	3.26
I-65	Single-screen well	26-36	5/26/2021	0.00	34.2	7.02	1406	14.4	8.90
I-65	Single-screen well	26-36	8/3/2021	0.97	27.3	6.97	1203	15.6	4.60
I-66	Single-screen well	26.9-36.9	2/23/2021	0.00	53.4	6.75	1352	14.6	7.35
I-66	Single-screen well	26.9-36.9	5/4/2021	0.00	27.2	6.79	1395	14.2	9.36
I-66	Single-screen well	26.9-36.9	8/3/2021	1.02	-43.5	6.80	1073	15.1	4.25
I-67	Single-screen well	25.4-35.4	2/23/2021	0.20	-78.3	6.70	1423	14.8	9.72
I-67	Single-screen well	25.4-35.4	5/4/2021	0.31	-59.9	6.52	1463	14.5	23.27
I-67	Single-screen well	25.4-35.4	8/4/2021	0.63	-84.5	6.87	1128	16.1	9.62
I-68	Single-screen well	21.2-31.2	2/23/2021	0.24	94.0	6.73	1907	15.5	7.92
I-68	Single-screen well	21.2-31.2	5/4/2021	0.10	109.8	6.55	2059	14.9	6.55
I-68	Single-screen well	21.2-31.2	8/5/2021	1.27	138.2	6.80	2024	15.9	5.60
I-73	Single-screen well	43.2-46.2	3/15/2021	0.00	-137.2	6.64	6456	16.0	9.03
I-73	Single-screen well	43.2-46.2	5/21/2021	0.97	-143.3	6.47	6213	17.9	3.60
I-73	Single-screen well	43.2-46.2	8/25/2021	3.06	-158.2	6.69	5164	18.0	8.90
LR-100	Leachate Riser	19.7-24.5	3/9/2021	0.00	-79.9	6.57	2346	16.2	8.60
LR-100	Leachate Riser	19.7-24.5	5/19/2021	0.02	-58.1	6.51	2474	15.7	9.70
LR-100	Leachate Riser	19.7-24.5	8/24/2021	0.97	-80.9	7.62	1941	16.1	5.29
MO-1-SDR	Single-screen well	233.7-253.7	5/17/2021	0.00	-2.7	6.98	676	14.2	4.34
MO-1-SDR	Single-screen well	233.7-253.7	8/16/2021	0.78	-157.8	7.05	1135	14.9	7.11

Notes and definition are presented on Page 6

Table 11: Summary of Field Water Quality Parameters
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				Field Water Quality Parameters					
				Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
MO-3-SDR	Single-screen well	188.6-208.6	5/28/2021	0.32	-36.6	7.06	1127	16.0	32.87
MO-3-SDR	Single-screen well	188.6-208.6	8/12/2021	0.62	-118.9	6.84	1779	17.3	8.17
MO-3-SS	Single-screen well	150.1-170.1	5/28/2021	1.03	-13.8	7.06	840	16.0	9.90
MO-3-SS	Single-screen well	150.1-170.1	8/5/2021	0.98	-44.2	7.15	740	16.9	7.27
MW-111-P1	Multi-level well (CHS)	39-49	5/6/2021	4.32 X	-38.7	6.95	1608	17.5	3.45
MW-111-P1	Multi-level well (CHS)	39-49	8/13/2021	6.59 X	-100.1	6.71	1915	22.4	6.03
MW-111-P2	Multi-level well (CHS)	54-64	5/6/2021	6.22 X	-52.5	6.91	1999	19.2	5.36
MW-111-P2	Multi-level well (CHS)	54-64	8/13/2021	6.57 X	-126.9	6.85	2168	20.8	5.25
MW-111-P3	Multi-level well (CHS)	79-89	5/6/2021	4.73 X	40.0	7.01	2524	17.5	3.18
MW-111-P3	Multi-level well (CHS)	79-89	8/13/2021	6.54 X	-165.3	6.93	3258	20.9	5.62
MW-112-P1	Multi-level well (CHS)	45-55	8/17/2021	6.79 X	-116.9	6.84	1773	19.3	4.82
MW-112-P2	Multi-level well (CHS)	70-80	8/17/2021	6.98 X	-119.6	6.84	2191	18.7	4.04
MW-112-P3	Multi-level well (CHS)	90-100	8/17/2021	5.62 X	-146.8	6.94	3046	18.9	5.67
MW-113	Single-screen well	170.2-180.2	8/24/2021	3.03	-199.8	7.26	821	18.0	37.19
MW-117	Single-screen well	25-35	5/18/2021	0.00	-140.2	6.74	2006	16.2	5.73
MW-117	Single-screen well	25-35	8/17/2021	4.03	-155.5	6.63	1846	16.0	2.50
MW-118	Single-screen well	38-48	5/19/2021	0.00	-114.0	7.05	1886	17.6	7.65
MW-118	Single-screen well	38-48	8/19/2021	1.42	-108.4	6.78	1788	17.8	3.89
MW-1204	Single-screen well	213.5-223.5	3/5/2021	0.00	-151.4	6.45	2650	24.2	4.08
MW-1204	Single-screen well	213.5-223.5	5/13/2021	0.53	-73.1	6.55	2864	24.8	9.56
MW-1204	Single-screen well	213.5-223.5	8/23/2021	0.82	-101.1	7.58	2914	25.9	8.32
MW-205	Single-screen well	160-170	5/20/2021	1.08	-129.6	6.89	1109	21.7	31.02
MW-205	Single-screen well	160-170	8/19/2021	0.64	-291.1	7.10	1085	21.5	11.33
MW-213-P1	Multi-level well (CHS)	50-60	8/19/2021	7.1 X	-109.2	7.13	1044	16.9	3.79
MW-213-P2	Multi-level well (CHS)	75-85	8/19/2021	7.53 X	134.2	6.67	1122	17.4	3.98
MW-302	Single-screen well	68-78	5/17/2021	0.00	-83.9	6.29	4727	15.4	9.50
MW-302	Single-screen well	68-78	8/23/2021	1.37	-90.3	6.51	4030	16.3	5.15
MW-303-P1	Multi-level well (CHS)	68-78	5/14/2021	5.06 X	-108.5	7.29	1758	17.2	2.96
MW-303-P1	Multi-level well (CHS)	68-78	8/9/2021	5.26 X	-87.7	8.48	1650	19.1	3.97
MW-303-P2	Multi-level well (CHS)	93-103	5/14/2021	5.87 X	-60.2	6.76	3828	16.7	6.96
MW-303-P2	Multi-level well (CHS)	93-103	8/9/2021	5.06 X	-26.9	6.41	3437	18.6	1.99
MW-304-P1	Multi-level well (CHS)	106-116	5/24/2021	2.48 X	-48.9	7.20	3120	19.4	5.22
MW-304-P1	Multi-level well (CHS)	106-116	8/4/2021	6.25 X	-115.2	7.21	2940	19.7	4.70
MW-304-P2	Multi-level well (CHS)	126-136	5/24/2021	2.30 X	-17.8	7.12	1989	18.9	8.65
MW-304-P2	Multi-level well (CHS)	126-136	8/4/2021	6.51 X	-91.5	6.47	1630	19.9	8.30
MW-304-P3	Multi-level well (CHS)	221-231	5/26/2021	4.74 X	-93.9	7.61	1929	25.1	26.43
MW-304-P3	Multi-level well (CHS)	221-231	8/4/2021	7.63 X	-173.6	7.85	1540	20.9	18.50
MW-306-P1	Multi-level well (CHS)	25-35	5/13/2021	3.99 X	-96.1	7.38	2689	19.4	5.47
MW-306-P1	Multi-level well (CHS)	25-35	8/16/2021	6.85 X	-106.8	6.71	2543	19.8	4.15
MW-306-P2	Multi-level well (CHS)	80-90	5/13/2021	3.66 X	-98.0	7.04	2901	18.3	4.68
MW-306-P2	Multi-level well (CHS)	80-90	8/16/2021	6.11 X	-161.4	6.79	2722	21.6	4.12
MW-306-P3	Multi-level well (CHS)	110-120	5/13/2021	3.1 X	-65.1	7.06	2944	17.8	4.01
MW-306-P3	Multi-level well (CHS)	110-120	8/16/2021	6.22 X	-205.6	6.89	3008	21.7	6.01
MW-400-P1	Multi-level well (CHS)	20-30	5/12/2021	7.58 X	-30.3	7.86	1564	17.8	3.04
MW-400-P1	Multi-level well (CHS)	20-30	8/10/2021	5.01 X	-142.3	9.48	1133	20.2	2.42
MW-400-P2	Multi-level well (CHS)	55-65	5/12/2021	1.71 X	-96.1	7.25	1797	17.1	4.18
MW-400-P2	Multi-level well (CHS)	55-65	8/10/2021	4.9 X	-127.7	9.26	1766	19.2	4.07
MW-400-P3	Multi-level well (CHS)	90-100	5/12/2021	4.47 X	-48.9	7.14	1764	15.6	5.47
MW-400-P3	Multi-level well (CHS)	90-100	8/10/2021	4.42 X	-91.9	8.36	1691	18.3	4.28
MW-400-P4	Multi-level well (CHS)	145-155	5/12/2021	1.76 X	-99.0	7.26	1333	16.8	4.95
MW-400-P4	Multi-level well (CHS)	145-155	5/14/2021	5.74 X	-41.4	7.17	1103	16.2	1.94
MW-400-P4	Multi-level well (CHS)	145-155	8/10/2021	3.49 X	-154.7	9.68	969	18.6	3.76
MW-400-P5	Multi-level well (CHS)	195-205	5/12/2021	7.82 X	19.2	7.52	1570	20.2	7.36
MW-400-P5	Multi-level well (CHS)	195-205	8/10/2021	6.23 X	-101.9	9.65	1641	20.2	2.75
MW-401-P1	Multi-level well (CHS)	32-42	5/7/2021	6.67 X	-39.6	8.00	1129	16.7	3.34
MW-401-P1	Multi-level well (CHS)	32-42	8/6/2021	6.08 X	-118.0	7.60	881	17.7	2.44
MW-401-P2	Multi-level well (CHS)	62-72	5/7/2021	7.55 X	125.8	7.64	1050	16.5	2.70
MW-401-P2	Multi-level well (CHS)	62-72	8/6/2021	6.7 X	-188.4	7.61	904	17.4	4.05
MW-401-P3	Multi-level well (CHS)	92-102	5/7/2021	5.22 X	-16.2	7.06	1281	16.6	4.86

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				Field Water Quality Parameters					
				Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
MW-401-P3	Multi-level well (CHS)	92-102	8/6/2021	7.42 X	-81.4	7.10	1160	17.4	1.99
MW-404-P1	Multi-level well (CHS)	48-58	8/18/2021	6.72 X	-123.6	7.07	2461	20.7	7.70
MW-404-P2	Multi-level well (CHS)	73-83	8/18/2021	7.25 X	-85.0	6.82	2200	20.9	5.35
MW-404-P3	Multi-level well (CHS)	103-113	8/18/2021	5.55 X	-122.1	6.99	2620	21.8	7.41
MW-405-P1	Multi-level well (CHS)	30-40	5/11/2021	3.81 X	-116.3	6.91	2289	16.6	5.58
MW-405-P1	Multi-level well (CHS)	30-40	8/11/2021	6.65 X	-124.2	6.69	2290	21.7	3.90
MW-405-P2	Multi-level well (CHS)	70-80	5/11/2021	5.48 X	-64.4	6.81	2674	17.3	3.52
MW-405-P2	Multi-level well (CHS)	70-80	8/11/2021	6.45 X	-162.4	6.83	2338	20.3	7.48
MW-405-P3	Multi-level well (CHS)	90-100	5/11/2021	5.2 X	-56.7	6.95	2129	16.6	3.10
MW-405-P3	Multi-level well (CHS)	90-100	8/11/2021	4.67 X	-92.5	6.71	2156	20.4	5.30
MW-407R-P1	Multi-level well (CHS)	53.6-63.6	8/12/2021	6.34 X	-276.2	7.31	1543	21.1	5.04
MW-407R-P2	Multi-level well (CHS)	73.6-83.6	8/12/2021	6.07 X	-127.7	6.95	2020	19.6	6.04
MW-407R-P3	Multi-level well (CHS)	103.6-113.6	8/12/2021	7.2 X	-102.4	6.86	1950	20.4	7.32
MW-408	Single-screen well	109-119	3/15/2021	0.36	-91.7	6.86	1665	16.1	17.09
MW-408	Single-screen well	109-119	5/12/2021	0.14	-116.6	6.88	1725	16.7	5.82
MW-408	Single-screen well	109-119	5/26/2021	0.15	-89.4	6.91	1598	16.9	8.26
MW-408	Single-screen well	109-119	8/6/2021	1.50	-82.4	6.77	1553	17.8	3.64
MW-409	Single-screen well	23-33	3/15/2021	0.47	-106.2	7.51	880	15.3	9.56
MW-409	Single-screen well	23-33	5/5/2021	0.27	-101.2	7.22	874	16.0	3.53
MW-409	Single-screen well	23-33	8/6/2021	1.55	-63.3	6.99	789	17.0	6.58
MW-505-P1	Multi-level well (CHS)	15-25	5/25/2021	5.53 X	74.0	8.15	473	17.4	1.88
MW-505-P1	Multi-level well (CHS)	15-25	8/5/2021	5.26 X	-54.6	8.56	484.1	17.2	1.91
MW-505-P2	Multi-level well (CHS)	40-50	5/25/2021	4.20 X	33.2	8.43	511	17.6	1.60
MW-505-P2	Multi-level well (CHS)	40-50	8/5/2021	5.83 X	-118.9	8.24	643	17.8	2.17
MW-505-P3	Multi-level well (CHS)	65-75	5/25/2021	4.51 X	58.2	8.04	530	17.8	2.46
MW-505-P3	Multi-level well (CHS)	65-75	8/5/2021	6.29 X	-112.3	7.90	646	16.8	2.10
PZ-100-KS	Single-screen well	374-383.8	3/3/2021	1.10	-105.8	7.47	937	15.8	6.46
PZ-100-KS	Single-screen well	374-383.8	5/7/2021	1.12	-195.9	7.43	1185	16.4	4.57
PZ-100-KS	Single-screen well	374-383.8	8/5/2021	3.92	-48.4	7.65	1096	16.5	2.44
PZ-100-SD	Single-screen well	234.8-244.6	3/2/2021	1.01	-35.2	6.97	513	15.4	1.73
PZ-100-SD	Single-screen well	234.8-244.6	5/7/2021	0.82	84.6	6.94	535	16.1	5.27
PZ-100-SD	Single-screen well	234.8-244.6	8/6/2021	0.91	-28.9	7.15	566	16.7	2.97
PZ-100-SS	Single-screen well	73.96-93.6	3/2/2021	3.34	97.0	6.88	701	14.6	5.22
PZ-100-SS	Single-screen well	73.96-93.6	5/7/2021	3.57	89.9	6.83	827	16.7	5.07
PZ-100-SS	Single-screen well	73.96-93.6	8/6/2021	3.99	137.4	6.99	755	16.9	8.98
PZ-101-SS	Single-screen well	145.9-155.7	3/12/2021	0.88	-21.9	6.65	1763	26.1	4.67
PZ-101-SS	Single-screen well	145.9-155.7	5/17/2021	0.30	-81.4	6.65	1909	28.1	9.70
PZ-101-SS	Single-screen well	145.9-155.7	8/19/2021	2.90	-50.6	6.43	1705	29.0	6.29
PZ-102R-SS	Single-screen well	79.83-91.04	2/25/2021	0.77	36.0	6.96	859	18.0	2.83
PZ-102R-SS	Single-screen well	79.83-91.04	5/6/2021	2.43	-48.6	7.00	876	18.8	5.29
PZ-102R-SS	Single-screen well	79.83-91.04	8/4/2021	0.89	-28.9	7.05	761	19.2	4.96
PZ-102-SS	Single-screen well	79.7-89.5	2/25/2021	0.18	-116.0	6.89	790	16.5	8.34
PZ-102-SS	Single-screen well	79.7-89.5	5/6/2021	1.07	-97.8	7.03	804	17.6	4.31
PZ-102-SS	Single-screen well	79.7-89.5	8/4/2021	7.50	-210.1	7.06	729	17.5	7.25
PZ-103-SS	Single-screen well	134.7-144.5	3/12/2021	0.00	-75.1	6.20	3593	24.0	7.86
PZ-103-SS	Single-screen well	134.7-144.5	5/20/2021	0.00	-60.3	6.18	3597	25.0	5.49
PZ-103-SS	Single-screen well	134.7-144.5	8/24/2021	1.12	-81.3	6.25	3550	25.2	7.50
PZ-104-KS	Single-screen well	397.37-407.17	2/24/2021	0.08	-167.5	7.13	839	22.6	9.59
PZ-104-KS	Single-screen well	397.37-407.17	5/5/2021	0.80	-22.0	6.90	792	22.3	5.11
PZ-104-KS	Single-screen well	397.37-407.17	8/4/2021	2.94	-114.3	7.11	818	23.0	2.44
PZ-104-SD	Single-screen well	235.2-245	3/3/2021	0.00	-114.1	7.11	1084	23.6	7.89
PZ-104-SD	Single-screen well	235.2-245	5/13/2021	0.94	-165.6	6.93	1152	23.8	7.67
PZ-104-SD	Single-screen well	235.2-245	8/23/2021	2.51	-140.1	6.80	1086	24.1	2.70
PZ-104-SS	Single-screen well	134.5-144.3	2/24/2021	0.40	-60.5	6.94	783	22.9	3.43
PZ-104-SS	Single-screen well	134.5-144.3	5/5/2021	2.22	-18.8	7.09	767	24.5	3.55
PZ-104-SS	Single-screen well	134.5-144.3	8/4/2021	3.72	6.3	6.98	721	24.8	3.44
PZ-105-SS	Single-screen well	138.5-148.3	3/5/2021	0.03	-69.0	6.94	1054	20.1	6.34
PZ-105-SS	Single-screen well	138.5-148.3	5/14/2021	0.14	-78.7	6.90	1196	20.3	3.01
PZ-105-SS	Single-screen well	138.5-148.3	8/18/2021	1.23	-84.0	6.80	1134	21.4	8.56

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Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
PZ-106-KS	Single-screen well	363.75-373.57	3/4/2021	0.09	-112.6	7.20	752	21.9	4.11
PZ-106-KS	Single-screen well	363.75-373.57	5/6/2021	0.31	-111.1	7.16	773	22.7	3.79
PZ-106-KS	Single-screen well	363.75-373.57	8/11/2021	0.63	-149.5	7.21	703	24.0	1.89
PZ-106-SD	Single-screen well	190.79-200.59	3/3/2021	0.10	-52.1	7.10	894	23.5	8.42
PZ-106-SD	Single-screen well	190.79-200.59	5/6/2021	0.06	-41.0	6.89	966	23.1	7.30
PZ-106-SD	Single-screen well	190.79-200.59	8/11/2021	2.28	-117.3	6.89	828	23.7	4.43
PZ-106-SS	Single-screen well	155.3-165.1	3/4/2021	0.00	-82.3	6.65	1381	22.6	8.23
PZ-106-SS	Single-screen well	155.3-165.1	5/6/2021	0.06	-66.2	6.55	1523	22.9	4.26
PZ-106-SS	Single-screen well	155.3-165.1	8/11/2021	2.97	-105.2	6.57	1250	23.2	5.62
PZ-107-SS	Single-screen well	92.6-102.4	3/9/2021	0.07	-90.5	6.55	3049	19.4	8.02
PZ-107-SS	Single-screen well	92.6-102.4	5/18/2021	0.09	-53.2	6.55	3328	19.2	9.44
PZ-107-SS	Single-screen well	92.6-102.4	8/23/2021	1.32	-90.0	6.57	3273	19.8	5.21
PZ-109-SS	Single-screen well	125.7-135.5	2/24/2021	0.86	50.6	6.89	806	21.0	7.25
PZ-109-SS	Single-screen well	125.7-135.5	5/4/2021	2.68	-17.2	6.95	769	21.1	3.76
PZ-109-SS	Single-screen well	125.7-135.5	8/3/2021	3.92	-1.5	7.01	715	21.7	2.38
PZ-111-KS	Single-screen well	357.15-366.96	2/22/2021	0.56	-188.7	7.94	1660	16.4	8.93
PZ-111-KS	Single-screen well	357.15-366.96	5/4/2021	1.08	-206.6	7.74	1597	16.4	4.28
PZ-111-KS	Single-screen well	357.15-366.96	8/3/2021	4.88	-203.5	8.06	1485	18.3	18.27
PZ-111-SD	Single-screen well	199.4-209.2	2/23/2021	1.34	-45.5	6.88	731	16.8	2.30
PZ-111-SD	Single-screen well	199.4-209.2	5/4/2021	2.03	-71.3	6.90	794	17.1	7.11
PZ-111-SD	Single-screen well	199.4-209.2	8/3/2021	4.85	61.4	7.09	699	17.8	8.92
PZ-111-SS	Single-screen well	105.5-115.5	3/5/2021	0.09	-70.6	6.59	3019	16.4	8.62
PZ-111-SS	Single-screen well	105.5-115.5	5/14/2021	1.11	-94.5	6.53	3046	17.1	4.70
PZ-111-SS	Single-screen well	105.5-115.5	8/20/2021	3.59	-60.1	6.55	2595	17.1	3.33
PZ-113-AD	Single-screen well	98.6-108.4	3/1/2021	0.00	-104.1	6.90	2790	16.5	2.42
PZ-113-AD	Single-screen well	98.6-108.4	5/18/2021	0.65	-56.8	6.62	2611	16.8	2.90
PZ-113-AD	Single-screen well	98.6-108.4	8/18/2021	3.89	-132.0	6.78	2318	17.3	1.87
PZ-113-AS	Single-screen well	28.9-38.7	3/1/2021	0.00	-33.9	6.69	1525	16.6	1.98
PZ-113-AS	Single-screen well	28.9-38.7	5/17/2021	1.06	-95.7	6.51	1552	17.5	0.62
PZ-113-AS	Single-screen well	28.9-38.7	8/13/2021	3.05	-80.9	6.61	1492	17.3	1.88
PZ-113-SS	Single-screen well	148.57-158.37	2/25/2021	1.42	-95.3	7.19	503	15.4	3.55
PZ-113-SS	Single-screen well	148.57-158.37	5/10/2021	1.27	-141.9	7.21	556	16.7	0.50
PZ-113-SS	Single-screen well	148.57-158.37	8/13/2021	0.88	-118.6	7.44	543	17.7	2.57
PZ-114-AS	Single-screen well	19.9-29.7	3/9/2021	0.03	-131.6	6.52	2512	16.3	5.34
PZ-114-AS	Single-screen well	19.9-29.7	5/18/2021	0.01	-109.7	6.57	2330	15.6	3.99
PZ-114-AS	Single-screen well	19.9-29.7	8/18/2021	1.30	-131.5	6.43	2493	16.7	6.45
PZ-115-SS	Single-screen well	74.68-84.48	2/26/2021	0.00	-17.2	6.50	2704	15.2	0.96
PZ-115-SS	Single-screen well	74.68-84.48	5/14/2021	2.14	-7.9	6.52	2753	16.1	2.84
PZ-115-SS	Single-screen well	74.68-84.48	8/13/2021	1.93	-30.5	6.52	2501	16.6	3.89
PZ-116-SS	Single-screen well	151.4-161	2/25/2021	0.09	-22.7	7.34	610	24.3	2.54
PZ-116-SS	Single-screen well	151.4-161	5/10/2021	0.11	-7.3	7.35	626	24.6	5.91
PZ-116-SS	Single-screen well	151.4-161	8/10/2021	4.03	116.7	7.37	610	24.8	6.75
PZ-200-SS	Single-screen well	9.62-97.64	2/23/2021	0.47	-33.9	6.39	2511	16.9	3.15
PZ-200-SS	Single-screen well	9.62-97.64	5/5/2021	0.07	38.4	6.36	2569	16.7	4.09
PZ-200-SS	Single-screen well	9.62-97.64	8/5/2021	1.16	30.5	6.60	2193	17.3	7.93
PZ-201A-SS	Single-screen well	80-89.8	3/4/2021	0.47	157.4	7.07	717	16.2	6.05
PZ-201A-SS	Single-screen well	80-89.8	5/5/2021	0.33	135.2	6.92	824	16.5	3.45
PZ-201A-SS	Single-screen well	80-89.8	8/13/2021	1.68	95.4	7.12	678	17.9	9.58
PZ-202-SS	Single-screen well	40.2-89.1	3/10/2021	0.03	-63.6	6.41	5069	15.1	4.93
PZ-202-SS	Single-screen well	40.2-89.1	5/19/2021	0.02	-49.5	6.32	3725	15.3	8.80
PZ-202-SS	Single-screen well	40.2-89.1	8/24/2021	1.08	-78.1	6.82	3058	16.5	5.78
PZ-203-SS	Single-screen well	99.6-109.4	3/4/2021	0.34	-74.8	7.02	835	15.9	6.56
PZ-203-SS	Single-screen well	99.6-109.4	5/12/2021	0.78	-54.1	7.11	716	15.9	9.61
PZ-203-SS	Single-screen well	99.6-109.4	8/12/2021	3.56	-125.4	6.96	806	16.4	4.18
PZ-204A-SS	Single-screen well	79.5-89.1	3/10/2021	0.00	-108.6	6.50	3609	14.7	2.12
PZ-204A-SS	Single-screen well	79.5-89.1	5/19/2021	0.00	-40.1	6.52	3921	15.8	5.73
PZ-204A-SS	Single-screen well	79.5-89.1	8/19/2021	1.40	-81.4	6.65	2273	18.5	5.81
PZ-204-SS	Single-screen well	10.95-89.35	3/10/2021	0.13	42.5	7.12	794	16.0	4.20
PZ-204-SS	Single-screen well	10.95-89.35	5/19/2021	0.32	9.3	7.10	786	16.5	6.44

Notes and definition are presented on Page 6

Table 11: Summary of Field Water Quality Parameters
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				Field Water Quality Parameters					
				Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
PZ-204-SS	Single-screen well	10.95-89.35	8/19/2021	1.60	10.0	7.24	716	17.2	8.36
PZ-205-AS	Single-screen well	38.55-48.35	3/15/2021	0.71	-95.5	6.44	9442	17.7	27.70
PZ-205-AS	Single-screen well	38.55-48.35	5/20/2021	0.91	-114.8	6.42	8518	22.0	8.81
PZ-205-AS	Single-screen well	38.55-48.35	8/25/2021	2.98	-125.3	6.47	6660	22.1	23.34
PZ-205-SS	Single-screen well	88.57-98.37	2/24/2021	2.92	71.8	6.90	826	18.4	9.13
PZ-205-SS	Single-screen well	88.57-98.37	5/5/2021	0.23	70.4	6.84	1065	21.3	7.97
PZ-205-SS	Single-screen well	88.57-98.37	8/9/2021	2.37	16.6	6.90	970	22.9	5.58
PZ-206-SS	Single-screen well	115-124.8	3/4/2021	0.24	-77.9	6.89	1231	17.3	8.79
PZ-206-SS	Single-screen well	115-124.8	5/17/2021	1.14	-152.4	6.63	1230	17.7	1.60
PZ-206-SS	Single-screen well	115-124.8	8/6/2021	3.62	-115.1	6.82	1168	17.7	5.50
PZ-207-AS	Single-screen well	34.9-39.7	3/9/2021	0.18	-78.7	6.49	2915	15.8	8.13
PZ-207-AS	Single-screen well	34.9-39.7	5/17/2021	0.32	-63.0	6.57	2914	16.1	3.24
PZ-207-AS	Single-screen well	34.9-39.7	8/20/2021	3.41	-93.2	6.50	2347	16.8	6.41
PZ-208-SS	Single-screen well	88.7-98.5	2/24/2021	0.17	-143.3	7.05	1102	14.5	2.38
PZ-208-SS	Single-screen well	88.7-98.5	5/7/2021	0.18	-44.9	7.10	1154	16.7	1.99
PZ-208-SS	Single-screen well	88.7-98.5	8/11/2021	1.25	-167.0	7.03	1062	17.0	4.57
PZ-209-SD	Single-screen well	240-250	2/24/2021	0.96	103.1	7.03	779	13.4	8.54
PZ-209-SD	Single-screen well	240-250	5/5/2021	1.09	21.0	7.22	812	14.7	3.45
PZ-209-SD	Single-screen well	240-250	8/5/2021	4.22	-33.2	7.21	764	14.7	3.82
PZ-209-SS	Single-screen well	140-150	2/25/2021	1.23	-115.1	7.04	635	11.6	7.02
PZ-209-SS	Single-screen well	140-150	5/10/2021	1.22	-177.7	7.11	686	14.5	9.74
PZ-209-SS	Single-screen well	140-150	8/5/2021	4.19	-146.3	7.20	673	14.6	4.58
PZ-210-SD	Single-screen well	238-248	3/5/2021	0.18	150.5	7.03	827	15.7	6.40
PZ-210-SD	Single-screen well	238-248	5/12/2021	1.14	-62.5	6.87	835	16.7	2.48
PZ-210-SD	Single-screen well	238-248	8/12/2021	0.81	-73.9	7.04	803	17.2	3.57
PZ-210-SS	Single-screen well	138-148	3/5/2021	0.05	-118.1	6.94	1115	16.0	6.32
PZ-210-SS	Single-screen well	138-148	5/12/2021	0.82	-71.4	6.82	1115	16.5	4.99
PZ-210-SS	Single-screen well	138-148	8/16/2021	0.84	-111.5	6.81	2108	17.1	3.46
PZ-211-SD	Single-screen well	237-247	3/4/2021	0.00	-87.1	7.03	922	14.9	6.23
PZ-211-SD	Single-screen well	237-247	5/13/2021	0.75	-30.7	7.01	884	14.9	2.83
PZ-211-SD	Single-screen well	237-247	8/17/2021	0.82	-115.0	7.14	657	15.8	5.31
PZ-211-SS	Single-screen well	137-147	2/24/2021	0.02	-12.8	7.14	675	14.8	2.13
PZ-211-SS	Single-screen well	137-147	5/5/2021	0.64	-24.9	7.06	593	15.2	6.82
PZ-211-SS	Single-screen well	137-147	8/4/2021	3.27	-104.7	7.25	588	15.4	5.58
PZ-212-SD	Single-screen well	234-244	2/25/2021	0.19	206.9	6.84	1340	13.7	9.07
PZ-212-SD	Single-screen well	234-244	3/19/2021	0.24	167.3	6.96	1309	13.4	8.57
PZ-212-SD	Single-screen well	234-244	5/11/2021	1.32	-18.6	6.92	1269	14.3	1.32
PZ-212-SD	Single-screen well	234-244	8/10/2021	0.75	-0.1	6.98	1242	15.7	4.34
PZ-212-SS	Single-screen well	134-144	2/26/2021	2.87	99.6	7.10	656	13.1	4.30
PZ-212-SS	Single-screen well	134-144	5/11/2021	2.38	83.2	7.10	594	14.2	12.44
PZ-212-SS	Single-screen well	134-144	8/10/2021	3.31	48.0	7.22	712	15.5	1.45
PZ-302-AI	Single-screen well	32.6-42.4	3/12/2021	0.95	19.2	6.33	1548	13.9	2.32
PZ-302-AI	Single-screen well	32.6-42.4	5/18/2021	0.00	17.3	6.44	1476	14.8	3.08
PZ-302-AI	Single-screen well	32.6-42.4	8/23/2021	1.22	1.9	8.77	1220	15.5	3.75
PZ-302-AS	Single-screen well	12.2-22	3/8/2021	0.00	-67.3	6.50	1544	15.9	2.17
PZ-302-AS	Single-screen well	12.2-22	5/18/2021	0.93	-48.9	6.43	1482	16.8	7.50
PZ-302-AS	Single-screen well	12.2-22	8/24/2021	6.35	-72.7	7.13	1483	15.9	7.08
PZ-303-AS	Single-screen well	16-25.8	3/15/2021	0.00	-114.6	6.49	1888	15.2	5.12
PZ-303-AS	Single-screen well	16-25.8	5/20/2021	0.00	-102.4	6.51	1774	15.6	9.56
PZ-303-AS	Single-screen well	16-25.8	8/24/2021	1.40	-122.9	6.57	1676	16.2	8.12
PZ-304-AI	Single-screen well	39-48.8	3/1/2021	0.00	-82.4	6.78	2523	17.1	2.95
PZ-304-AI	Single-screen well	39-48.8	5/17/2021	0.01	-82.9	6.81	2793	17.2	6.40
PZ-304-AI	Single-screen well	39-48.8	8/18/2021	1.26	-110.7	6.65	2772	17.7	8.88
PZ-304-AS	Single-screen well	17.1-26.9	3/10/2021	0.03	-91.4	6.75	3248	17.0	9.67
PZ-304-AS	Single-screen well	17.1-26.9	5/20/2021	0.00	-90.4	6.59	3182	16.5	5.30
PZ-304-AS	Single-screen well	17.1-26.9	8/23/2021	1.34	-113.9	6.71	3081	17.1	9.15
S-5	Single-screen well	30-40	3/8/2021	0.02	-115.3	6.99	5070	17.0	5.65
S-5	Single-screen well	30-40	5/12/2021	0.02	-143.0	6.88	4577	17.0	8.87
S-5	Single-screen well	30-40	8/17/2021	1.19	-165.0	7.00	4374	17.7	8.66

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Table 11: Summary of Field Water Quality Parameters
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				Field Water Quality Parameters					
				Dissolved Oxygen	Oxidation-Reduction Potential	pH	Specific Conductivity	Temperature	Turbidity
Sample Location	Location Type	Sample Depth (ft BGS)	Sample Date	mg/L	mV	SU	µS/cm	degrees C	FNU
S-8	Single-screen well	6.8-26.8	2/24/2021	0.00	7.2	6.81	891	16.1	1.80
S-8	Single-screen well	6.8-26.8	5/7/2021	0.03	20.8	7.00	841	15.2	9.81
S-8	Single-screen well	6.8-26.8	8/11/2021	1.02	-74.2	7.11	621	17.1	3.77
S-10	Single-screen well	32-52	3/8/2021	0.56	-110.1	6.56	3263	17.3	1.90
S-10	Single-screen well	32-52	5/11/2021	0.04	-109.4	6.58	2760	17.0	2.85
S-10	Single-screen well	32-52	8/12/2021	0.99	-117.2	6.57	2778	18.1	3.50
S-82	Single-screen well	15.5-25.5	3/8/2021	0.00	-96.9	6.81	2648	18.6	4.60
S-82	Single-screen well	15.5-25.5	5/13/2021	0.02	-128.7	6.78	2839	18.2	7.87
S-82	Single-screen well	15.5-25.5	8/16/2021	1.22	-143.4	6.81	2862	18.5	5.03
S-84	Single-screen well	20.9-30.9	2/26/2021	0.02	-391.7	6.57	1283	14.9	5.45
S-84	Single-screen well	20.9-30.9	5/10/2021	0.01	-116.2	6.70	1409	15.5	3.65
S-84	Single-screen well	20.9-30.9	8/17/2021	0.65	-135.1	6.78	777	15.9	9.55

Notes:
ft = feet
BGS = below ground surface
CHS = Cased Hole Sampler
FNU = Formazin Nephelometric Units
mg/L = micrograms per liter
mV = millivolts
µS/cm = microsiemens per centimeter
SU = standard units
X = Measurement not considered representative

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	D-3	D-3	D-3	D-6	D-6	D-6
			Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5
			Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.64 ± 0.849 (1.03) J-**	**1.68 ± 0.693 (0.557)**	**2.12 ± 0.764 (0.447)**	**1.74 ± 0.876 (0.992)**	**1.87 ± 0.770 (0.619)**	**1.56 ± 0.685 (0.581)**
Radium-228	E904.0	pCi/L	5	**6.86 ± 1.60 (1.37) J**	**4.73 ± 1.14 (1.04)**	**3.75 ± 0.860 (0.609) J-**	**3.07 ± 0.818 (0.876)**	**4.43 ± 1.02 (0.821)**	**4.16 ± 0.939 (0.685)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**8.50 ± 2.45 (2.40) J**	**6.41 ± 1.83 (1.60)**	**5.87 ± 1.62 (1.06) J-**	**4.81 ± 1.69 (1.87)**	**6.30 ± 1.79 (1.44)**	**5.72 ± 1.62 (1.27)**
Thorium-228	HASL300	pCi/L	15	0.095 ± 0.101 (0.176) U	0.288 ± 0.231 (0.346) U	0.223 ± 0.185 (0.320) U	0.104 ± 0.095 (0.133) U	0.144 ± 0.159 (0.284) U	**0.272 ± 0.155 (0.196) J+**
Thorium-230	HASL300	pCi/L	15	0.010 ± 0.056 (0.082) U	0.024 ± 0.116 (0.161) U	-0.012 ± 0.063 (0.112) U	0.017 ± 0.065 (0.047) U	0.007 ± 0.096 (0.177) U	0 ± 0.058 (0.042) U
Thorium-232	HASL300	pCi/L	15	-0.005 ± 0.056 (0.082) U	0 ± 0.116 (0.087) U	0.011 ± 0.063 (0.092) U	0 ± 0.065 (0.047) U	-0.006 ± 0.096 (0.133) U	-0.006 ± 0.058 (0.085) U
Uranium-234	HASL300	pCi/L	NE	**0.332 ± 0.155 (0.120) J+**	**0.226 ± 0.152 (0.068)**	**0.108 ± 0.087 (0.090)**	**0.335 ± 0.173 (0.158) J+**	**0.270 ± 0.176 (0.184)**	0.170 ± 0.158 (0.214) U
Uranium-235	HASL300	pCi/L	NE	**0.267 ± 0.151 (0.056) J+**	0.071 ± 0.118 (0.089) U	0.079 ± 0.086 (0.117) U	**0.150 ± 0.122 (0.068) J+**	0.041 ± 0.119 (0.089) U	0 ± 0.147 (0.114) U
Uranium-238	HASL300	pCi/L	NE	**0.113 ± 0.084 (0.043)**	**0.151 ± 0.123 (0.068)**	**0.124 ± 0.093 (0.090)**	**0.229 ± 0.134 (0.052)**	**0.247 ± 0.162 (0.126)**	0.111 ± 0.129 (0.197) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.52 ± 0.677 (0.710)**	**1.01 ± 0.638 (0.838)**	0.792 ± 0.614 (0.897) UJ	**1.45 ± 0.637 (0.701)**	**1.80 ± 0.700 (0.175)**	**1.85 ± 0.695 (0.426) J-**
Radium-228	E904.0	pCi/L	5	**2.96 ± 0.774 (0.781)**	**5.56 ± 1.32 (1.16)**	**5.78 ± 1.26 (0.814)**	**3.10 ± 0.768 (0.721)**	**3.59 ± 0.903 (0.837) J**	**4.38 ± 1.05 (1.05) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.48 ± 1.45 (1.49)**	**6.57 ± 1.96 (2.00)**	**6.57 ± 1.87 (1.71) J-**	**4.55 ± 1.41 (1.42)**	**5.39 ± 1.60 (1.01) J**	**6.23 ± 1.75 (1.48) J**
Thorium-228	HASL300	pCi/L	15	0.115 ± 0.107 (0.175) U	0.129 ± 0.154 (0.286) U	0.212 ± 0.166 (0.277) U	0.082 ± 0.084 (0.128) U	0.170 ± 0.162 (0.267) U	0.154 ± 0.153 (0.274) U
Thorium-230	HASL300	pCi/L	15	0.027 ± 0.058 (0.103) U	-0.006 ± 0.092 (0.127) U	0.004 ± 0.060 (0.107) U	0.033 ± 0.062 (0.045) U	-0.018 ± 0.090 (0.166) U	0.005 ± 0.063 (0.112) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.058 (0.042) U	-0.006 ± 0.092 (0.127) U	0.032 ± 0.060 (0.043) U	0 ± 0.062 (0.045) U	0.019 ± 0.090 (0.125) U	-0.006 ± 0.063 (0.093) U
Uranium-234	HASL300	pCi/L	NE	**0.288 ± 0.140 (0.102) J+**	0.142 ± 0.121 (0.150) U	0.134 ± 0.129 (0.159) U	**0.307 ± 0.147 (0.106) J+**	0.117 ± 0.119 (0.193) U	**0.224 ± 0.174 (0.154)**
Uranium-235	HASL300	pCi/L	NE	**0.173 ± 0.125 (0.136) J+**	0.029 ± 0.106 (0.080) U	-0.007 ± 0.132 (0.177) U	**0.125 ± 0.101 (0.056) J+**	0 ± 0.104 (0.078) U	0.043 ± 0.150 (0.116) U
Uranium-238	HASL300	pCi/L	NE	**0.154 ± 0.100 (0.087) J+**	**0.130 ± 0.111 (0.113)**	**0.168 ± 0.141 (0.135)**	**0.159 ± 0.101 (0.043) J+**	0.034 ± 0.080 (0.131) U	0.146 ± 0.147 (0.201) U
Tritium	E906.0	pCi/L	20,000	39.0 ± 137 (237) U	25.0 ± 145 (253) U	-52.3 ± 143 (256) U	**307 ± 164 (251)**	**330 ± 156 (231)**	182 ± 147 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	D-6	D-12	D-12	D-12	D-12	D-13
			Sample Depth (ft BGS)	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133
			Sample Date	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021
			Sample Type	FD	N	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.82 ± 0.715 (0.461)**	**1.12 ± 0.592 (0.634)**	0.426 ± 0.433 (0.655) U	0.499 ± 0.501 (0.782) U	**0.480 ± 0.376 (0.442)**	**1.12 ± 0.683 (0.881) J-**
Radium-228	E904.0	pCi/L	5	**3.96 ± 0.927 (0.730)**	**0.939 ± 0.442 (0.752) J-**	**1.85 ± 0.604 (0.791)**	0.528 ± 0.455 (0.914) U	**2.02 ± 0.641 (0.904)**	**1.68 ± 0.533 (0.683)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.78 ± 1.64 (1.19)**	**2.06 ± 1.03 (1.39) J-**	**2.28 ± 1.04 (1.45)**	1.03 ± 0.956 (1.70) U	**2.50 ± 1.02 (1.35)**	**2.80 ± 1.22 (1.56) J-**
Thorium-228	HASL300	pCi/L	15	0.088 ± 0.133 (0.265) U	0.051 ± 0.074 (0.141) U	0.231 ± 0.202 (0.341) U	0.007 ± 0.103 (0.251) U	0.019 ± 0.145 (0.333) U	0.074 ± 0.091 (0.166) U
Thorium-230	HASL300	pCi/L	15	0.034 ± 0.065 (0.047) U	0.010 ± 0.057 (0.084) U	-0.018 ± 0.092 (0.171) U	0.034 ± 0.063 (0.045) U	-0.019 ± 0.065 (0.131) U	0.026 ± 0.061 (0.089) U
Thorium-232	HASL300	pCi/L	15	-0.012 ± 0.065 (0.114) U	0 ± 0.057 (0.041) U	-0.012 ± 0.092 (0.152) U	0.011 ± 0.063 (0.092) U	-0.006 ± 0.065 (0.095) U	0.007 ± 0.061 (0.089) U
Uranium-234	HASL300	pCi/L	NE	**0.126 ± 0.125 (0.085)**	**0.452 ± 0.173 (0.107) J+**	**0.271 ± 0.165 (0.120)**	**0.308 ± 0.207 (0.157)**	**0.141 ± 0.120 (0.122)**	**0.163 ± 0.121 (0.152) J+**
Uranium-235	HASL300	pCi/L	NE	0.041 ± 0.144 (0.111) U	0.079 ± 0.084 (0.123) U	0.087 ± 0.113 (0.156) U	**0.219 ± 0.195 (0.119)**	0.032 ± 0.115 (0.086) U	**0.117 ± 0.105 (0.065) J+**
Uranium-238	HASL300	pCi/L	NE	**0.209 ± 0.167 (0.173)**	**0.245 ± 0.124 (0.094)**	**0.096 ± 0.095 (0.065)**	0.128 ± 0.134 (0.157) U	**0.073 ± 0.089 (0.066)**	**0.089 ± 0.080 (0.050)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**0.954 ± 0.516 (0.521) J-**	**0.433 ± 0.325 (0.168)**	0.123 ± 0.280 (0.166) U	0.168 ± 0.365 (0.673) U	0.420 ± 0.356 (0.442) U	0.495 ± 0.422 (0.592) U
Radium-228	E904.0	pCi/L	5	**4.14 ± 1.01 (0.969) J+**	0.455 ± 0.523 (1.11) U	**1.42 ± 0.697 (1.27) J+**	0.700 ± 0.505 (0.977) U	0.420 ± 0.452 (0.937) U	**1.47 ± 0.509 (0.717) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.09 ± 1.53 (1.49) J**	0.888 ± 0.848 (1.28) U	**1.54 ± 0.977 (1.44) J+**	0.868 ± 0.870 (1.65) U	0.840 ± 0.808 (1.38) U	**1.97 ± 0.931 (1.31) J-**
Thorium-228	HASL300	pCi/L	15	**0.244 ± 0.165 (0.242)**	-0.018 ± 0.062 (0.123) U	0.067 ± 0.170 (0.388) U	0.027 ± 0.122 (0.276) U	0.080 ± 0.138 (0.283) U	0.042 ± 0.106 (0.232) U
Thorium-230	HASL300	pCi/L	15	0.003 ± 0.065 (0.144) U	**0.048 ± 0.061 (0.043)**	0.052 ± 0.093 (0.070) U	0.004 ± 0.058 (0.103) U	-0.015 ± 0.060 (0.114) U	0.031 ± 0.058 (0.041) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.065 (0.047) U	0 ± 0.060 (0.043) U	0 ± 0.093 (0.070) U	0 ± 0.058 (0.042) U	0 ± 0.060 (0.043) U	0 ± 0.057 (0.041) U
Uranium-234	HASL300	pCi/L	NE	0.090 ± 0.117 (0.207) U	**0.500 ± 0.190 (0.133) J+**	**0.341 ± 0.209 (0.176)**	**0.152 ± 0.141 (0.148)**	**0.215 ± 0.181 (0.173)**	**0.394 ± 0.171 (0.109) J+**
Uranium-235	HASL300	pCi/L	NE	0.037 ± 0.133 (0.178) U	**0.194 ± 0.123 (0.052) J+**	0.107 ± 0.140 (0.193) U	**0.124 ± 0.146 (0.112) J+**	0.047 ± 0.169 (0.166) U	**0.211 ± 0.135 (0.058) J+**
Uranium-238	HASL300	pCi/L	NE	**0.204 ± 0.154 (0.079)**	**0.237 ± 0.121 (0.040) J+**	**0.148 ± 0.132 (0.080)**	0.089 ± 0.112 (0.148) U	0.067 ± 0.130 (0.173) U	**0.196 ± 0.115 (0.044) J+**
Tritium	E906.0	pCi/L	20,000	199 ± 148 (236) U	**1089 ± 236 (239)**	**995 ± 225 (237)**	**830 ± 233 (296)**	**892 ± 214 (239)**	100 ± 139 (234) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	D-13	D-13	D-81	D-81	D-81	D-83
			Sample Depth (ft BGS)	123-133	123-133	45-60	45-60	45-60	77-97
			Sample Date	05-05-2021	08-06-2021	03-09-2021	05-05-2021	08-09-2021	03-02-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.953 ± 0.554 (0.590)**	**0.906 ± 0.533 (0.640)**	**0.781 ± 0.486 (0.479) J-**	**0.445 ± 0.348 (0.409)**	-0.0568 ± 0.259 (0.528) U	**1.23 ± 0.562 (0.496)**
Radium-228	E904.0	pCi/L	5	**2.30 ± 0.649 (0.704)**	**1.79 ± 0.546 (0.650)**	0.845 ± 0.578 (1.11) UJ	**1.39 ± 0.540 (0.826)**	**1.15 ± 0.508 (0.875)**	**2.87 ± 0.740 (0.745) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.25 ± 1.20 (1.29)**	**2.70 ± 1.08 (1.29)**	**1.63 ± 1.06 (1.59) J-**	**1.84 ± 0.888 (1.24)**	1.15 ± 0.767 (1.40) U	**4.10 ± 1.30 (1.24) J-**
Thorium-228	HASL300	pCi/L	15	0.013 ± 0.108 (0.285) U	0.164 ± 0.197 (0.385) U	-0.004 ± 0.092 (0.234) U	0.035 ± 0.082 (0.188) U	0.154 ± 0.180 (0.343) U	0.017 ± 0.064 (0.129) U
Thorium-230	HASL300	pCi/L	15	0.007 ± 0.088 (0.162) U	0.010 ± 0.091 (0.161) U	0.026 ± 0.060 (0.088) U	0.039 ± 0.080 (0.110) U	0.018 ± 0.074 (0.082) U	0 ± 0.063 (0.045) U
Thorium-232	HASL300	pCi/L	15	-0.012 ± 0.088 (0.145) U	0 ± 0.091 (0.069) U	0.016 ± 0.060 (0.043) U	-0.005 ± 0.079 (0.110) U	0 ± 0.074 (0.054) U	0 ± 0.063 (0.045) U
Uranium-234	HASL300	pCi/L	NE	0.105 ± 0.105 (0.150) U	**0.118 ± 0.117 (0.080)**	**2.10 ± 0.482 (0.126) J+**	**1.27 ± 0.369 (0.119)**	**1.13 ± 0.441 (0.278)**	**0.330 ± 0.145 (0.085) J+**
Uranium-235	HASL300	pCi/L	NE	0.029 ± 0.106 (0.080) U	0.038 ± 0.138 (0.104) U	**0.386 ± 0.188 (0.059) J+**	**0.209 ± 0.148 (0.071)**	**0.224 ± 0.208 (0.218)**	**0.314 ± 0.158 (0.051) J+**
Uranium-238	HASL300	pCi/L	NE	0.036 ± 0.081 (0.150) U	0.060 ± 0.106 (0.214) U	**1.53 ± 0.387 (0.045)**	**1.19 ± 0.354 (0.100)**	**0.925 ± 0.389 (0.219)**	**0.217 ± 0.116 (0.079)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.08 ± 0.547 (0.527) J+**	**1.09 ± 0.691 (0.907)**	0.386 ± 0.473 (0.778) U	0.175 ± 0.472 (0.877) U	0.152 ± 0.432 (0.802) U	**1.30 ± 0.587 (0.435)**
Radium-228	E904.0	pCi/L	5	**2.02 ± 0.633 (0.843)**	**2.87 ± 0.797 (0.921) J+**	**1.58 ± 0.534 (0.744) J**	**1.24 ± 0.531 (0.890) J+**	0.851 ± 0.510 (0.938) U	**2.97 ± 0.837 (1.04)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.10 ± 1.18 (1.37) J+**	**3.96 ± 1.49 (1.83) J+**	**1.97 ± 1.01 (1.52) J**	1.42 ± 1.00 (1.77) UJ	1.00 ± 0.942 (1.74) U	**4.27 ± 1.42 (1.48)**
Thorium-228	HASL300	pCi/L	15	0.056 ± 0.093 (0.173) U	-0.041 ± 0.122 (0.356) U	0.047 ± 0.090 (0.190) U	0.043 ± 0.109 (0.254) U	**0.196 ± 0.134 (0.191) J+**	0.032 ± 0.091 (0.206) U
Thorium-230	HASL300	pCi/L	15	0.032 ± 0.091 (0.168) U	0.039 ± 0.085 (0.149) U	-0.030 ± 0.063 (0.150) U	0.022 ± 0.087 (0.100) U	0.010 ± 0.057 (0.083) U	0.005 ± 0.063 (0.111) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.090 (0.068) U	0 ± 0.085 (0.064) U	-0.006 ± 0.063 (0.092) U	0 ± 0.087 (0.065) U	0 ± 0.057 (0.041) U	-0.006 ± 0.063 (0.092) U
Uranium-234	HASL300	pCi/L	NE	0.079 ± 0.094 (0.148) U	**0.279 ± 0.165 (0.064)**	**1.94 ± 0.454 (0.109)**	**1.12 ± 0.355 (0.152)**	**1.86 ± 0.559 (0.150) J+**	**0.480 ± 0.187 (0.127) J+**
Uranium-235	HASL300	pCi/L	NE	0.111 ± 0.121 (0.154) U	0.042 ± 0.111 (0.083) U	**0.240 ± 0.151 (0.146)**	-0.007 ± 0.104 (0.145) U	**0.126 ± 0.148 (0.114) J+**	**0.275 ± 0.151 (0.054) J+**
Uranium-238	HASL300	pCi/L	NE	0.008 ± 0.085 (0.152) U	0.048 ± 0.085 (0.171) U	**1.47 ± 0.375 (0.093)**	**0.972 ± 0.325 (0.111)**	**1.03 ± 0.390 (0.087)**	**0.102 ± 0.082 (0.084) J+**
Tritium	E906.0	pCi/L	20,000	113 ± 139 (231) U	110 ± 127 (211) U	112 ± 137 (229) U	57.6 ± 135 (232) U	120 ± 143 (239) U	-12.4 ± 134 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	D-83	D-83	D-85	D-85	D-85	D-85
			Sample Depth (ft BGS)	77-97	77-97	62-82	62-82	62-82	62-82
			Sample Date	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021
			Sample Type	N	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.34 ± 0.685 (0.719)**	**0.887 ± 0.458 (0.384)**	**1.32 ± 0.589 (0.509) J-**	**0.649 ± 0.404 (0.398)**	**0.886 ± 0.564 (0.682)**	0.564 ± 0.499 (0.740) U
Radium-228	E904.0	pCi/L	5	**2.79 ± 0.704 (0.636)**	**2.73 ± 0.841 (1.08)**	**1.76 ± 0.536 (0.638)**	**0.887 ± 0.472 (0.841)**	**1.12 ± 0.534 (0.955) J-**	**1.52 ± 0.552 (0.831) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.13 ± 1.39 (1.36)**	**3.62 ± 1.30 (1.46)**	**3.08 ± 1.13 (1.15) J-**	**1.54 ± 0.876 (1.24)**	**2.01 ± 1.10 (1.64) J-**	**2.08 ± 1.05 (1.57) J-**
Thorium-228	HASL300	pCi/L	15	0.069 ± 0.146 (0.327) U	0.105 ± 0.149 (0.296) U	0.120 ± 0.171 (0.340) U	0.007 ± 0.126 (0.332) U	**0.299 ± 0.191 (0.278) J+**	0.076 ± 0.136 (0.281) U
Thorium-230	HASL300	pCi/L	15	0.023 ± 0.110 (0.152) U	0.001 ± 0.062 (0.119) U	-0.009 ± 0.076 (0.168) U	0.013 ± 0.090 (0.148) U	0.005 ± 0.069 (0.123) U	-0.011 ± 0.056 (0.099) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.110 (0.083) U	0 ± 0.062 (0.045) U	0 ± 0.076 (0.055) U	0 ± 0.090 (0.068) U	0.018 ± 0.069 (0.050) U	-0.009 ± 0.056 (0.094) U
Uranium-234	HASL300	pCi/L	NE	0.031 ± 0.087 (0.160) U	0.130 ± 0.135 (0.191) U	**0.462 ± 0.175 (0.115) J+**	0.068 ± 0.084 (0.139) U	**0.305 ± 0.222 (0.183)**	**0.255 ± 0.185 (0.152)**
Uranium-235	HASL300	pCi/L	NE	0.063 ± 0.114 (0.085) U	0.047 ± 0.143 (0.110) U	**0.215 ± 0.126 (0.049) J+**	**0.154 ± 0.129 (0.074)**	0.051 ± 0.179 (0.138) U	0.043 ± 0.149 (0.115) U
Uranium-238	HASL300	pCi/L	NE	0.024 ± 0.087 (0.065) U	0.144 ± 0.139 (0.172) U	**0.197 ± 0.108 (0.077)**	0.006 ± 0.075 (0.139) U	0.103 ± 0.138 (0.214) U	**0.228 ± 0.180 (0.200)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.19 ± 0.652 (0.752)**	**1.21 ± 0.567 (0.510)**	**0.824 ± 0.550 (0.682)**	**1.01 ± 0.541 (0.195)**	0.231 ± 0.531 (0.961) U	**0.994 ± 0.654 (0.876)**
Radium-228	E904.0	pCi/L	5	**1.61 ± 0.523 (0.688) J**	**1.45 ± 0.605 (0.951) J+**	**0.917 ± 0.424 (0.720) J-**	**1.12 ± 0.489 (0.823)**	**1.06 ± 0.378 (0.526) J-**	**1.43 ± 0.459 (0.595) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.80 ± 1.18 (1.44) J**	**2.66 ± 1.17 (1.46) J+**	**1.74 ± 0.974 (1.40) J-**	**2.13 ± 1.03 (1.02)**	1.29 ± 0.909 (1.49) UJ	**2.42 ± 1.11 (1.47) J-**
Thorium-228	HASL300	pCi/L	15	0.128 ± 0.152 (0.282) U	0.071 ± 0.160 (0.351) U	**0.145 ± 0.105 (0.123)**	0.080 ± 0.115 (0.224) U	0.160 ± 0.155 (0.273) U	**0.333 ± 0.197 (0.276) J+**
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.091 (0.126) U	0.042 ± 0.081 (0.088) U	**0.138 ± 0.097 (0.088)**	0.109 ± 0.109 (0.143) U	0.054 ± 0.076 (0.138) U	0.083 ± 0.085 (0.121) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.091 (0.126) U	0 ± 0.080 (0.059) U	**0.048 ± 0.061 (0.043)**	0 ± 0.087 (0.066) U	**0.073 ± 0.073 (0.050)**	**0.091 ± 0.081 (0.049)**
Uranium-234	HASL300	pCi/L	NE	0.035 ± 0.091 (0.163) U	0.116 ± 0.127 (0.175) U	**0.360 ± 0.152 (0.105) J+**	0.154 ± 0.135 (0.195) U	0.005 ± 0.125 (0.250) U	0.139 ± 0.134 (0.164) U
Uranium-235	HASL300	pCi/L	NE	0.033 ± 0.119 (0.090) U	0.034 ± 0.145 (0.194) U	**0.160 ± 0.114 (0.121) J+**	0.047 ± 0.111 (0.182) U	0.093 ± 0.164 (0.126) U	0.032 ± 0.137 (0.183) U
Uranium-238	HASL300	pCi/L	NE	0 ± 0.091 (0.069) U	0.090 ± 0.112 (0.149) U	**0.157 ± 0.098 (0.093)**	-0.016 ± 0.085 (0.206) U	0.100 ± 0.126 (0.167) U	0.084 ± 0.106 (0.140) U
Tritium	E906.0	pCi/L	20,000	107 ± 140 (235) U	24.9 ± 154 (296) U	112 ± 139 (233) U	5.01 ± 136 (238) U	-45.0 ± 139 (249) U	17.4 ± 142 (247) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	D-87	D-87	D-87	D-87	D-89	D-89
			Sample Depth (ft BGS)	91-111	91-111	91-111	91-111	33-48	33-48
			Sample Date	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021
			Sample Type	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.886 ± 0.541 (0.636) J-**	**1.85 ± 0.694 (0.425)**	**1.63 ± 0.720 (0.675)**	**1.37 ± 0.649 (0.642)**	**1.58 ± 0.629 (0.489) J-**	**1.75 ± 0.729 (0.497) J-**
Radium-228	E904.0	pCi/L	5	**3.21 ± 0.890 (1.04) J**	**3.92 ± 0.923 (0.718)**	**2.84 ± 0.717 (0.683)**	**3.61 ± 0.873 (0.801)**	**1.94 ± 0.649 (0.907) J**	**2.80 ± 0.794 (0.883) J**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.10 ± 1.43 (1.68) J**	**5.77 ± 1.62 (1.14)**	**4.47 ± 1.44 (1.36)**	**4.98 ± 1.52 (1.44)**	**3.52 ± 1.28 (1.40) J**	**4.55 ± 1.52 (1.38) J**
Thorium-228	HASL300	pCi/L	15	0.030 ± 0.099 (0.226) U	0.194 ± 0.163 (0.239) U	0.111 ± 0.143 (0.278) U	0.098 ± 0.161 (0.328) U	0.021 ± 0.062 (0.110) U	0.059 ± 0.111 (0.232) U
Thorium-230	HASL300	pCi/L	15	0.006 ± 0.062 (0.091) U	-0.018 ± 0.090 (0.166) U	0.030 ± 0.064 (0.087) U	-0.014 ± 0.066 (0.158) U	0 ± 0.061 (0.044) U	-0.014 ± 0.072 (0.127) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.062 (0.045) U	-0.006 ± 0.090 (0.124) U	-0.006 ± 0.064 (0.094) U	-0.013 ± 0.066 (0.117) U	0 ± 0.061 (0.044) U	0.012 ± 0.072 (0.105) U
Uranium-234	HASL300	pCi/L	NE	**0.352 ± 0.182 (0.166) J+**	0.104 ± 0.104 (0.137) U	**0.105 ± 0.124 (0.095)**	**0.332 ± 0.236 (0.112)**	**0.584 ± 0.211 (0.107) J+**	**0.370 ± 0.186 (0.184) J+**
Uranium-235	HASL300	pCi/L	NE	**0.223 ± 0.162 (0.174) J+**	0 ± 0.108 (0.082) U	0.046 ± 0.161 (0.124) U	**0.217 ± 0.215 (0.147)**	**0.193 ± 0.135 (0.143) J+**	**0.284 ± 0.175 (0.138) J+**
Uranium-238	HASL300	pCi/L	NE	**0.146 ± 0.115 (0.134)**	0.128 ± 0.114 (0.137) U	0.093 ± 0.124 (0.193) U	**0.124 ± 0.147 (0.112)**	**0.154 ± 0.103 (0.091)**	**0.248 ± 0.157 (0.195)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.98 ± 0.734 (0.591)**	**2.10 ± 0.868 (0.860)**	**1.96 ± 0.825 (0.829)**	0.721 ± 0.558 (0.787) U	**1.29 ± 0.705 (0.863)**	**1.97 ± 0.747 (0.657)**
Radium-228	E904.0	pCi/L	5	**3.72 ± 0.993 (1.11)**	**4.45 ± 1.10 (1.13)**	**2.91 ± 0.727 (0.672) J-**	**4.65 ± 1.04 (0.758) J-**	**3.29 ± 1.01 (1.34)**	**2.15 ± 0.844 (1.35)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.70 ± 1.73 (1.70)**	**6.55 ± 1.97 (1.99)**	**4.87 ± 1.55 (1.50) J-**	**5.37 ± 1.60 (1.55) J-**	**4.58 ± 1.72 (2.20)**	**4.12 ± 1.59 (2.01)**
Thorium-228	HASL300	pCi/L	15	0.052 ± 0.065 (0.107) U	0.049 ± 0.098 (0.216) U	**0.209 ± 0.140 (0.196)**	0.097 ± 0.136 (0.268) U	0.081 ± 0.111 (0.213) U	0.067 ± 0.099 (0.188) U
Thorium-230	HASL300	pCi/L	15	0.016 ± 0.059 (0.042) U	-0.006 ± 0.089 (0.123) U	0.016 ± 0.058 (0.042) U	0 ± 0.065 (0.047) U	0.030 ± 0.068 (0.100) U	-0.007 ± 0.078 (0.114) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.059 (0.042) U	0 ± 0.089 (0.067) U	-0.006 ± 0.058 (0.085) U	-0.013 ± 0.066 (0.116) U	-0.007 ± 0.068 (0.100) U	0 ± 0.078 (0.056) U
Uranium-234	HASL300	pCi/L	NE	**0.228 ± 0.134 (0.130) J+**	**0.303 ± 0.175 (0.118) J+**	0.109 ± 0.126 (0.192) U	0.217 ± 0.184 (0.255) U	**0.445 ± 0.191 (0.120) J+**	**0.517 ± 0.200 (0.111) J+**
Uranium-235	HASL300	pCi/L	NE	**0.064 ± 0.085 (0.061)**	0.062 ± 0.112 (0.084) U	**0.123 ± 0.145 (0.111) J+**	-0.002 ± 0.147 (0.155) U	**0.237 ± 0.151 (0.064) J+**	**0.358 ± 0.184 (0.120) J+**
Uranium-238	HASL300	pCi/L	NE	**0.172 ± 0.110 (0.047)**	**0.143 ± 0.116 (0.064)**	0.114 ± 0.125 (0.173) U	0.091 ± 0.114 (0.151) U	**0.144 ± 0.102 (0.049) J+**	**0.182 ± 0.114 (0.092) J+**
Tritium	E906.0	pCi/L	20,000	113 ± 137 (228) U	2.50 ± 138 (242) U	37.2 ± 123 (214) U	212 ± 137 (215) U	**11750 ± 1580 (226)**	**11960 ± 1609 (228)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	D-89	D-89	D-89	D-93	D-93	D-93
			Sample Depth (ft BGS)	33-48	33-48	33-48	92-112	92-112	92-112
			Sample Date	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021
			Sample Type	N	FD	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.83 ± 0.740 (0.686)**	**1.23 ± 0.562 (0.496)**	**3.20 ± 1.03 (0.717)**	**1.83 ± 0.761 (0.783) J-**	**1.71 ± 0.645 (0.155) J-**	**1.24 ± 0.622 (0.704)**
Radium-228	E904.0	pCi/L	5	**1.93 ± 0.687 (0.956)**	**3.53 ± 1.37 (2.24)**	**1.60 ± 0.521 (0.698)**	**3.99 ± 1.04 (1.05) J**	**5.93 ± 1.46 (1.28) J**	**5.64 ± 1.21 (0.663) J**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.76 ± 1.43 (1.64)**	**4.76 ± 1.93 (2.74)**	**4.80 ± 1.55 (1.42)**	**5.82 ± 1.80 (1.83) J**	**7.64 ± 2.11 (1.44) J**	**6.88 ± 1.83 (1.37) J**
Thorium-228	HASL300	pCi/L	15	0.089 ± 0.176 (0.385) U	0.020 ± 0.107 (0.285) U	0.199 ± 0.170 (0.279) U	0.117 ± 0.119 (0.211) U	0.107 ± 0.125 (0.232) U	0.052 ± 0.157 (0.366) U
Thorium-230	HASL300	pCi/L	15	0.001 ± 0.097 (0.196) U	-0.013 ± 0.101 (0.166) U	-0.007 ± 0.078 (0.171) U	-0.011 ± 0.055 (0.098) U	-0.012 ± 0.061 (0.108) U	0.018 ± 0.085 (0.119) U
Thorium-232	HASL300	pCi/L	15	-0.013 ± 0.097 (0.160) U	0 ± 0.101 (0.076) U	0 ± 0.078 (0.057) U	0 ± 0.055 (0.040) U	-0.006 ± 0.061 (0.089) U	0 ± 0.085 (0.064) U
Uranium-234	HASL300	pCi/L	NE	**0.205 ± 0.150 (0.182)**	**0.239 ± 0.157 (0.122)**	0.057 ± 0.132 (0.223) U	**0.409 ± 0.182 (0.151) J+**	**0.408 ± 0.222 (0.181) J+**	**0.347 ± 0.212 (0.243)**
Uranium-235	HASL300	pCi/L	NE	0.114 ± 0.121 (0.152) U	**0.096 ± 0.116 (0.087)**	0.033 ± 0.172 (0.264) U	**0.132 ± 0.108 (0.060) J+**	**0.107 ± 0.135 (0.096) J+**	-0.007 ± 0.125 (0.167) U
Uranium-238	HASL300	pCi/L	NE	0.056 ± 0.084 (0.148) U	0.111 ± 0.110 (0.146) U	0.092 ± 0.132 (0.230) U	**0.163 ± 0.108 (0.093)**	**0.190 ± 0.144 (0.074)**	0.087 ± 0.107 (0.177) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.36 ± 0.623 (0.550)**	**1.94 ± 0.682 (0.150)**	**2.14 ± 0.954 (0.954)**	**2.07 ± 0.785 (0.582)**	**2.47 ± 0.810 (0.578)**	**2.25 ± 0.819 (0.693)**
Radium-228	E904.0	pCi/L	5	**1.78 ± 0.639 (0.982)**	**2.43 ± 0.708 (0.862)**	**2.95 ± 0.757 (0.701)**	**3.67 ± 1.000 (1.11)**	**5.31 ± 1.20 (0.841)**	**3.56 ± 0.875 (0.787)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.14 ± 1.26 (1.53)**	**4.37 ± 1.39 (1.01)**	**5.09 ± 1.71 (1.66)**	**5.74 ± 1.79 (1.69)**	**7.78 ± 2.01 (1.42)**	**5.81 ± 1.69 (1.48)**
Thorium-228	HASL300	pCi/L	15	0.070 ± 0.112 (0.227) U	0.047 ± 0.115 (0.266) U	0.068 ± 0.145 (0.316) U	0.099 ± 0.094 (0.143) U	0.203 ± 0.165 (0.255) U	0.024 ± 0.127 (0.321) U
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.095 (0.132) U	-0.006 ± 0.085 (0.118) U	-0.012 ± 0.073 (0.125) U	-0.023 ± 0.059 (0.130) U	-0.015 ± 0.079 (0.139) U	-0.019 ± 0.092 (0.171) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.095 (0.072) U	0 ± 0.085 (0.064) U	0 ± 0.073 (0.054) U	-0.006 ± 0.059 (0.086) U	-0.008 ± 0.078 (0.115) U	0.013 ± 0.092 (0.153) U
Uranium-234	HASL300	pCi/L	NE	**0.192 ± 0.141 (0.142)**	0.152 ± 0.129 (0.161) U	0.177 ± 0.159 (0.198) U	**0.185 ± 0.136 (0.128) J+**	**0.382 ± 0.189 (0.140) J+**	**0.141 ± 0.120 (0.122) J+**
Uranium-235	HASL300	pCi/L	NE	0.009 ± 0.112 (0.207) U	0.063 ± 0.114 (0.086) U	0.077 ± 0.149 (0.198) U	0.054 ± 0.115 (0.167) U	**0.192 ± 0.145 (0.074) J+**	0.080 ± 0.115 (0.189) U
Uranium-238	HASL300	pCi/L	NE	**0.095 ± 0.095 (0.065) J+**	**0.139 ± 0.119 (0.121) J+**	0.027 ± 0.114 (0.152) U	0.085 ± 0.094 (0.128) U	**0.203 ± 0.135 (0.116) J+**	0.088 ± 0.099 (0.145) U
Tritium	E906.0	pCi/L	20,000	**9981 ± 1354 (240)**	**10670 ± 1444 (242)**	**10000 ± 1376 (262)**	84.5 ± 134 (226) U	174 ± 141 (227) U	77.5 ± 142 (242) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	D-93	D-93	I-9	I-9	I-9	I-9
			Sample Depth (ft BGS)	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1
			Sample Date	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021
			Sample Type	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**2.95 ± 0.945 (0.708)**	**1.64 ± 0.744 (0.756)**	**1.52 ± 0.695 (0.786) J-**	**1.52 ± 0.657 (0.605)**	**2.12 ± 0.734 (0.159)**	**1.93 ± 0.814 (0.849)**
Radium-228	E904.0	pCi/L	5	**5.21 ± 1.15 (0.645) J**	**6.23 ± 1.35 (0.776)**	**1.97 ± 0.695 (0.981) J**	**2.36 ± 0.825 (1.16) J**	**3.97 ± 0.964 (0.848)**	**3.57 ± 0.890 (0.822)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**8.16 ± 2.10 (1.35) J**	**7.87 ± 2.09 (1.53)**	**3.49 ± 1.39 (1.77) J**	**3.88 ± 1.48 (1.77) J**	**6.09 ± 1.70 (1.01)**	**5.50 ± 1.70 (1.67)**
Thorium-228	HASL300	pCi/L	15	0.123 ± 0.180 (0.363) U	0.142 ± 0.166 (0.318) U	0.081 ± 0.121 (0.241) U	**0.249 ± 0.170 (0.206)**	0.066 ± 0.150 (0.321) U	0.167 ± 0.126 (0.188) U
Thorium-230	HASL300	pCi/L	15	-0.008 ± 0.114 (0.158) U	0.016 ± 0.061 (0.044) U	-0.012 ± 0.064 (0.112) U	-0.005 ± 0.083 (0.181) U	0.012 ± 0.072 (0.105) U	0.041 ± 0.059 (0.065) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.114 (0.086) U	0.010 ± 0.061 (0.089) U	-0.006 ± 0.064 (0.093) U	0 ± 0.083 (0.063) U	0 ± 0.072 (0.052) U	0 ± 0.058 (0.042) U
Uranium-234	HASL300	pCi/L	NE	**0.262 ± 0.163 (0.067)**	0.053 ± 0.114 (0.179) U	**0.394 ± 0.159 (0.039) J+**	**0.245 ± 0.150 (0.060)**	0.185 ± 0.157 (0.197) U	**0.159 ± 0.142 (0.086)**
Uranium-235	HASL300	pCi/L	NE	**0.096 ± 0.116 (0.087)**	**0.205 ± 0.189 (0.199)**	0.069 ± 0.076 (0.104) U	0 ± 0.105 (0.079) U	0.077 ± 0.136 (0.104) U	0.083 ± 0.146 (0.113) U
Uranium-238	HASL300	pCi/L	NE	**0.123 ± 0.109 (0.067)**	0.178 ± 0.160 (0.199) U	0.100 ± 0.083 (0.109) U	**0.156 ± 0.118 (0.060)**	0.043 ± 0.104 (0.181) U	0.148 ± 0.142 (0.175) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.36 ± 0.681 (0.828)**	**2.35 ± 0.841 (0.589) J**	**1.49 ± 0.707 (0.699)**	**2.70 ± 0.840 (0.159)**	**1.06 ± 0.722 (1.03) J**	**2.06 ± 0.814 (0.693) J**
Radium-228	E904.0	pCi/L	5	**4.13 ± 0.975 (0.781)**	**5.12 ± 1.26 (1.05) J+**	**3.84 ± 0.910 (0.764)**	**2.35 ± 0.684 (0.761)**	**2.99 ± 0.849 (0.932) J+**	**3.82 ± 1.10 (1.25) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.49 ± 1.66 (1.61)**	**7.47 ± 2.10 (1.64) J**	**5.33 ± 1.62 (1.46)**	**5.05 ± 1.52 (0.920)**	**4.05 ± 1.57 (1.96) J**	**5.88 ± 1.91 (1.94) J**
Thorium-228	HASL300	pCi/L	15	0.159 ± 0.169 (0.306) U	0.133 ± 0.138 (0.251) U	0.145 ± 0.144 (0.246) U	0.212 ± 0.167 (0.236) U	0.177 ± 0.132 (0.193) U	**0.282 ± 0.170 (0.232)**
Thorium-230	HASL300	pCi/L	15	0.019 ± 0.088 (0.122) U	0.016 ± 0.061 (0.044) U	0.006 ± 0.076 (0.134) U	-0.018 ± 0.088 (0.163) U	0.030 ± 0.060 (0.067) U	-0.007 ± 0.063 (0.138) U
Thorium-232	HASL300	pCi/L	15	0.025 ± 0.088 (0.066) U	0.005 ± 0.061 (0.108) U	-0.007 ± 0.076 (0.110) U	-0.006 ± 0.088 (0.122) U	0 ± 0.060 (0.043) U	0 ± 0.063 (0.045) U
Uranium-234	HASL300	pCi/L	NE	**0.275 ± 0.158 (0.138) J+**	0.152 ± 0.136 (0.170) U	**0.343 ± 0.168 (0.146) J+**	**0.250 ± 0.164 (0.162) J+**	**0.221 ± 0.160 (0.132)**	**0.264 ± 0.192 (0.158)**
Uranium-235	HASL300	pCi/L	NE	0 ± 0.097 (0.073) U	0.036 ± 0.127 (0.098) U	0.104 ± 0.107 (0.153) U	**0.124 ± 0.125 (0.086)**	**0.111 ± 0.130 (0.100) J+**	**0.132 ± 0.156 (0.119) J+**
Uranium-238	HASL300	pCi/L	NE	0.099 ± 0.092 (0.103) U	**0.157 ± 0.136 (0.153)**	**0.216 ± 0.129 (0.117) J+**	0.094 ± 0.098 (0.121) U	0.041 ± 0.099 (0.173) U	0.054 ± 0.119 (0.207) U
Tritium	E906.0	pCi/L	20,000	25.0 ± 139 (243) U	125 ± 139 (230) U	72.7 ± 134 (229) U	24.9 ± 139 (242) U	19.9 ± 131 (228) U	-9.95 ± 129 (229) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	I-11	I-11	I-11	I-62	I-62	I-62
			Sample Depth (ft BGS)	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44
			Sample Date	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.978 ± 0.489 (0.400)**	**1.65 ± 0.698 (0.633)**	0.266 ± 0.321 (0.489) U	0.401 ± 0.375 (0.532) U	0.561 ± 0.536 (0.817) U	0.421 ± 0.394 (0.559) U
Radium-228	E904.0	pCi/L	5	**1.30 ± 0.488 (0.761) J-**	**1.98 ± 0.592 (0.706)**	**1.21 ± 0.443 (0.637)**	0.782 ± 0.469 (0.883) UJ	**1.06 ± 0.465 (0.759)**	0.931 ± 0.522 (0.956) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.28 ± 0.977 (1.16) J-**	**3.63 ± 1.29 (1.34)**	**1.48 ± 0.764 (1.13)**	1.18 ± 0.844 (1.42) UJ	**1.62 ± 1.00 (1.58)**	1.35 ± 0.916 (1.52) U
Thorium-228	HASL300	pCi/L	15	0.057 ± 0.091 (0.180) U	0.044 ± 0.119 (0.281) U	0.131 ± 0.141 (0.259) U	0.037 ± 0.063 (0.112) U	0.082 ± 0.128 (0.260) U	**0.168 ± 0.120 (0.146) J+**
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.064 (0.114) U	-0.019 ± 0.094 (0.175) U	0.004 ± 0.060 (0.106) U	0.005 ± 0.061 (0.108) U	0.014 ± 0.097 (0.160) U	-0.003 ± 0.065 (0.082) U
Thorium-232	HASL300	pCi/L	15	0.017 ± 0.064 (0.046) U	-0.006 ± 0.094 (0.131) U	-0.006 ± 0.060 (0.087) U	0 ± 0.061 (0.044) U	-0.006 ± 0.097 (0.135) U	0.017 ± 0.065 (0.047) U
Uranium-234	HASL300	pCi/L	NE	**0.706 ± 0.235 (0.106) J+**	**0.478 ± 0.220 (0.149)**	**0.558 ± 0.268 (0.139)**	**0.447 ± 0.178 (0.115) J+**	**0.176 ± 0.138 (0.130)**	**0.264 ± 0.161 (0.065)**
Uranium-235	HASL300	pCi/L	NE	**0.269 ± 0.153 (0.086) J+**	0.054 ± 0.106 (0.079) U	0.070 ± 0.136 (0.181) U	**0.181 ± 0.126 (0.132) J+**	0.026 ± 0.122 (0.170) U	0.111 ± 0.121 (0.157) U
Uranium-238	HASL300	pCi/L	NE	**0.473 ± 0.185 (0.088)**	**0.449 ± 0.208 (0.061)**	**0.380 ± 0.218 (0.139)**	**0.171 ± 0.107 (0.101)**	**0.078 ± 0.094 (0.071)**	0.043 ± 0.087 (0.188) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.600 ± 0.556 (0.845) U	**0.948 ± 0.551 (0.587)**	**0.764 ± 0.510 (0.633) J-**	0.513 ± 0.506 (0.770) U	0.365 ± 0.431 (0.678) U	0.355 ± 0.404 (0.638) U
Radium-228	E904.0	pCi/L	5	**1.73 ± 0.594 (0.862) J-**	**1.56 ± 0.563 (0.859) J+**	**1.84 ± 0.640 (0.915) J+**	**1.91 ± 0.687 (1.05)**	0.491 ± 0.349 (0.680) UJ	0.537 ± 0.548 (1.14) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.33 ± 1.15 (1.71) J-**	**2.51 ± 1.11 (1.45) J+**	**2.60 ± 1.15 (1.55) J**	**2.42 ± 1.19 (1.82)**	0.856 ± 0.780 (1.36) UJ	0.892 ± 0.952 (1.78) U
Thorium-228	HASL300	pCi/L	15	0.025 ± 0.087 (0.205) U	0.099 ± 0.113 (0.186) U	0.115 ± 0.117 (0.202) U	0.105 ± 0.129 (0.244) U	0.040 ± 0.093 (0.215) U	0.051 ± 0.143 (0.320) U
Thorium-230	HASL300	pCi/L	15	-0.013 ± 0.065 (0.116) U	-0.012 ± 0.087 (0.144) U	0.015 ± 0.063 (0.070) U	-0.001 ± 0.064 (0.128) U	0.007 ± 0.090 (0.167) U	-0.012 ± 0.071 (0.122) U
Thorium-232	HASL300	pCi/L	15	0.017 ± 0.065 (0.052) U	-0.012 ± 0.087 (0.144) U	0 ± 0.063 (0.045) U	-0.006 ± 0.064 (0.094) U	0.016 ± 0.090 (0.125) U	0.019 ± 0.071 (0.052) U
Uranium-234	HASL300	pCi/L	NE	**0.858 ± 0.260 (0.103) J+**	**0.464 ± 0.216 (0.144)**	**0.767 ± 0.322 (0.165)**	**0.359 ± 0.180 (0.160) J+**	**0.315 ± 0.202 (0.178)**	**0.151 ± 0.134 (0.082)**
Uranium-235	HASL300	pCi/L	NE	**0.215 ± 0.136 (0.111) J+**	0.059 ± 0.106 (0.079) U	0.071 ± 0.138 (0.184) U	**0.073 ± 0.096 (0.068) J+**	0.104 ± 0.142 (0.195) U	-0.007 ± 0.138 (0.184) U
Uranium-238	HASL300	pCi/L	NE	**0.570 ± 0.202 (0.042) J+**	**0.314 ± 0.171 (0.061)**	**0.494 ± 0.255 (0.184)**	**0.235 ± 0.137 (0.052) J+**	**0.275 ± 0.183 (0.081)**	0.003 ± 0.106 (0.214) U
Tritium	E906.0	pCi/L	20,000	**413 ± 167 (239)**	**358 ± 161 (237)**	**449 ± 169 (237)**	-7.48 ± 135 (238) U	57.5 ± 138 (236) U	27.4 ± 137 (239) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	I-65	I-65	I-65	I-66	I-66	I-66
			Sample Depth (ft BGS)	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9
			Sample Date	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.378 ± 0.384 (0.581) U	**0.913 ± 0.507 (0.190)**	0.242 ± 0.291 (0.445) U	0.297 ± 0.278 (0.394) U	**0.178 ± 0.271 (0.160)**	0.260 ± 0.362 (0.604) U
Radium-228	E904.0	pCi/L	5	0.367 ± 0.357 (0.733) U	**0.957 ± 0.410 (0.647)**	**1.51 ± 0.750 (1.35)**	0.627 ± 0.432 (0.837) U	0.761 ± 0.423 (0.774) U	0.538 ± 0.491 (1.00) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.745 ± 0.741 (1.31) U	**1.87 ± 0.917 (0.837)**	1.75 ± 1.04 (1.80) U	0.924 ± 0.710 (1.23) U	**0.939 ± 0.694 (0.934)**	0.798 ± 0.853 (1.60) U
Thorium-228	HASL300	pCi/L	15	0.036 ± 0.075 (0.163) U	0.103 ± 0.109 (0.163) U	**0.363 ± 0.211 (0.259) J+**	0.026 ± 0.069 (0.157) U	-0.021 ± 0.092 (0.231) U	**0.335 ± 0.210 (0.275) J+**
Thorium-230	HASL300	pCi/L	15	0.0005 ± 0.071 (0.125) U	0.007 ± 0.085 (0.158) U	-0.011 ± 0.083 (0.137) U	0.005 ± 0.068 (0.120) U	-0.005 ± 0.091 (0.120) U	-0.004 ± 0.086 (0.160) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.071 (0.051) U	0.024 ± 0.085 (0.064) U	-0.006 ± 0.083 (0.115) U	0.018 ± 0.068 (0.049) U	0 ± 0.091 (0.068) U	-0.012 ± 0.086 (0.143) U
Uranium-234	HASL300	pCi/L	NE	**0.821 ± 0.259 (0.133) J+**	**1.00 ± 0.333 (0.139)**	**1.29 ± 0.393 (0.064)**	**1.76 ± 0.422 (0.122) J+**	**1.76 ± 0.493 (0.144)**	**1.75 ± 0.474 (0.105)**
Uranium-235	HASL300	pCi/L	NE	**0.147 ± 0.111 (0.057) J+**	0.100 ± 0.111 (0.145) U	0.023 ± 0.110 (0.153) U	**0.233 ± 0.142 (0.057) J+**	0.037 ± 0.117 (0.088) U	0.076 ± 0.109 (0.178) U
Uranium-238	HASL300	pCi/L	NE	**0.696 ± 0.233 (0.107)**	**0.520 ± 0.229 (0.143)**	**0.642 ± 0.263 (0.157)**	**1.63 ± 0.400 (0.089)**	**1.54 ± 0.452 (0.067)**	**1.28 ± 0.389 (0.115)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.07 ± 0.584 (0.640)**	0.266 ± 0.347 (0.572) U	0.109 ± 0.263 (0.508) U	0.243 ± 0.416 (0.729) U	0.417 ± 0.511 (0.840) UJ	0.202 ± 0.344 (0.606) U
Radium-228	E904.0	pCi/L	5	0.614 ± 0.434 (0.828) U	**1.34 ± 0.488 (0.730)**	0.657 ± 0.512 (1.02) U	0.713 ± 0.398 (0.721) U	**0.797 ± 0.439 (0.792) J**	0.849 ± 0.585 (1.13) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.68 ± 1.02 (1.47)**	**1.61 ± 0.835 (1.30)**	0.766 ± 0.775 (1.53) U	0.956 ± 0.814 (1.45) U	1.21 ± 0.950 (1.63) UJ	1.05 ± 0.929 (1.74) U
Thorium-228	HASL300	pCi/L	15	0.065 ± 0.081 (0.132) U	0.037 ± 0.091 (0.209) U	0.172 ± 0.170 (0.294) U	0.030 ± 0.071 (0.158) U	0.055 ± 0.161 (0.374) U	**0.317 ± 0.203 (0.285) J+**
Thorium-230	HASL300	pCi/L	15	0 ± 0.074 (0.053) U	0.019 ± 0.089 (0.123) U	0.007 ± 0.091 (0.169) U	-0.023 ± 0.062 (0.135) U	0.014 ± 0.094 (0.155) U	-0.027 ± 0.081 (0.175) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.074 (0.053) U	0.019 ± 0.089 (0.123) U	0.013 ± 0.091 (0.151) U	-0.006 ± 0.061 (0.090) U	-0.006 ± 0.094 (0.130) U	0 ± 0.080 (0.061) U
Uranium-234	HASL300	pCi/L	NE	**0.874 ± 0.275 (0.047) J+**	**0.940 ± 0.322 (0.134)**	**1.02 ± 0.353 (0.237)**	**1.99 ± 0.466 (0.094) J+**	**2.22 ± 0.561 (0.138)**	**1.84 ± 0.486 (0.163)**
Uranium-235	HASL300	pCi/L	NE	0.023 ± 0.086 (0.062) U	**0.173 ± 0.143 (0.080)**	0.063 ± 0.113 (0.085) U	**0.409 ± 0.196 (0.060) J+**	0.114 ± 0.121 (0.151) U	0.189 ± 0.158 (0.195) U
Uranium-238	HASL300	pCi/L	NE	**0.926 ± 0.285 (0.047) J+**	**0.903 ± 0.313 (0.113)**	**1.04 ± 0.353 (0.199) J+**	**1.52 ± 0.388 (0.094) J+**	**1.81 ± 0.489 (0.063)**	**0.955 ± 0.322 (0.131) J+**
Tritium	E906.0	pCi/L	20,000	223 ± 144 (226) U	**305 ± 154 (231)**	42.3 ± 136 (235) U	143 ± 139 (228) U	95.1 ± 130 (218) U	142 ± 144 (236) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	I-67	I-67	I-67	I-68	I-68
			Sample Depth (ft BGS)	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2
			Sample Date	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	0.487 ± 0.417 (0.565) U	**0.756 ± 0.477 (0.205)**	**0.746 ± 0.555 (0.730)**	0.114 ± 0.317 (0.616) U	**0.194 ± 0.296 (0.175)**
Radium-228	E904.0	pCi/L	5	0.447 ± 0.400 (0.810) U	0.385 ± 0.371 (0.766) U	**0.998 ± 0.458 (0.780)**	0.245 ± 0.332 (0.709) U	**0.827 ± 0.420 (0.739)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.934 ± 0.817 (1.38) U	**1.14 ± 0.848 (0.971)**	**1.74 ± 1.01 (1.51)**	0.359 ± 0.649 (1.33) U	**1.02 ± 0.716 (0.914)**
Thorium-228	HASL300	pCi/L	15	0.013 ± 0.059 (0.148) U	0.152 ± 0.153 (0.263) U	0.170 ± 0.169 (0.294) U	0.036 ± 0.106 (0.238) U	0.133 ± 0.182 (0.357) U
Thorium-230	HASL300	pCi/L	15	0.015 ± 0.058 (0.042) U	-0.011 ± 0.086 (0.142) U	0.007 ± 0.091 (0.169) U	-0.006 ± 0.067 (0.098) U	-0.008 ± 0.117 (0.162) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.058 (0.084) U	-0.011 ± 0.086 (0.142) U	-0.012 ± 0.091 (0.151) U	-0.006 ± 0.067 (0.098) U	0 ± 0.117 (0.088) U
Uranium-234	HASL300	pCi/L	NE	**0.876 ± 0.268 (0.107) J+**	**0.680 ± 0.271 (0.154)**	**0.770 ± 0.314 (0.166)**	**1.14 ± 0.315 (0.119) J+**	**1.14 ± 0.423 (0.195)**
Uranium-235	HASL300	pCi/L	NE	**0.171 ± 0.129 (0.150) J+**	0.023 ± 0.109 (0.151) U	**0.110 ± 0.132 (0.099)**	0.068 ± 0.084 (0.137) U	**0.209 ± 0.189 (0.116)**
Uranium-238	HASL300	pCi/L	NE	**0.576 ± 0.211 (0.128)**	**0.360 ± 0.191 (0.138)**	**0.560 ± 0.260 (0.076)**	**1.10 ± 0.305 (0.087)**	**1.15 ± 0.424 (0.089)**
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	0.116 ± 0.360 (0.698) U	0.265 ± 0.369 (0.615) U	0.532 ± 0.492 (0.716) U	0.327 ± 0.341 (0.481) U	-0.197 ± 0.341 (0.860) U
Radium-228	E904.0	pCi/L	5	**0.837 ± 0.398 (0.676)**	0.00785 ± 0.407 (0.939) U	0.320 ± 0.380 (0.802) U	0.103 ± 0.377 (0.853) U	0.698 ± 0.511 (1.01) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.953 ± 0.758 (1.37) U	0.273 ± 0.776 (1.55) U	0.852 ± 0.872 (1.52) U	0.430 ± 0.718 (1.33) U	0.698 ± 0.852 (1.87) U
Thorium-228	HASL300	pCi/L	15	0.066 ± 0.074 (0.117) U	0.030 ± 0.127 (0.321) U	0.063 ± 0.130 (0.290) U	**0.055 ± 0.063 (0.045)**	0.014 ± 0.127 (0.344) U
Thorium-230	HASL300	pCi/L	15	**0.225 ± 0.123 (0.085)**	**0.490 ± 0.249 (0.146)**	0.074 ± 0.107 (0.205) U	0.017 ± 0.061 (0.119) U	0.024 ± 0.112 (0.156) U
Thorium-232	HASL300	pCi/L	15	0.015 ± 0.058 (0.042) U	0 ± 0.105 (0.079) U	-0.006 ± 0.094 (0.131) U	-0.012 ± 0.061 (0.109) U	0 ± 0.112 (0.085) U
Uranium-234	HASL300	pCi/L	NE	**0.977 ± 0.286 (0.143) J+**	**0.940 ± 0.366 (0.152)**	**0.731 ± 0.314 (0.177)**	**1.47 ± 0.383 (0.141) J+**	**1.52 ± 0.486 (0.151)**
Uranium-235	HASL300	pCi/L	NE	**0.225 ± 0.137 (0.055) J+**	0 ± 0.143 (0.108) U	**0.204 ± 0.177 (0.106) J+**	**0.153 ± 0.117 (0.060) J+**	**0.158 ± 0.157 (0.107)**
Uranium-238	HASL300	pCi/L	NE	**0.646 ± 0.221 (0.104)**	**0.512 ± 0.260 (0.152)**	**0.447 ± 0.237 (0.081)**	**1.12 ± 0.318 (0.094)**	**1.08 ± 0.395 (0.151)**
Tritium	E906.0	pCi/L	20,000	213 ± 144 (228) U	118 ± 132 (219) U	-204 ± 155 (284) UJ	184 ± 141 (227) U	57.5 ± 127 (218) U

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Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	I-68	I-73	I-73	I-73	I-73	I-73
			Sample Depth (ft BGS)	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2
			Sample Date	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021
			Sample Type	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.554 ± 0.466 (0.693) UJ	**4.05 ± 1.10 (0.561)**	**4.90 ± 1.34 (0.211)**	**5.19 ± 1.35 (0.903) J-**	**3.54 ± 1.09 (0.967) J-**	**3.49 ± 0.872 (0.471) J-**
Radium-228	E904.0	pCi/L	5	**1.65 ± 0.611 (0.931) J-**	**5.14 ± 1.14 (0.681)**	**3.60 ± 0.884 (0.837)**	**5.26 ± 1.21 (0.900) J+**	**3.90 ± 0.925 (0.802) J+**	**5.29 ± 1.13 (0.669) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.20 ± 1.08 (1.62) J-**	**9.19 ± 2.24 (1.24)**	**8.50 ± 2.22 (1.05)**	**10.5 ± 2.56 (1.80) J**	**7.44 ± 2.02 (1.77) J**	**8.78 ± 2.00 (1.14) J-**
Thorium-228	HASL300	pCi/L	15	0.040 ± 0.133 (0.319) U	0.118 ± 0.117 (0.193) U	0.004 ± 0.067 (0.159) U	0.019 ± 0.103 (0.274) U	0.158 ± 0.165 (0.289) U	0.141 ± 0.117 (0.188) UJ
Thorium-230	HASL300	pCi/L	15	-0.030 ± 0.090 (0.195) U	0 ± 0.069 (0.050) U	-0.006 ± 0.066 (0.096) U	0.094 ± 0.108 (0.160) U	-0.006 ± 0.092 (0.128) U	-0.007 ± 0.046 (0.071) UJ
Thorium-232	HASL300	pCi/L	15	0 ± 0.090 (0.068) U	0.018 ± 0.069 (0.050) U	0 ± 0.066 (0.047) U	0 ± 0.097 (0.073) U	0 ± 0.092 (0.070) U	-0.007 ± 0.046 (0.072) UJ
Uranium-234	HASL300	pCi/L	NE	**1.22 ± 0.379 (0.167)**	**0.714 ± 0.245 (0.048) J+**	**0.575 ± 0.219 (0.140) J+**	0.054 ± 0.095 (0.190) U	0.102 ± 0.107 (0.159) U	0.201 ± 0.188 (0.262) UJ
Uranium-235	HASL300	pCi/L	NE	**0.090 ± 0.109 (0.081)**	**0.339 ± 0.181 (0.063) J+**	**0.211 ± 0.146 (0.151) J+**	0 ± 0.124 (0.093) U	-0.007 ± 0.112 (0.155) U	0.049 ± 0.171 (0.132) UJ
Uranium-238	HASL300	pCi/L	NE	**0.957 ± 0.330 (0.191)**	**0.222 ± 0.127 (0.048)**	**0.203 ± 0.123 (0.096)**	0.001 ± 0.095 (0.191) U	0.036 ± 0.086 (0.141) U	0.031 ± 0.131 (0.175) UJ
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.308 ± 0.358 (0.577) U	**6.02 ± 1.61 (1.24)**	**4.23 ± 1.08 (0.405)**	**2.63 ± 0.874 (0.630) J+**	**4.52 ± 1.19 (0.770) J+**	**4.31 ± 1.62 (1.59)**
Radium-228	E904.0	pCi/L	5	**1.03 ± 0.478 (0.815) J+**	**4.78 ± 1.20 (1.09) J-**	**3.21 ± 0.917 (1.08) J-**	**5.06 ± 1.14 (0.858)**	**5.09 ± 1.14 (0.845)**	**3.09 ± 0.746 (0.610) J**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.34 ± 0.836 (1.39) U	**10.8 ± 2.81 (2.33) J-**	**7.44 ± 2.00 (1.49) J-**	**7.69 ± 2.01 (1.49) J+**	**9.61 ± 2.33 (1.62) J+**	**7.40 ± 2.37 (2.20) J**
Thorium-228	HASL300	pCi/L	15	-0.075 ± 0.110 (0.371) U	0.164 ± 0.135 (0.193) U	**0.128 ± 0.154 (0.290)**	0.185 ± 0.174 (0.290) U	**0.244 ± 0.127 (0.146)**	0.042 ± 0.107 (0.214) U
Thorium-230	HASL300	pCi/L	15	0.144 ± 0.128 (0.155) U	0 ± 0.076 (0.055) U	-0.007 ± 0.072 (0.105) U	0.071 ± 0.094 (0.129) U	**0.545 ± 0.177 (0.072)**	-0.016 ± 0.045 (0.110) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.094 (0.071) U	0 ± 0.076 (0.055) U	0 ± 0.072 (0.052) U	0 ± 0.093 (0.070) U	0.004 ± 0.046 (0.072) U	0.004 ± 0.045 (0.070) U
Uranium-234	HASL300	pCi/L	NE	**1.94 ± 0.546 (0.201)**	**0.469 ± 0.194 (0.098) J+**	**0.409 ± 0.185 (0.124) J+**	0.051 ± 0.080 (0.148) U	0.068 ± 0.091 (0.162) U	0.079 ± 0.129 (0.258) U
Uranium-235	HASL300	pCi/L	NE	0.191 ± 0.179 (0.241) U	**0.360 ± 0.187 (0.063) J+**	**0.296 ± 0.179 (0.162) J+**	-0.007 ± 0.104 (0.145) U	0.058 ± 0.105 (0.079) U	0.089 ± 0.169 (0.130) U
Uranium-238	HASL300	pCi/L	NE	**1.76 ± 0.511 (0.161)**	**0.089 ± 0.079 (0.048) J+**	**0.319 ± 0.158 (0.051) J+**	0.056 ± 0.080 (0.132) U	-0.005 ± 0.080 (0.112) U	0.030 ± 0.129 (0.172) U
Tritium	E906.0	pCi/L	20,000	-35.0 ± 133 (238) U	**27080 ± 3555 (223)**	**28150 ± 3694 (226)**	**27410 ± 3598 (242)**	**26830 ± 3523 (241)**	**26880 ± 3529 (222)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR
			Sample Depth (ft BGS)	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-
			Sample Date	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.334 ± 0.438 (0.729) UJ	0.448 ± 0.414 (0.603) U	0.379 ± 0.465 (0.759) U	**0.290 ± 0.267 (0.157)**	0.412 ± 0.385 (0.546) U	**1.22 ± 0.668 (0.817)**
Radium-228	E904.0	pCi/L	5	0.722 ± 0.599 (1.20) UJ	0.271 ± 0.375 (0.802) U	0.332 ± 0.318 (0.651) U	0.200 ± 0.900 (2.02) UJ	**1.20 ± 0.532 (0.886)**	**1.49 ± 0.573 (0.878)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.06 ± 1.04 (1.93) UJ	0.719 ± 0.789 (1.41) U	0.711 ± 0.783 (1.41) U	0.490 ± 1.17 (2.18) UJ	**1.61 ± 0.917 (1.43)**	**2.71 ± 1.24 (1.70)**
Thorium-228	HASL300	pCi/L	15	0.078 ± 0.095 (0.167) U	-0.029 ± 0.107 (0.324) U	0.137 ± 0.158 (0.297) U	0.101 ± 0.128 (0.236) U	0.047 ± 0.102 (0.220) U	0.013 ± 0.148 (0.386) U
Thorium-230	HASL300	pCi/L	15	0.005 ± 0.069 (0.122) U	-0.012 ± 0.088 (0.145) U	-0.019 ± 0.079 (0.153) U	0.007 ± 0.088 (0.164) U	0.007 ± 0.063 (0.046) U	0.015 ± 0.105 (0.174) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.069 (0.049) U	0 ± 0.088 (0.066) U	0 ± 0.079 (0.058) U	-0.006 ± 0.088 (0.123) U	0.017 ± 0.063 (0.046) U	0 ± 0.105 (0.079) U
Uranium-234	HASL300	pCi/L	NE	**0.254 ± 0.147 (0.127) J+**	0.036 ± 0.099 (0.240) U	0.166 ± 0.166 (0.265) U	**3.60 ± 0.790 (0.137)**	**3.85 ± 0.921 (0.154)**	**0.977 ± 0.359 (0.211)**
Uranium-235	HASL300	pCi/L	NE	**0.250 ± 0.159 (0.068) J+**	0 ± 0.129 (0.097) U	0.193 ± 0.186 (0.229) U	**0.121 ± 0.120 (0.082)**	0.078 ± 0.151 (0.202) U	0.027 ± 0.127 (0.176) U
Uranium-238	HASL300	pCi/L	NE	**0.153 ± 0.109 (0.052)**	0.042 ± 0.099 (0.163) U	0.026 ± 0.112 (0.150) U	**1.65 ± 0.461 (0.137)**	**1.81 ± 0.556 (0.154)**	**0.362 ± 0.207 (0.172)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.525 ± 0.447 (0.628) U	0.449 ± 0.443 (0.674) U	0.526 ± 0.492 (0.698) U	0.308 ± 0.363 (0.571) U	0.298 ± 0.561 (0.992) U	**1.58 ± 0.715 (0.682)**
Radium-228	E904.0	pCi/L	5	0.317 ± 0.393 (0.835) U	0.640 ± 0.418 (0.804) U	0.335 ± 0.422 (0.899) U	0.244 ± 0.331 (0.707) U	0.267 ± 0.466 (1.02) U	0.427 ± 0.746 (1.63) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.842 ± 0.840 (1.46) U	1.09 ± 0.861 (1.48) U	0.861 ± 0.914 (1.60) U	0.552 ± 0.694 (1.28) U	0.565 ± 1.03 (2.01) U	2.01 ± 1.46 (2.31) U
Thorium-228	HASL300	pCi/L	15	-0.001 ± 0.067 (0.134) U	0.077 ± 0.161 (0.358) U	0.152 ± 0.151 (0.268) U	0.026 ± 0.083 (0.195) U	0.051 ± 0.160 (0.355) U	0.083 ± 0.182 (0.359) U
Thorium-230	HASL300	pCi/L	15	-0.025 ± 0.065 (0.144) U	-0.006 ± 0.094 (0.130) U	0 ± 0.072 (0.053) U	-0.005 ± 0.081 (0.112) U	0.014 ± 0.080 (0.117) U	**0.071 ± 0.099 (0.064)**
Thorium-232	HASL300	pCi/L	15	0 ± 0.065 (0.047) U	-0.019 ± 0.094 (0.173) U	-0.012 ± 0.072 (0.123) U	0 ± 0.081 (0.061) U	0.021 ± 0.080 (0.057) U	0.047 ± 0.099 (0.064) U
Uranium-234	HASL300	pCi/L	NE	**0.246 ± 0.136 (0.113) J+**	0.075 ± 0.099 (0.177) U	0.233 ± 0.210 (0.261) U	**3.36 ± 0.723 (0.102) J+**	**2.58 ± 0.664 (0.078)**	**1.10 ± 0.432 (0.213)**
Uranium-235	HASL300	pCi/L	NE	**0.129 ± 0.106 (0.060) J+**	**0.096 ± 0.116 (0.087)**	0.101 ± 0.196 (0.261) U	**0.187 ± 0.142 (0.073) J+**	0.037 ± 0.131 (0.101) U	0.174 ± 0.199 (0.312) U
Uranium-238	HASL300	pCi/L	NE	**0.095 ± 0.083 (0.093) J+**	0.050 ± 0.088 (0.178) U	0.004 ± 0.149 (0.304) U	**1.33 ± 0.381 (0.056) J+**	**1.72 ± 0.509 (0.078)**	**0.699 ± 0.331 (0.097)**
Tritium	E906.0	pCi/L	20,000	192 ± 143 (229) U	160 ± 146 (238) U	127 ± 149 (263) U	10.0 ± 136 (239) U	52.4 ± 133 (229) U	237 ± 159 (252) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2
			Sample Depth (ft BGS)	-	-	-	39-49	39-49	54-64
			Sample Date	08-12-2021	05-28-2021	08-05-2021	05-06-2021	08-13-2021	05-06-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.50 ± 0.675 (0.500)**	**1.31 ± 0.606 (0.459)**	**1.76 ± 0.845 (0.981)**	**1.04 ± 0.632 (0.744)**	**1.59 ± 0.658 (0.529)**	**0.801 ± 0.498 (0.491)**
Radium-228	E904.0	pCi/L	5	**1.83 ± 0.599 (0.829)**	0.751 ± 0.482 (0.925) U	0.562 ± 0.437 (0.861) UJ	0.591 ± 0.370 (0.675) U	**0.858 ± 0.441 (0.800)**	**1.37 ± 0.500 (0.718)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.33 ± 1.27 (1.33)**	**2.06 ± 1.09 (1.38)**	**2.32 ± 1.28 (1.84) J**	**1.63 ± 1.00 (1.42)**	**2.45 ± 1.10 (1.33)**	**2.17 ± 0.998 (1.21)**
Thorium-228	HASL300	pCi/L	15	0.068 ± 0.101 (0.202) U	0.071 ± 0.124 (0.261) U	-0.073 ± 0.103 (0.332) U	0.008 ± 0.115 (0.302) U	0.145 ± 0.189 (0.368) U	0.127 ± 0.131 (0.206) U
Thorium-230	HASL300	pCi/L	15	-0.021 ± 0.055 (0.120) U	0.013 ± 0.093 (0.154) U	0.078 ± 0.114 (0.217) U	-0.013 ± 0.083 (0.142) U	-0.008 ± 0.083 (0.121) U	-0.012 ± 0.093 (0.153) U
Thorium-232	HASL300	pCi/L	15	0.014 ± 0.055 (0.039) U	0 ± 0.093 (0.070) U	-0.007 ± 0.100 (0.139) U	-0.011 ± 0.083 (0.137) U	0 ± 0.083 (0.060) U	-0.006 ± 0.093 (0.129) U
Uranium-234	HASL300	pCi/L	NE	**0.740 ± 0.317 (0.210)**	**1.58 ± 0.460 (0.212) J+**	**1.00 ± 0.352 (0.170)**	**1.03 ± 0.326 (0.132)**	**0.813 ± 0.342 (0.209)**	**0.624 ± 0.254 (0.063)**
Uranium-235	HASL300	pCi/L	NE	0.153 ± 0.156 (0.180) U	**0.095 ± 0.115 (0.086) J+**	0.126 ± 0.133 (0.167) U	0.014 ± 0.096 (0.159) U	0.082 ± 0.144 (0.111) U	**0.090 ± 0.109 (0.082)**
Uranium-238	HASL300	pCi/L	NE	**0.472 ± 0.242 (0.080)**	**1.03 ± 0.349 (0.144) J+**	**0.609 ± 0.268 (0.200)**	**0.717 ± 0.262 (0.056)**	**0.422 ± 0.240 (0.192)**	**0.221 ± 0.148 (0.134)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.75 ± 0.819 (0.914) J-**	**1.16 ± 0.630 (0.636)**	**1.10 ± 0.598 (0.656)**	**0.578 ± 0.348 (0.142) J+**	**0.934 ± 0.570 (0.670)**	**0.580 ± 0.349 (0.143) J+**
Radium-228	E904.0	pCi/L	5	**1.70 ± 0.760 (1.30) J+**	0.370 ± 0.641 (1.40) U	0.607 ± 0.430 (0.833) U	**1.58 ± 0.585 (0.891)**	**0.886 ± 0.390 (0.635) J-**	**1.91 ± 0.608 (0.818)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.45 ± 1.58 (2.21) J**	1.53 ± 1.27 (2.04) U	**1.71 ± 1.03 (1.49)**	**2.16 ± 0.933 (1.03) J+**	**1.82 ± 0.960 (1.31) J-**	**2.49 ± 0.957 (0.961) J+**
Thorium-228	HASL300	pCi/L	15	0.084 ± 0.154 (0.320) U	0.048 ± 0.122 (0.284) U	0.117 ± 0.157 (0.308) U	-0.019 ± 0.098 (0.295) U	-0.034 ± 0.101 (0.274) U	0.047 ± 0.113 (0.259) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0.070 ± 0.092 (0.127) U	0.036 ± 0.065 (0.123) U	-0.019 ± 0.096 (0.177) U	0.005 ± 0.064 (0.113) U	-0.018 ± 0.089 (0.165) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.061 (0.090) U	0.003 ± 0.091 (0.069) U	0.034 ± 0.065 (0.047) U	-0.006 ± 0.096 (0.133) U	-0.006 ± 0.064 (0.093) U	0 ± 0.089 (0.067) U
Uranium-234	HASL300	pCi/L	NE	**0.960 ± 0.359 (0.079) J+**	**1.54 ± 0.447 (0.173)**	**1.34 ± 0.415 (0.193) J+**	**1.27 ± 0.399 (0.146)**	**0.718 ± 0.307 (0.204) J+**	**0.489 ± 0.214 (0.148)**
Uranium-235	HASL300	pCi/L	NE	**0.114 ± 0.134 (0.103) J+**	**0.219 ± 0.166 (0.085)**	**0.129 ± 0.128 (0.088) J+**	**0.193 ± 0.157 (0.087)**	0.031 ± 0.131 (0.175) U	0 ± 0.095 (0.072) U
Uranium-238	HASL300	pCi/L	NE	**0.494 ± 0.247 (0.079)**	**1.20 ± 0.383 (0.174)**	**0.917 ± 0.326 (0.067)**	**1.01 ± 0.350 (0.179)**	**0.458 ± 0.235 (0.078) J+**	**0.504 ± 0.214 (0.101)**
Tritium	E906.0	pCi/L	20,000	**3179 ± 487 (237)**	-125 ± 137 (252) U	52.5 ± 138 (238) U	150 ± 134 (218) U	94.3 ± 127 (214) U	105 ± 131 (219) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3
			Sample Depth (ft BGS)	54-64	79-89	79-89	45-55	70-80	90-100
			Sample Date	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.690 ± 0.542 (0.753) U	**2.45 ± 1.04 (1.08)**	**3.04 ± 1.01 (0.792)**	**1.67 ± 0.718 (0.598)**	**0.833 ± 0.496 (0.472)**	**2.21 ± 0.825 (0.603)**
Radium-228	E904.0	pCi/L	5	**0.914 ± 0.430 (0.717)**	**1.59 ± 0.548 (0.773)**	**1.92 ± 0.632 (0.829)**	**2.16 ± 0.651 (0.815) J-**	**1.83 ± 0.644 (0.926) J-**	**1.71 ± 0.587 (0.833) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.60 ± 0.972 (1.47)**	**4.04 ± 1.59 (1.85)**	**4.96 ± 1.64 (1.62)**	**3.83 ± 1.37 (1.41) J-**	**2.66 ± 1.14 (1.40) J-**	**3.92 ± 1.41 (1.44) J-**
Thorium-228	HASL300	pCi/L	15	0.052 ± 0.161 (0.353) U	-0.102 ± 0.095 (0.362) U	0.138 ± 0.117 (0.185) U	**0.211 ± 0.140 (0.180) J+**	0.182 ± 0.148 (0.241) U	0.171 ± 0.143 (0.234) U
Thorium-230	HASL300	pCi/L	15	0.018 ± 0.068 (0.049) U	-0.006 ± 0.090 (0.126) U	-0.002 ± 0.058 (0.064) U	0.017 ± 0.065 (0.047) U	0.006 ± 0.061 (0.044) U	-0.010 ± 0.062 (0.141) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.068 (0.099) U	0 ± 0.090 (0.068) U	0.031 ± 0.058 (0.041) U	0 ± 0.065 (0.047) U	-0.012 ± 0.061 (0.108) U	0.016 ± 0.062 (0.045) U
Uranium-234	HASL300	pCi/L	NE	**0.412 ± 0.261 (0.213)**	**0.774 ± 0.322 (0.173)**	**0.277 ± 0.138 (0.095)**	**0.222 ± 0.127 (0.120)**	**0.198 ± 0.135 (0.176)**	**0.179 ± 0.115 (0.129)**
Uranium-235	HASL300	pCi/L	NE	0.092 ± 0.178 (0.237) U	0.076 ± 0.137 (0.103) U	0.041 ± 0.082 (0.056) U	0.021 ± 0.078 (0.056) U	0.092 ± 0.092 (0.094) U	**0.117 ± 0.097 (0.055)**
Uranium-238	HASL300	pCi/L	NE	0.211 ± 0.190 (0.237) U	**0.467 ± 0.240 (0.079)**	**0.198 ± 0.122 (0.133)**	**0.164 ± 0.107 (0.106)**	**0.203 ± 0.123 (0.096)**	**0.165 ± 0.109 (0.117)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.17 ± 0.909 (0.868)**	**1.60 ± 0.779 (0.620) J+**	**1.18 ± 0.646 (0.745)**	**1.00 ± 0.478 (0.151) J-**	**0.986 ± 0.533 (0.539) J-**	**1.70 ± 0.727 (0.705) J-**
Radium-228	E904.0	pCi/L	5	**1.19 ± 0.470 (0.727) J-**	1.08 ± 0.638 (1.18) U	**2.14 ± 0.645 (0.850) J-**	**2.86 ± 0.755 (0.818)**	**2.96 ± 0.795 (0.866)**	**3.09 ± 0.779 (0.755)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.36 ± 1.38 (1.60) J-**	**2.68 ± 1.42 (1.80) J+**	**3.32 ± 1.29 (1.60) J-**	**3.86 ± 1.23 (0.969) J-**	**3.95 ± 1.33 (1.41) J-**	**4.79 ± 1.51 (1.46) J-**
Thorium-228	HASL300	pCi/L	15	0.091 ± 0.165 (0.343) U	0.061 ± 0.107 (0.224) U	0.167 ± 0.152 (0.264) U	0.077 ± 0.160 (0.336) U	0.143 ± 0.116 (0.170) U	0.127 ± 0.137 (0.251) U
Thorium-230	HASL300	pCi/L	15	0.034 ± 0.077 (0.113) U	-0.006 ± 0.095 (0.132) U	-0.004 ± 0.061 (0.083) U	0.005 ± 0.066 (0.117) U	0.016 ± 0.062 (0.044) U	0.017 ± 0.063 (0.045) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.077 (0.056) U	0 ± 0.095 (0.072) U	-0.006 ± 0.061 (0.090) U	-0.006 ± 0.066 (0.096) U	0 ± 0.061 (0.044) U	-0.012 ± 0.063 (0.112) U
Uranium-234	HASL300	pCi/L	NE	**0.256 ± 0.187 (0.206) J+**	**0.563 ± 0.231 (0.137)**	**0.310 ± 0.198 (0.084) J+**	0.149 ± 0.139 (0.179) U	**0.270 ± 0.192 (0.188) J+**	**0.092 ± 0.108 (0.083) J+**
Uranium-235	HASL300	pCi/L	NE	0.071 ± 0.142 (0.109) U	**0.081 ± 0.098 (0.073)**	0 ± 0.142 (0.110) U	0.107 ± 0.134 (0.178) U	0.028 ± 0.145 (0.223) U	-0.009 ± 0.140 (0.219) U
Uranium-238	HASL300	pCi/L	NE	**0.293 ± 0.198 (0.189) J+**	**0.382 ± 0.185 (0.103)**	0.144 ± 0.139 (0.171) U	**0.228 ± 0.166 (0.136) J+**	0.063 ± 0.112 (0.194) U	0.086 ± 0.108 (0.143) U
Tritium	E906.0	pCi/L	20,000	174 ± 134 (214) U	**287 ± 145 (218)**	**540 ± 168 (214)**	-37.3 ± 144 (255) U	4.99 ± 146 (256) U	92.3 ± 152 (256) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118
			Sample Depth (ft BGS)	170.2-180.2	25-35	25-35	38-48	38-48	38-48
			Sample Date	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021
			Sample Type	N	N	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**3.35 ± 1.02 (0.769)**	0.644 ± 0.506 (0.703) U	**1.09 ± 0.491 (0.364)**	**0.925 ± 0.523 (0.586)**	**1.58 ± 0.663 (0.542)**	**1.35 ± 0.585 (0.415)**
Radium-228	E904.0	pCi/L	5	0.620 ± 0.358 (0.654) U	**2.32 ± 0.709 (0.891)**	**1.35 ± 0.497 (0.742) J-**	**1.71 ± 0.853 (1.53)**	1.29 ± 0.934 (1.86) U	**1.79 ± 0.607 (0.853) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.97 ± 1.38 (1.42)**	**2.96 ± 1.22 (1.59)**	**2.44 ± 0.988 (1.11) J-**	**2.64 ± 1.38 (2.12)**	**2.87 ± 1.60 (2.40)**	**3.14 ± 1.19 (1.27) J-**
Thorium-228	HASL300	pCi/L	15	0.034 ± 0.123 (0.287) U	0.169 ± 0.160 (0.276) U	0.264 ± 0.179 (0.280) U	0.086 ± 0.156 (0.336) U	0.095 ± 0.115 (0.202) U	0.075 ± 0.140 (0.291) U
Thorium-230	HASL300	pCi/L	15	0.029 ± 0.072 (0.139) U	0.006 ± 0.079 (0.147) U	-0.012 ± 0.061 (0.108) U	0.013 ± 0.091 (0.150) U	0.018 ± 0.085 (0.117) U	0.004 ± 0.057 (0.101) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.072 (0.053) U	-0.011 ± 0.080 (0.131) U	0 ± 0.061 (0.044) U	0 ± 0.091 (0.069) U	0 ± 0.085 (0.064) U	-0.005 ± 0.057 (0.084) U
Uranium-234	HASL300	pCi/L	NE	0.137 ± 0.138 (0.188) U	**0.225 ± 0.140 (0.104)**	0.091 ± 0.086 (0.131) U	**0.917 ± 0.317 (0.149)**	**1.07 ± 0.412 (0.221)**	**0.904 ± 0.378 (0.164)**
Uranium-235	HASL300	pCi/L	NE	0.033 ± 0.141 (0.188) U	**0.182 ± 0.147 (0.162)**	0.070 ± 0.077 (0.105) U	**0.095 ± 0.106 (0.079)**	0.101 ± 0.156 (0.117) U	0.083 ± 0.161 (0.214) U
Uranium-238	HASL300	pCi/L	NE	0.095 ± 0.124 (0.219) U	0.053 ± 0.076 (0.124) U	**0.088 ± 0.072 (0.040)**	**0.410 ± 0.202 (0.149)**	**0.595 ± 0.298 (0.221)**	**0.976 ± 0.395 (0.164)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**4.45 ± 1.35 (0.780)**	**0.278 ± 0.256 (0.151)**	**0.923 ± 0.521 (0.660) J-**	**1.17 ± 0.620 (0.664)**	**0.810 ± 0.446 (0.398)**	**0.990 ± 0.495 (0.405)**
Radium-228	E904.0	pCi/L	5	0.667 ± 0.502 (0.986) U	**2.04 ± 0.622 (0.812)**	**0.970 ± 0.447 (0.762)**	**2.75 ± 0.749 (0.806)**	**1.89 ± 0.590 (0.763)**	**2.86 ± 0.686 (0.557) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.12 ± 1.85 (1.77)**	**2.32 ± 0.878 (0.963)**	**1.89 ± 0.968 (1.42) J-**	**3.92 ± 1.37 (1.47)**	**2.70 ± 1.04 (1.16)**	**3.85 ± 1.18 (0.962) J-**
Thorium-228	HASL300	pCi/L	15	0.134 ± 0.127 (0.200) U	0.158 ± 0.183 (0.337) U	0.385 ± 0.328 (0.535) UJ	0.133 ± 0.138 (0.229) U	0.071 ± 0.180 (0.417) UJ	0.161 ± 0.148 (0.261) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.076 (0.056) U	0.022 ± 0.106 (0.147) U	-0.051 ± 0.124 (0.313) U	-0.012 ± 0.089 (0.147) U	-0.030 ± 0.121 (0.239) U	**0.410 ± 0.170 (0.101)**
Thorium-232	HASL300	pCi/L	15	0.021 ± 0.076 (0.056) U	0 ± 0.106 (0.080) U	0 ± 0.124 (0.082) U	0 ± 0.089 (0.067) U	-0.008 ± 0.121 (0.168) U	0 ± 0.057 (0.041) U
Uranium-234	HASL300	pCi/L	NE	**0.173 ± 0.154 (0.094)**	**0.177 ± 0.123 (0.058) J+**	**0.337 ± 0.213 (0.223) J+**	**0.663 ± 0.258 (0.174)**	**0.642 ± 0.258 (0.161)**	**1.07 ± 0.440 (0.231) J+**
Uranium-235	HASL300	pCi/L	NE	0.035 ± 0.158 (0.249) U	0.028 ± 0.100 (0.075) U	0.089 ± 0.153 (0.235) U	0.103 ± 0.113 (0.162) U	**0.115 ± 0.115 (0.078)**	0.085 ± 0.179 (0.274) U
Uranium-238	HASL300	pCi/L	NE	**0.236 ± 0.184 (0.162) J+**	**0.106 ± 0.095 (0.058)**	**0.211 ± 0.165 (0.180)**	**0.488 ± 0.220 (0.183)**	**0.592 ± 0.243 (0.110)**	**1.50 ± 0.534 (0.239)**
Tritium	E906.0	pCi/L	20,000	42.5 ± 142 (264) U	97.6 ± 141 (238) U	12.5 ± 147 (256) U	5.01 ± 138 (242) U	24.9 ± 138 (240) U	-20.0 ± 140 (248) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205
			Sample Depth (ft BGS)	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170
			Sample Date	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021
			Sample Type	N	FD	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**38.6 ± 5.38 (0.687) J-**	**44.0 ± 6.31 (0.871)**	**39.2 ± 5.41 (0.746)**	**35.7 ± 4.94 (0.857)**	**40.1 ± 5.51 (0.611)**	0.566 ± 0.449 (0.609) UJ
Radium-228	E904.0	pCi/L	5	**2.23 ± 0.659 (0.760)**	**3.74 ± 0.974 (1.03)**	**4.12 ± 1.15 (1.33) J**	**3.91 ± 0.941 (0.750) J**	**3.08 ± 0.753 (0.614)**	0.428 ± 0.467 (0.979) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**40.8 ± 6.04 (1.45) J-**	**47.7 ± 7.28 (1.90)**	**43.3 ± 6.56 (2.08) J**	**39.6 ± 5.88 (1.61) J**	**43.2 ± 6.26 (1.23)**	0.994 ± 0.916 (1.59) UJ
Thorium-228	HASL300	pCi/L	15	**0.113 ± 0.090 (0.105)**	0.068 ± 0.080 (0.131) U	0.026 ± 0.121 (0.301) U	0.033 ± 0.133 (0.329) U	0.195 ± 0.154 (0.246) U	0.057 ± 0.134 (0.306) U
Thorium-230	HASL300	pCi/L	15	0.015 ± 0.058 (0.041) U	0 ± 0.064 (0.046) U	-0.006 ± 0.088 (0.122) U	-0.006 ± 0.096 (0.133) U	0 ± 0.066 (0.048) U	-0.006 ± 0.092 (0.128) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.058 (0.041) U	0 ± 0.064 (0.046) U	0 ± 0.088 (0.066) U	0 ± 0.096 (0.072) U	-0.011 ± 0.066 (0.113) U	0 ± 0.092 (0.070) U
Uranium-234	HASL300	pCi/L	NE	**0.243 ± 0.125 (0.097) J+**	**0.387 ± 0.189 (0.164) J+**	0.049 ± 0.097 (0.214) U	0.001 ± 0.081 (0.164) U	0.147 ± 0.148 (0.202) U	**2.15 ± 0.553 (0.140)**
Uranium-235	HASL300	pCi/L	NE	**0.137 ± 0.109 (0.130) J+**	**0.233 ± 0.156 (0.070) J+**	**0.177 ± 0.149 (0.146)**	0.022 ± 0.106 (0.147) U	0.121 ± 0.152 (0.202) U	0.163 ± 0.152 (0.206) U
Uranium-238	HASL300	pCi/L	NE	**0.096 ± 0.078 (0.083)**	**0.139 ± 0.105 (0.054)**	0.053 ± 0.084 (0.155) U	-0.005 ± 0.081 (0.113) U	0.027 ± 0.116 (0.155) U	**1.04 ± 0.347 (0.064)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**54.4 ± 7.25 (0.952) J**	**34.2 ± 4.75 (0.887) J**	**41.6 ± 5.69 (0.739)**	**37.1 ± 5.16 (0.886)**	**37.3 ± 5.68 (0.696)**	**0.687 ± 0.449 (0.460) J+**
Radium-228	E904.0	pCi/L	5	**3.04 ± 0.779 (0.707)**	**3.59 ± 0.915 (0.894)**	**2.37 ± 0.673 (0.757)**	**3.11 ± 0.784 (0.755)**	**3.10 ± 0.782 (0.733)**	**1.15 ± 0.565 (0.983)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**57.4 ± 8.03 (1.66) J**	**37.8 ± 5.67 (1.78) J**	**44.0 ± 6.36 (1.50)**	**40.2 ± 5.94 (1.64)**	**40.4 ± 6.46 (1.43)**	**1.84 ± 1.01 (1.44) J+**
Thorium-228	HASL300	pCi/L	15	0.070 ± 0.095 (0.182) U	0.039 ± 0.066 (0.131) U	0.139 ± 0.135 (0.207) U	0.015 ± 0.094 (0.217) U	0.062 ± 0.128 (0.277) U	**0.499 ± 0.285 (0.361)**
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.058 (0.085) U	0 ± 0.063 (0.046) U	0 ± 0.087 (0.066) U	0 ± 0.091 (0.069) U	-0.017 ± 0.069 (0.134) U	**0.354 ± 0.216 (0.208)**
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.058 (0.085) U	0 ± 0.063 (0.046) U	-0.006 ± 0.087 (0.121) U	-0.006 ± 0.091 (0.127) U	0 ± 0.069 (0.051) U	**0.402 ± 0.224 (0.146)**
Uranium-234	HASL300	pCi/L	NE	**0.316 ± 0.167 (0.132) J+**	**0.213 ± 0.129 (0.118) J+**	0.089 ± 0.095 (0.118) U	0.016 ± 0.112 (0.155) U	**0.270 ± 0.235 (0.263)**	**3.55 ± 0.860 (0.265)**
Uranium-235	HASL300	pCi/L	NE	**0.103 ± 0.102 (0.070) J+**	**0.069 ± 0.087 (0.063) J+**	0.078 ± 0.112 (0.184) U	-0.010 ± 0.146 (0.202) U	0.165 ± 0.221 (0.293) U	0.079 ± 0.143 (0.107) U
Uranium-238	HASL300	pCi/L	NE	**0.067 ± 0.075 (0.054) J+**	**0.124 ± 0.093 (0.048) J+**	0.060 ± 0.086 (0.141) U	0.086 ± 0.113 (0.155) U	0.087 ± 0.168 (0.224) U	**1.84 ± 0.549 (0.180) J+**
Tritium	E906.0	pCi/L	20,000	**4052 ± 599 (251)**	**4298 ± 630 (252)**	**4092 ± 602 (242)**	**3696 ± 554 (253)**	**3856 ± 590 (263)**	133 ± 146 (241) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1
			Sample Depth (ft BGS)	160-170	50-60	75-85	68-78	68-78	68-78
			Sample Date	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.125 ± 0.346 (0.671) U	**0.678 ± 0.474 (0.572)**	0.249 ± 0.424 (0.748) U	**1.37 ± 0.706 (0.869)**	**1.10 ± 0.674 (0.851)**	0.650 ± 0.546 (0.781) U
Radium-228	E904.0	pCi/L	5	0.559 ± 0.436 (0.870) UJ	0.725 ± 0.410 (0.754) UJ	**1.36 ± 0.468 (0.657) J-**	**2.60 ± 1.07 (1.81) J**	**2.57 ± 0.698 (0.796)**	**1.68 ± 0.530 (0.661)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.684 ± 0.782 (1.54) UJ	**1.40 ± 0.884 (1.33) J-**	**1.61 ± 0.892 (1.41) J-**	**3.97 ± 1.78 (2.68) J**	**3.67 ± 1.37 (1.65)**	**2.33 ± 1.08 (1.44)**
Thorium-228	HASL300	pCi/L	15	**0.161 ± 0.115 (0.155) J+**	0.209 ± 0.160 (0.254) U	0.037 ± 0.104 (0.231) U	0.189 ± 0.154 (0.221) U	0.133 ± 0.173 (0.342) U	0.175 ± 0.160 (0.271) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.056 (0.041) U	0.017 ± 0.064 (0.046) U	-0.010 ± 0.061 (0.140) U	-0.017 ± 0.083 (0.153) U	0.008 ± 0.073 (0.124) U	0.006 ± 0.078 (0.144) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.056 (0.041) U	-0.012 ± 0.064 (0.114) U	0 ± 0.061 (0.044) U	-0.006 ± 0.083 (0.115) U	-0.010 ± 0.073 (0.118) U	0.011 ± 0.078 (0.128) U
Uranium-234	HASL300	pCi/L	NE	**0.765 ± 0.323 (0.184)**	**0.459 ± 0.276 (0.286)**	0.157 ± 0.146 (0.197) U	0.076 ± 0.101 (0.181) U	0.082 ± 0.119 (0.220) U	0.091 ± 0.092 (0.111) U
Uranium-235	HASL300	pCi/L	NE	0 ± 0.138 (0.106) U	**0.186 ± 0.187 (0.174)**	**0.155 ± 0.154 (0.105)**	0.016 ± 0.117 (0.162) U	0.040 ± 0.151 (0.167) U	0.102 ± 0.116 (0.172) U
Uranium-238	HASL300	pCi/L	NE	**0.290 ± 0.192 (0.165)**	**0.246 ± 0.191 (0.169)**	0.073 ± 0.105 (0.182) U	0.021 ± 0.090 (0.148) U	0.021 ± 0.116 (0.182) U	0.012 ± 0.080 (0.132) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.296 ± 0.349 (0.549) U	0.240 ± 0.373 (0.645) U	**0.565 ± 0.389 (0.416)**	**2.31 ± 0.726 (0.139)**	**1.65 ± 0.804 (0.639)**	0.251 ± 0.427 (0.753) U
Radium-228	E904.0	pCi/L	5	**0.690 ± 0.303 (0.474) J-**	**0.961 ± 0.411 (0.664) J-**	**1.57 ± 0.480 (0.581) J-**	**3.51 ± 0.904 (0.949)**	**2.52 ± 0.943 (1.47)**	**1.61 ± 0.713 (1.25)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.986 ± 0.652 (1.02) UJ	1.20 ± 0.784 (1.31) UJ	**2.14 ± 0.869 (0.997) J-**	**5.82 ± 1.63 (1.09)**	**4.17 ± 1.75 (2.11)**	1.86 ± 1.14 (2.00) U
Thorium-228	HASL300	pCi/L	15	0.212 ± 0.173 (0.298) U	0.073 ± 0.089 (0.161) U	0.195 ± 0.143 (0.224) U	0.088 ± 0.116 (0.215) U	0.058 ± 0.122 (0.259) U	0.102 ± 0.166 (0.346) U
Thorium-230	HASL300	pCi/L	15	0.020 ± 0.059 (0.104) U	0 ± 0.058 (0.042) U	0.015 ± 0.057 (0.041) U	0.068 ± 0.089 (0.123) U	-0.018 ± 0.062 (0.123) U	-0.007 ± 0.109 (0.151) U
Thorium-232	HASL300	pCi/L	15	0.041 ± 0.059 (0.086) U	0.016 ± 0.058 (0.042) U	-0.011 ± 0.057 (0.100) U	0 ± 0.089 (0.067) U	0 ± 0.062 (0.044) U	0 ± 0.109 (0.082) U
Uranium-234	HASL300	pCi/L	NE	**0.573 ± 0.277 (0.085)**	**0.319 ± 0.205 (0.187) J+**	0.181 ± 0.174 (0.270) U	**0.186 ± 0.132 (0.130)**	0.033 ± 0.107 (0.187) U	**0.108 ± 0.096 (0.058)**
Uranium-235	HASL300	pCi/L	NE	0.147 ± 0.162 (0.224) U	**0.192 ± 0.177 (0.186)**	0.112 ± 0.150 (0.234) U	**0.143 ± 0.127 (0.077)**	**0.352 ± 0.241 (0.187)**	0 ± 0.101 (0.076) U
Uranium-238	HASL300	pCi/L	NE	**0.401 ± 0.230 (0.146) J+**	0.216 ± 0.174 (0.217) U	0.124 ± 0.130 (0.153) U	0.099 ± 0.098 (0.130) U	**0.153 ± 0.136 (0.083)**	0.043 ± 0.078 (0.058) U
Tritium	E906.0	pCi/L	20,000	155 ± 151 (248) U	7.48 ± 142 (248) U	-62.4 ± 138 (248) U	**52850 ± 6888 (257)**	**33470 ± 4378 (226)**	**765 ± 201 (241)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1
			Sample Depth (ft BGS)	68-78	93-103	93-103	106-116	106-116	106-116
			Sample Date	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021
			Sample Type	N	N	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.119 ± 0.272 (0.439) U	**1.53 ± 0.615 (0.160)**	**1.32 ± 0.617 (0.555)**	**3.36 ± 1.02 (0.859) J-**	**2.39 ± 0.781 (0.409) J-**	**2.13 ± 0.819 (0.730)**
Radium-228	E904.0	pCi/L	5	**1.84 ± 0.511 (0.532)**	**5.11 ± 1.11 (0.602)**	**4.50 ± 1.08 (1.11)**	**6.14 ± 1.35 (0.930) J+**	**6.85 ± 1.45 (0.790) J+**	**6.01 ± 1.30 (0.798)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.96 ± 0.783 (0.971)**	**6.64 ± 1.73 (0.762)**	**5.82 ± 1.70 (1.67)**	**9.50 ± 2.37 (1.79) J**	**9.24 ± 2.23 (1.20) J**	**8.14 ± 2.12 (1.53)**
Thorium-228	HASL300	pCi/L	15	0.053 ± 0.104 (0.220) U	0.285 ± 0.216 (0.334) U	0.073 ± 0.173 (0.395) U	**0.308 ± 0.194 (0.226)**	0.144 ± 0.192 (0.378) U	0.187 ± 0.198 (0.356) U
Thorium-230	HASL300	pCi/L	15	0.032 ± 0.061 (0.043) U	0 ± 0.093 (0.070) U	-0.015 ± 0.114 (0.189) U	-0.012 ± 0.088 (0.145) U	-0.028 ± 0.110 (0.218) U	-0.036 ± 0.108 (0.233) U
Thorium-232	HASL300	pCi/L	15	-0.010 ± 0.060 (0.103) U	0 ± 0.093 (0.070) U	-0.015 ± 0.114 (0.189) U	0.025 ± 0.088 (0.066) U	-0.007 ± 0.110 (0.153) U	-0.007 ± 0.107 (0.149) U
Uranium-234	HASL300	pCi/L	NE	0.138 ± 0.144 (0.169) U	0.129 ± 0.119 (0.174) U	**0.370 ± 0.248 (0.111)**	**0.193 ± 0.142 (0.155)**	0.009 ± 0.101 (0.245) U	0.114 ± 0.136 (0.248) U
Uranium-235	HASL300	pCi/L	NE	0.046 ± 0.165 (0.162) U	0.058 ± 0.105 (0.079) U	**0.376 ± 0.284 (0.145)**	0.054 ± 0.110 (0.152) U	**0.146 ± 0.145 (0.099)**	**0.093 ± 0.119 (0.089)**
Uranium-238	HASL300	pCi/L	NE	0.066 ± 0.127 (0.169) U	0.039 ± 0.080 (0.111) U	**0.187 ± 0.174 (0.111)**	0.059 ± 0.084 (0.138) U	0.155 ± 0.138 (0.166) U	0.014 ± 0.090 (0.208) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.602 ± 0.477 (0.648) U	**1.48 ± 0.726 (0.809)**	**1.74 ± 0.713 (0.626)**	**1.22 ± 0.650 (0.762) J+**	**3.46 ± 0.980 (0.591) J+**	**3.03 ± 0.968 (0.598)**
Radium-228	E904.0	pCi/L	5	**1.21 ± 0.599 (1.03) J+**	**3.99 ± 0.998 (1.05)**	**3.66 ± 0.985 (1.01) J+**	**5.28 ± 1.18 (0.818)**	**6.95 ± 1.51 (1.09)**	**5.82 ± 1.26 (0.709)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.81 ± 1.08 (1.68) J+**	**5.47 ± 1.72 (1.86)**	**5.40 ± 1.70 (1.64) J+**	**6.50 ± 1.83 (1.58) J+**	**10.4 ± 2.49 (1.68) J+**	**8.85 ± 2.23 (1.31)**
Thorium-228	HASL300	pCi/L	15	-0.001 ± 0.117 (0.281) U	0.057 ± 0.174 (0.405) UJ	0.130 ± 0.126 (0.221) U	0.099 ± 0.136 (0.264) U	0.255 ± 0.195 (0.307) U	0.076 ± 0.127 (0.243) U
Thorium-230	HASL300	pCi/L	15	0.001 ± 0.059 (0.113) U	-0.006 ± 0.094 (0.131) U	-0.011 ± 0.057 (0.101) U	-0.013 ± 0.094 (0.155) U	-0.011 ± 0.084 (0.138) U	0.006 ± 0.064 (0.122) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.059 (0.043) U	0 ± 0.094 (0.071) U	-0.005 ± 0.057 (0.084) U	0.026 ± 0.094 (0.071) U	0.023 ± 0.084 (0.063) U	-0.011 ± 0.064 (0.102) U
Uranium-234	HASL300	pCi/L	NE	0.080 ± 0.116 (0.223) U	0.227 ± 0.170 (0.229) U	0.113 ± 0.131 (0.201) U	0.150 ± 0.133 (0.180) U	0.025 ± 0.083 (0.167) U	0.102 ± 0.140 (0.271) U
Uranium-235	HASL300	pCi/L	NE	0.174 ± 0.164 (0.175) U	0.059 ± 0.118 (0.157) U	**0.128 ± 0.151 (0.116)**	0.065 ± 0.117 (0.088) U	**0.121 ± 0.120 (0.082) J+**	**0.138 ± 0.139 (0.097)**
Uranium-238	HASL300	pCi/L	NE	**0.185 ± 0.152 (0.175)**	0.082 ± 0.101 (0.167) U	0.021 ± 0.115 (0.180) U	0.102 ± 0.103 (0.124) U	0.070 ± 0.094 (0.168) U	0.131 ± 0.139 (0.227) U
Tritium	E906.0	pCi/L	20,000	69.7 ± 140 (239) U	**32370 ± 4238 (242)**	**28270 ± 3708 (239)**	**1236 ± 256 (251)**	**1307 ± 264 (250)**	**1799 ± 330 (285) J-**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1
			Sample Depth (ft BGS)	126-136	126-136	221-231	221-231	221-231	25-35
			Sample Date	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021	05-13-2021
			Sample Type	N	N	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**3.81 ± 1.04 (0.536) J-**	**3.96 ± 1.21 (0.865)**	**1.49 ± 0.700 (0.630)**	**1.52 ± 0.788 (0.934)**	**1.34 ± 0.690 (0.724)**	**0.918 ± 0.496 (0.501)**
Radium-228	E904.0	pCi/L	5	**3.76 ± 0.932 (0.849) J+**	**3.87 ± 0.926 (0.817)**	**2.07 ± 0.659 (0.887)**	**1.52 ± 0.554 (0.841)**	**1.34 ± 0.504 (0.745)**	0.498 ± 0.619 (1.31) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**7.57 ± 1.97 (1.39) J**	**7.83 ± 2.14 (1.68)**	**3.56 ± 1.36 (1.52)**	**3.04 ± 1.34 (1.78)**	**2.68 ± 1.19 (1.47)**	1.42 ± 1.12 (1.81) U
Thorium-228	HASL300	pCi/L	15	0.263 ± 0.225 (0.368) U	0.123 ± 0.157 (0.304) U	0.034 ± 0.146 (0.354) U	-0.079 ± 0.116 (0.389) U	-0.021 ± 0.110 (0.327) U	-0.101 ± 0.110 (0.386) U
Thorium-230	HASL300	pCi/L	15	0.003 ± 0.107 (0.212) U	-0.012 ± 0.091 (0.151) U	-0.024 ± 0.090 (0.181) U	0.014 ± 0.099 (0.163) U	-0.011 ± 0.095 (0.150) U	0.044 ± 0.090 (0.125) U
Thorium-232	HASL300	pCi/L	15	0.023 ± 0.107 (0.149) U	-0.012 ± 0.091 (0.151) U	-0.012 ± 0.090 (0.148) U	0 ± 0.098 (0.074) U	-0.005 ± 0.095 (0.127) U	0 ± 0.090 (0.068) U
Uranium-234	HASL300	pCi/L	NE	0.185 ± 0.145 (0.185) U	0.091 ± 0.127 (0.249) U	**0.468 ± 0.210 (0.139)**	0.108 ± 0.119 (0.171) U	0.046 ± 0.093 (0.200) U	**0.220 ± 0.150 (0.164)**
Uranium-235	HASL300	pCi/L	NE	0.024 ± 0.111 (0.155) U	**0.099 ± 0.119 (0.089)**	0.021 ± 0.098 (0.136) U	0 ± 0.135 (0.102) U	0 ± 0.121 (0.091) U	0.022 ± 0.106 (0.147) U
Uranium-238	HASL300	pCi/L	NE	0.081 ± 0.096 (0.151) U	0.109 ± 0.123 (0.209) U	**0.220 ± 0.141 (0.124)**	**0.086 ± 0.104 (0.078)**	**0.077 ± 0.093 (0.070)**	**0.147 ± 0.120 (0.134)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.46 ± 0.840 (0.463) J+**	**3.25 ± 1.19 (1.07)**	**1.39 ± 0.612 (0.443)**	**1.66 ± 0.748 (0.713)**	**0.911 ± 0.604 (0.796)**	**1.13 ± 0.640 (0.778)**
Radium-228	E904.0	pCi/L	5	**3.88 ± 0.949 (0.907)**	**2.21 ± 0.649 (0.812)**	**2.06 ± 0.658 (0.869) J+**	**1.02 ± 0.512 (0.913)**	**0.954 ± 0.456 (0.771)**	0.625 ± 0.399 (0.754) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**6.34 ± 1.79 (1.37) J+**	**5.46 ± 1.84 (1.88)**	**3.45 ± 1.27 (1.31) J+**	**2.68 ± 1.26 (1.63)**	**1.87 ± 1.06 (1.57)**	**1.76 ± 1.04 (1.53)**
Thorium-228	HASL300	pCi/L	15	0.166 ± 0.170 (0.299) U	0.090 ± 0.152 (0.321) U	0.175 ± 0.158 (0.233) U	0.118 ± 0.152 (0.295) U	0.027 ± 0.105 (0.264) U	0.053 ± 0.143 (0.335) U
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.091 (0.126) U	-0.032 ± 0.097 (0.210) U	0.048 ± 0.098 (0.136) U	0.007 ± 0.092 (0.170) U	0.013 ± 0.087 (0.144) U	-0.019 ± 0.096 (0.178) U
Thorium-232	HASL300	pCi/L	15	0.025 ± 0.091 (0.068) U	0.020 ± 0.097 (0.134) U	0 ± 0.098 (0.074) U	-0.012 ± 0.092 (0.151) U	-0.007 ± 0.087 (0.125) U	-0.013 ± 0.096 (0.159) U
Uranium-234	HASL300	pCi/L	NE	**0.160 ± 0.126 (0.118)**	0.107 ± 0.114 (0.176) U	**0.312 ± 0.183 (0.174)**	0.137 ± 0.122 (0.147) U	0.162 ± 0.144 (0.203) U	**0.229 ± 0.147 (0.130)**
Uranium-235	HASL300	pCi/L	NE	0.031 ± 0.111 (0.084) U	**0.095 ± 0.115 (0.086)**	0 ± 0.112 (0.085) U	0.017 ± 0.116 (0.192) U	0.034 ± 0.122 (0.092) U	0.029 ± 0.103 (0.077) U
Uranium-238	HASL300	pCi/L	NE	0.037 ± 0.085 (0.141) U	0.086 ± 0.111 (0.201) U	**0.281 ± 0.168 (0.119)**	0.044 ± 0.089 (0.124) U	0.026 ± 0.094 (0.071) U	0.099 ± 0.098 (0.130) U
Tritium	E906.0	pCi/L	20,000	**688 ± 199 (252)**	194 ± 174 (284) UJ	**674 ± 197 (251)**	154 ± 171 (284) UJ	149 ± 171 (285) UJ	189 ± 150 (241) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3
			Sample Depth (ft BGS)	25-35	80-90	80-90	80-90	110-120	110-120
			Sample Date	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021
			Sample Type	N	N	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.795 ± 0.530 (0.658)**	**0.983 ± 0.621 (0.816)**	**1.78 ± 0.680 (0.166)**	**1.71 ± 0.820 (0.929)**	**3.74 ± 1.10 (0.899)**	**4.09 ± 1.15 (0.878)**
Radium-228	E904.0	pCi/L	5	**1.74 ± 0.542 (0.642)**	**1.43 ± 0.543 (0.765) J**	**4.81 ± 1.09 (0.739)**	**4.93 ± 1.13 (0.795)**	**3.59 ± 0.883 (0.781) J**	**4.85 ± 1.10 (0.747)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.54 ± 1.07 (1.30)**	**2.41 ± 1.16 (1.58) J**	**6.59 ± 1.77 (0.905)**	**6.64 ± 1.95 (1.72)**	**7.33 ± 1.98 (1.68) J**	**8.94 ± 2.25 (1.63)**
Thorium-228	HASL300	pCi/L	15	0.139 ± 0.115 (0.179) U	0.142 ± 0.136 (0.209) U	0.179 ± 0.137 (0.214) U	0.208 ± 0.159 (0.259) U	0.103 ± 0.154 (0.315) U	**0.302 ± 0.169 (0.211) J+**
Thorium-230	HASL300	pCi/L	15	-0.002 ± 0.056 (0.062) U	0 ± 0.087 (0.066) U	0.009 ± 0.058 (0.128) U	-0.012 ± 0.060 (0.106) U	0 ± 0.088 (0.066) U	0 ± 0.063 (0.045) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.056 (0.040) U	-0.006 ± 0.087 (0.121) U	0 ± 0.058 (0.042) U	-0.006 ± 0.060 (0.088) U	0 ± 0.088 (0.066) U	-0.006 ± 0.063 (0.092) U
Uranium-234	HASL300	pCi/L	NE	**0.201 ± 0.182 (0.187)**	**0.294 ± 0.176 (0.125)**	**0.214 ± 0.167 (0.147)**	**0.322 ± 0.204 (0.206)**	0.048 ± 0.099 (0.137) U	0.128 ± 0.129 (0.177) U
Uranium-235	HASL300	pCi/L	NE	0.052 ± 0.183 (0.141) U	0.082 ± 0.118 (0.194) U	0 ± 0.144 (0.111) U	0.107 ± 0.134 (0.177) U	0.032 ± 0.128 (0.178) U	0.038 ± 0.132 (0.102) U
Uranium-238	HASL300	pCi/L	NE	0.169 ± 0.171 (0.219) U	0.138 ± 0.123 (0.148) U	0.140 ± 0.141 (0.193) U	**0.232 ± 0.165 (0.079)**	0.076 ± 0.099 (0.137) U	0.076 ± 0.102 (0.158) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.36 ± 0.661 (0.666) J**	**0.288 ± 0.265 (0.156)**	**2.09 ± 0.726 (0.158) J**	0.596 ± 0.552 (0.840) U	**3.39 ± 1.06 (0.956)**	**5.07 ± 1.28 (0.478) J**
Radium-228	E904.0	pCi/L	5	**1.51 ± 0.683 (1.14) J+**	0.453 ± 0.383 (0.771) U	**3.99 ± 1.11 (1.28) J+**	**4.45 ± 1.27 (1.47) J+**	**2.47 ± 0.670 (0.711)**	**4.00 ± 1.04 (1.03) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.87 ± 1.34 (1.81) J**	0.741 ± 0.648 (0.927) U	**6.08 ± 1.84 (1.44) J**	**5.05 ± 1.82 (2.31) J+**	**5.86 ± 1.73 (1.67)**	**9.07 ± 2.32 (1.51) J**
Thorium-228	HASL300	pCi/L	15	0.076 ± 0.151 (0.317) U	0.012 ± 0.110 (0.262) U	0.121 ± 0.116 (0.195) U	0.197 ± 0.149 (0.240) U	0.156 ± 0.163 (0.294) U	0.217 ± 0.163 (0.273) U
Thorium-230	HASL300	pCi/L	15	0.012 ± 0.071 (0.104) U	-0.035 ± 0.106 (0.230) U	0 ± 0.058 (0.042) U	0.016 ± 0.059 (0.042) U	0.023 ± 0.082 (0.062) U	-0.012 ± 0.055 (0.131) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.071 (0.051) U	0 ± 0.106 (0.080) U	-0.006 ± 0.058 (0.085) U	-0.011 ± 0.059 (0.104) U	0 ± 0.082 (0.062) U	0.004 ± 0.055 (0.098) U
Uranium-234	HASL300	pCi/L	NE	0.192 ± 0.179 (0.266) U	**0.066 ± 0.080 (0.060)**	**0.200 ± 0.161 (0.192) J+**	**0.356 ± 0.209 (0.080) J+**	0.109 ± 0.113 (0.177) U	0.120 ± 0.132 (0.181) U
Uranium-235	HASL300	pCi/L	NE	**0.173 ± 0.174 (0.162)**	0.029 ± 0.104 (0.078) U	**0.151 ± 0.150 (0.102)**	0.077 ± 0.136 (0.105) U	0 ± 0.107 (0.080) U	-0.008 ± 0.151 (0.202) U
Uranium-238	HASL300	pCi/L	NE	0.094 ± 0.118 (0.157) U	**0.133 ± 0.108 (0.060)**	**0.244 ± 0.175 (0.177) J+**	**0.345 ± 0.209 (0.163) J+**	0.108 ± 0.102 (0.113) U	0.147 ± 0.148 (0.202) U
Tritium	E906.0	pCi/L	20,000	**277 ± 150 (229)**	-59.9 ± 134 (242) U	19.9 ± 131 (229) U	94.4 ± 136 (228) U	62.5 ± 142 (242) U	44.9 ± 133 (229) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3
			Sample Depth (ft BGS)	110-120	20-30	20-30	55-65	55-65	90-100
			Sample Date	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021
			Sample Type	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**7.69 ± 1.75 (0.555)**	**2.18 ± 0.756 (0.164)**	**0.734 ± 0.444 (0.487)**	**2.12 ± 0.892 (0.896)**	**2.63 ± 0.966 (0.938)**	**2.47 ± 0.777 (0.149)**
Radium-228	E904.0	pCi/L	5	**4.75 ± 1.11 (0.818)**	**2.50 ± 0.709 (0.819)**	**1.02 ± 0.503 (0.862)**	**4.36 ± 0.990 (0.782)**	**4.90 ± 1.18 (1.07)**	**5.06 ± 1.20 (1.00)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**12.4 ± 2.86 (1.37)**	**4.68 ± 1.47 (0.983)**	**1.75 ± 0.947 (1.35)**	**6.48 ± 1.88 (1.68)**	**7.53 ± 2.15 (2.01)**	**7.53 ± 1.98 (1.15)**
Thorium-228	HASL300	pCi/L	15	**0.255 ± 0.165 (0.244) J+**	0.012 ± 0.089 (0.210) U	0.136 ± 0.111 (0.150) U	0.070 ± 0.157 (0.356) U	**0.338 ± 0.185 (0.242) J+**	0.077 ± 0.166 (0.367) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	-0.006 ± 0.087 (0.120) U	-0.004 ± 0.066 (0.085) U	0.024 ± 0.112 (0.155) U	-0.012 ± 0.063 (0.111) U	-0.006 ± 0.086 (0.119) U
Thorium-232	HASL300	pCi/L	15	-0.011 ± 0.060 (0.105) U	0 ± 0.087 (0.065) U	0.018 ± 0.066 (0.048) U	0 ± 0.112 (0.084) U	0.011 ± 0.063 (0.092) U	0 ± 0.086 (0.065) U
Uranium-234	HASL300	pCi/L	NE	0.154 ± 0.161 (0.257) U	**0.175 ± 0.128 (0.112)**	**0.114 ± 0.114 (0.079)**	**0.082 ± 0.100 (0.074)**	0.132 ± 0.127 (0.138) U	0.027 ± 0.090 (0.227) U
Uranium-235	HASL300	pCi/L	NE	0.083 ± 0.149 (0.157) U	**0.088 ± 0.107 (0.080)**	0.061 ± 0.133 (0.103) U	0 ± 0.129 (0.097) U	**0.115 ± 0.136 (0.104)**	0.026 ± 0.116 (0.155) U
Uranium-238	HASL300	pCi/L	NE	-0.006 ± 0.114 (0.152) U	**0.277 ± 0.161 (0.061)**	**0.258 ± 0.182 (0.193)**	**0.082 ± 0.100 (0.074)**	0.031 ± 0.103 (0.080) U	0.081 ± 0.100 (0.165) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**5.63 ± 1.40 (0.511) J**	**1.67 ± 0.773 (0.750)**	0.980 ± 0.722 (1.04) U	**2.97 ± 1.01 (0.811)**	**1.47 ± 0.664 (0.633)**	**2.06 ± 0.775 (0.633)**
Radium-228	E904.0	pCi/L	5	**5.31 ± 1.29 (1.06) J+**	**2.96 ± 0.777 (0.806)**	**1.66 ± 0.628 (0.912) J+**	**5.93 ± 1.29 (0.816)**	**5.01 ± 1.22 (1.13) J+**	**5.86 ± 1.38 (1.13)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**10.9 ± 2.69 (1.57) J**	**4.63 ± 1.55 (1.56)**	**2.64 ± 1.35 (1.95) J+**	**8.90 ± 2.30 (1.63)**	**6.48 ± 1.88 (1.76) J+**	**7.92 ± 2.16 (1.76)**
Thorium-228	HASL300	pCi/L	15	0.042 ± 0.144 (0.318) U	0.184 ± 0.191 (0.346) U	0.104 ± 0.131 (0.251) U	0.100 ± 0.150 (0.308) U	0.167 ± 0.131 (0.167) U	0.105 ± 0.158 (0.324) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0 ± 0.097 (0.073) U	0.005 ± 0.065 (0.115) U	0.019 ± 0.089 (0.123) U	0.017 ± 0.077 (0.097) U	-0.019 ± 0.093 (0.173) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.061 (0.089) U	0 ± 0.097 (0.073) U	-0.006 ± 0.065 (0.095) U	0 ± 0.088 (0.067) U	0 ± 0.077 (0.057) U	-0.012 ± 0.093 (0.154) U
Uranium-234	HASL300	pCi/L	NE	**0.171 ± 0.158 (0.166) J+**	**0.341 ± 0.190 (0.180)**	**0.224 ± 0.161 (0.204)**	0.142 ± 0.120 (0.150) U	0.100 ± 0.126 (0.167) U	**0.128 ± 0.109 (0.111)**
Uranium-235	HASL300	pCi/L	NE	0 ± 0.162 (0.125) U	**0.181 ± 0.147 (0.082)**	**0.210 ± 0.165 (0.155)**	0.059 ± 0.106 (0.080) U	0 ± 0.163 (0.126) U	-0.013 ± 0.104 (0.172) U
Uranium-238	HASL300	pCi/L	NE	0.129 ± 0.142 (0.195) U	**0.156 ± 0.122 (0.115)**	0.113 ± 0.112 (0.158) U	0.105 ± 0.100 (0.113) U	0.071 ± 0.125 (0.096) U	0.121 ± 0.109 (0.132) U
Tritium	E906.0	pCi/L	20,000	199 ± 144 (229) U	-108 ± 139 (253) U	-22.4 ± 150 (296) U	42.5 ± 146 (253) U	69.7 ± 157 (296) U	-62.5 ± 140 (252) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1
			Sample Depth (ft BGS)	90-100	145-155	145-155	195-205	195-205	32-42
			Sample Date	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.88 ± 0.810 (0.881)**	**3.59 ± 1.06 (0.730)**	0.716 ± 0.546 (0.777) U	**2.86 ± 0.926 (0.184)**	**0.834 ± 0.527 (0.596)**	**0.761 ± 0.480 (0.206)**
Radium-228	E904.0	pCi/L	5	**5.23 ± 1.22 (0.998)**	**3.56 ± 0.844 (0.712)**	**2.22 ± 0.715 (0.966)**	**2.93 ± 0.790 (0.839)**	**1.15 ± 0.606 (1.11)**	0.425 ± 0.425 (0.879) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**7.11 ± 2.03 (1.88)**	**7.15 ± 1.90 (1.44)**	**2.94 ± 1.26 (1.74)**	**5.79 ± 1.72 (1.02)**	**1.98 ± 1.13 (1.71)**	**1.19 ± 0.905 (1.09)**
Thorium-228	HASL300	pCi/L	15	0.059 ± 0.103 (0.212) U	0.156 ± 0.139 (0.204) U	0.082 ± 0.107 (0.202) U	0.203 ± 0.168 (0.236) U	0.049 ± 0.134 (0.292) U	-0.029 ± 0.097 (0.292) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.058 (0.042) U	-0.006 ± 0.084 (0.117) U	0.010 ± 0.060 (0.088) U	-0.032 ± 0.095 (0.207) U	-0.012 ± 0.062 (0.109) U	-0.006 ± 0.094 (0.130) U
Thorium-232	HASL300	pCi/L	15	-0.010 ± 0.058 (0.100) U	0 ± 0.084 (0.063) U	0 ± 0.060 (0.043) U	0 ± 0.095 (0.072) U	0 ± 0.062 (0.044) U	-0.006 ± 0.094 (0.130) U
Uranium-234	HASL300	pCi/L	NE	**0.202 ± 0.156 (0.144)**	**0.125 ± 0.106 (0.108)**	**0.277 ± 0.209 (0.247)**	**0.379 ± 0.208 (0.183)**	**0.214 ± 0.171 (0.177)**	0.126 ± 0.116 (0.151) U
Uranium-235	HASL300	pCi/L	NE	0.036 ± 0.136 (0.134) U	0 ± 0.102 (0.077) U	-0.008 ± 0.157 (0.211) U	-0.008 ± 0.118 (0.164) U	0.077 ± 0.148 (0.197) U	0.061 ± 0.110 (0.083) U
Uranium-238	HASL300	pCi/L	NE	0.138 ± 0.129 (0.144) U	**0.108 ± 0.096 (0.059)**	0.189 ± 0.184 (0.289) U	**0.316 ± 0.186 (0.150)**	**0.155 ± 0.144 (0.151)**	**0.187 ± 0.133 (0.063)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.83 ± 0.701 (0.580)**	**2.42 ± 0.888 (0.832)**	**1.56 ± 0.721 (0.700)**	**1.86 ± 0.776 (0.692)**	0.223 ± 0.514 (0.930) U	**0.586 ± 0.389 (0.176)**
Radium-228	E904.0	pCi/L	5	**4.65 ± 1.16 (1.01) J+**	**4.06 ± 1.08 (1.16)**	0.914 ± 0.579 (1.10) U	**4.08 ± 0.979 (0.851)**	0.244 ± 0.429 (0.939) U	0.611 ± 0.373 (0.691) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**6.48 ± 1.86 (1.59) J+**	**6.48 ± 1.97 (1.99)**	**2.47 ± 1.30 (1.80)**	**5.94 ± 1.76 (1.54)**	0.467 ± 0.943 (1.87) U	**1.20 ± 0.762 (0.867) J-**
Thorium-228	HASL300	pCi/L	15	0.040 ± 0.148 (0.339) U	0.221 ± 0.192 (0.320) U	0.168 ± 0.153 (0.258) U	0.235 ± 0.177 (0.243) U	0.032 ± 0.125 (0.295) U	0.069 ± 0.112 (0.226) U
Thorium-230	HASL300	pCi/L	15	0.002 ± 0.070 (0.136) U	0 ± 0.089 (0.067) U	0.020 ± 0.074 (0.055) U	-0.018 ± 0.091 (0.168) U	0 ± 0.078 (0.057) U	-0.019 ± 0.095 (0.176) U
Thorium-232	HASL300	pCi/L	15	0.013 ± 0.070 (0.100) U	0 ± 0.089 (0.067) U	-0.011 ± 0.074 (0.124) U	-0.006 ± 0.091 (0.126) U	-0.006 ± 0.078 (0.111) U	0.020 ± 0.095 (0.132) U
Uranium-234	HASL300	pCi/L	NE	-0.007 ± 0.123 (0.273) U	0.163 ± 0.131 (0.171) U	0.075 ± 0.127 (0.258) U	**0.423 ± 0.206 (0.136)**	**0.280 ± 0.214 (0.230)**	**0.186 ± 0.129 (0.134)**
Uranium-235	HASL300	pCi/L	NE	0.083 ± 0.161 (0.214) U	**0.086 ± 0.104 (0.078)**	0.039 ± 0.165 (0.220) U	0.070 ± 0.108 (0.081) U	0.098 ± 0.172 (0.133) U	0 ± 0.094 (0.071) U
Uranium-238	HASL300	pCi/L	NE	0.086 ± 0.124 (0.215) U	**0.171 ± 0.125 (0.110)**	0.259 ± 0.215 (0.302) U	0.103 ± 0.103 (0.136) U	**0.212 ± 0.184 (0.206)**	0.010 ± 0.072 (0.119) U
Tritium	E906.0	pCi/L	20,000	152 ± 146 (239) U	-37.5 ± 142 (252) U	14.9 ± 153 (296) U	10.0 ± 144 (252) U	32.3 ± 143 (257) U	7.52 ± 132 (232) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3
			Sample Depth (ft BGS)	32-42	62-72	62-72	92-102	92-102	92-102
			Sample Date	08-06-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	08-06-2021
			Sample Type	N	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.363 ± 0.340 (0.481) U	0.177 ± 0.306 (0.547) U	0.300 ± 0.341 (0.539) U	**1.04 ± 0.656 (0.741)**	**1.44 ± 0.671 (0.725)**	**1.74 ± 0.711 (0.624)**
Radium-228	E904.0	pCi/L	5	0.442 ± 0.328 (0.639) U	**1.20 ± 0.451 (0.665)**	**1.08 ± 0.416 (0.621)**	**3.07 ± 0.815 (0.866)**	**3.30 ± 0.826 (0.813)**	**3.05 ± 0.825 (0.909)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.805 ± 0.668 (1.12) U	**1.38 ± 0.757 (1.21)**	**1.38 ± 0.757 (1.16)**	**4.11 ± 1.47 (1.61)**	**4.74 ± 1.50 (1.54)**	**4.79 ± 1.54 (1.53)**
Thorium-228	HASL300	pCi/L	15	0.055 ± 0.153 (0.353) U	-0.039 ± 0.097 (0.224) U	0.077 ± 0.102 (0.180) U	0.086 ± 0.119 (0.230) U	0.144 ± 0.154 (0.277) U	0.085 ± 0.149 (0.319) U
Thorium-230	HASL300	pCi/L	15	0.035 ± 0.084 (0.138) U	0.007 ± 0.094 (0.174) U	0.021 ± 0.087 (0.107) U	-0.011 ± 0.086 (0.142) U	0.047 ± 0.085 (0.064) U	0.013 ± 0.092 (0.152) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.084 (0.063) U	-0.006 ± 0.094 (0.130) U	0 ± 0.087 (0.066) U	-0.006 ± 0.086 (0.119) U	0.013 ± 0.085 (0.136) U	0.013 ± 0.092 (0.152) U
Uranium-234	HASL300	pCi/L	NE	**0.134 ± 0.114 (0.116)**	0.118 ± 0.117 (0.155) U	0.033 ± 0.092 (0.170) U	0.060 ± 0.078 (0.108) U	0.068 ± 0.089 (0.123) U	0.138 ± 0.133 (0.201) U
Uranium-235	HASL300	pCi/L	NE	**0.091 ± 0.110 (0.082)**	0.060 ± 0.123 (0.170) U	**0.100 ± 0.121 (0.090)**	0.107 ± 0.113 (0.141) U	**0.194 ± 0.158 (0.088)**	0.025 ± 0.120 (0.166) U
Uranium-238	HASL300	pCi/L	NE	**0.226 ± 0.148 (0.116)**	0.052 ± 0.094 (0.071) U	0.141 ± 0.126 (0.151) U	0 ± 0.078 (0.059) U	0.049 ± 0.089 (0.067) U	0.026 ± 0.093 (0.236) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.169 ± 0.258 (0.414) U	0.697 ± 0.687 (1.05) UJ	**0.750 ± 0.467 (0.460)**	**1.10 ± 0.669 (0.733)**	**2.26 ± 0.775 (0.166)**	**2.31 ± 0.824 (0.638)**
Radium-228	E904.0	pCi/L	5	**0.790 ± 0.426 (0.770) J+**	**1.19 ± 0.397 (0.516) J-**	**1.68 ± 0.559 (0.766) J+**	**2.03 ± 0.611 (0.756) J-**	**3.22 ± 0.821 (0.786) J+**	**3.31 ± 0.850 (0.851) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.959 ± 0.684 (1.18) U	**1.89 ± 1.08 (1.57) J-**	**2.43 ± 1.03 (1.23) J+**	**3.13 ± 1.28 (1.49) J-**	**5.48 ± 1.60 (0.952) J+**	**5.62 ± 1.67 (1.49) J+**
Thorium-228	HASL300	pCi/L	15	0.156 ± 0.182 (0.353) U	0.154 ± 0.183 (0.350) U	0.157 ± 0.139 (0.188) U	0.089 ± 0.134 (0.271) U	0.094 ± 0.135 (0.271) U	0.023 ± 0.125 (0.316) U
Thorium-230	HASL300	pCi/L	15	0.035 ± 0.084 (0.138) U	0.007 ± 0.095 (0.176) U	**0.909 ± 0.331 (0.112)**	0.004 ± 0.093 (0.182) U	0 ± 0.083 (0.063) U	-0.012 ± 0.091 (0.151) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.084 (0.063) U	-0.013 ± 0.095 (0.157) U	0 ± 0.091 (0.069) U	-0.006 ± 0.093 (0.129) U	-0.010 ± 0.083 (0.133) U	-0.012 ± 0.091 (0.151) U
Uranium-234	HASL300	pCi/L	NE	**0.256 ± 0.160 (0.119)**	0.075 ± 0.085 (0.126) U	**0.749 ± 0.289 (0.159)**	0.048 ± 0.086 (0.172) U	0.072 ± 0.094 (0.130) U	0.115 ± 0.119 (0.189) U
Uranium-235	HASL300	pCi/L	NE	0.055 ± 0.112 (0.084) U	-0.007 ± 0.099 (0.138) U	0.063 ± 0.113 (0.085) U	0.031 ± 0.111 (0.084) U	0.068 ± 0.122 (0.092) U	0.055 ± 0.113 (0.157) U
Uranium-238	HASL300	pCi/L	NE	**0.232 ± 0.152 (0.119)**	0.023 ± 0.076 (0.057) U	**0.923 ± 0.325 (0.142)**	-0.006 ± 0.085 (0.118) U	**0.078 ± 0.094 (0.070)**	0.001 ± 0.086 (0.222) U
Tritium	E906.0	pCi/L	20,000	29.8 ± 120 (210) U	-95.2 ± 126 (232) U	84.7 ± 125 (211) U	30.0 ± 133 (231) U	191 ± 133 (210) U	72.3 ± 124 (211) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2
			Sample Depth (ft BGS)	48-58	73-83	103-113	30-40	30-40	70-80
			Sample Date	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**2.16 ± 0.796 (0.683)**	**1.48 ± 0.676 (0.744)**	**2.08 ± 0.746 (0.522)**	0.450 ± 0.382 (0.473) U	**0.198 ± 0.303 (0.179)**	**2.04 ± 0.794 (0.779)**
Radium-228	E904.0	pCi/L	5	**2.62 ± 0.651 (0.611) J-**	**2.09 ± 0.573 (0.632) J-**	**6.56 ± 1.38 (0.785) J-**	0.523 ± 0.386 (0.755) U	**1.18 ± 0.497 (0.822) J+**	**5.99 ± 1.27 (0.625)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.78 ± 1.45 (1.29) J-**	**3.57 ± 1.25 (1.38) J-**	**8.64 ± 2.13 (1.31) J-**	0.973 ± 0.768 (1.23) U	**1.38 ± 0.800 (1.00) J+**	**8.03 ± 2.06 (1.40)**
Thorium-228	HASL300	pCi/L	15	0.232 ± 0.179 (0.303) U	**0.185 ± 0.130 (0.172) J+**	**0.239 ± 0.160 (0.238) J+**	0.118 ± 0.160 (0.315) U	0.091 ± 0.123 (0.239) U	**0.302 ± 0.197 (0.256)**
Thorium-230	HASL300	pCi/L	15	0.020 ± 0.060 (0.106) U	0.017 ± 0.063 (0.045) U	**0.048 ± 0.061 (0.043)**	-0.006 ± 0.095 (0.131) U	-0.012 ± 0.062 (0.109) U	0.007 ± 0.086 (0.159) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.060 (0.087) U	0 ± 0.063 (0.045) U	-0.012 ± 0.060 (0.107) U	0 ± 0.095 (0.071) U	0.011 ± 0.062 (0.090) U	-0.006 ± 0.086 (0.119) U
Uranium-234	HASL300	pCi/L	NE	**0.171 ± 0.140 (0.131)**	**0.258 ± 0.188 (0.194)**	0.110 ± 0.143 (0.261) U	**1.59 ± 0.448 (0.115)**	**1.39 ± 0.529 (0.199)**	0.125 ± 0.117 (0.157) U
Uranium-235	HASL300	pCi/L	NE	0.103 ± 0.129 (0.171) U	0.041 ± 0.145 (0.112) U	0.009 ± 0.150 (0.159) U	0.046 ± 0.108 (0.178) U	0.109 ± 0.195 (0.191) U	0 ± 0.111 (0.084) U
Uranium-238	HASL300	pCi/L	NE	0.107 ± 0.112 (0.131) U	0.118 ± 0.128 (0.175) U	**0.159 ± 0.147 (0.154)**	**0.905 ± 0.317 (0.136)**	**1.14 ± 0.470 (0.199)**	0.047 ± 0.085 (0.064) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.72 ± 0.930 (0.851)**	**1.40 ± 0.742 (0.927)**	**2.52 ± 0.840 (0.725)**	0.191 ± 0.483 (0.896) U	0.355 ± 0.540 (0.930) U	**2.29 ± 0.774 (0.421)**
Radium-228	E904.0	pCi/L	5	**1.93 ± 0.543 (0.646) J-**	**2.41 ± 0.607 (0.579) J-**	**4.48 ± 0.991 (0.714) J-**	0.738 ± 0.639 (1.31) U	**1.53 ± 0.491 (0.604)**	**5.64 ± 1.22 (0.814)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.65 ± 1.47 (1.50) J-**	**3.81 ± 1.35 (1.51) J-**	**7.00 ± 1.83 (1.44) J-**	0.929 ± 1.12 (2.21) U	**1.89 ± 1.03 (1.53)**	**7.93 ± 1.99 (1.24)**
Thorium-228	HASL300	pCi/L	15	0.124 ± 0.149 (0.284) U	0.043 ± 0.140 (0.309) U	**0.192 ± 0.124 (0.155)**	0.118 ± 0.185 (0.378) U	0.198 ± 0.143 (0.219) U	**0.214 ± 0.164 (0.201)**
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.062 (0.110) U	0.021 ± 0.061 (0.108) U	0.015 ± 0.056 (0.041) U	0.027 ± 0.127 (0.176) U	0.019 ± 0.057 (0.100) U	-0.013 ± 0.094 (0.155) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.062 (0.045) U	-0.006 ± 0.061 (0.089) U	0 ± 0.056 (0.041) U	0 ± 0.127 (0.096) U	0.010 ± 0.057 (0.083) U	-0.013 ± 0.094 (0.155) U
Uranium-234	HASL300	pCi/L	NE	0.045 ± 0.103 (0.174) U	**0.345 ± 0.230 (0.102) J+**	0.144 ± 0.145 (0.198) U	**1.49 ± 0.454 (0.072)**	**1.27 ± 0.479 (0.181)**	0.052 ± 0.079 (0.141) U
Uranium-235	HASL300	pCi/L	NE	0.064 ± 0.134 (0.206) U	0.081 ± 0.173 (0.271) U	0.070 ± 0.148 (0.198) U	**0.171 ± 0.154 (0.094)**	0.049 ± 0.177 (0.173) U	0.029 ± 0.103 (0.078) U
Uranium-238	HASL300	pCi/L	NE	0.101 ± 0.117 (0.180) U	0.144 ± 0.150 (0.177) U	0.100 ± 0.130 (0.230) U	**0.718 ± 0.293 (0.072)**	**0.803 ± 0.370 (0.181)**	**0.086 ± 0.086 (0.060)**
Tritium	E906.0	pCi/L	20,000	-44.9 ± 139 (248) U	-24.8 ± 139 (247) U	-125 ± 135 (248) U	67.1 ± 138 (235) U	87.2 ± 156 (265) U	67.5 ± 138 (236) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2
			Sample Depth (ft BGS)	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6
			Sample Date	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021
			Sample Type	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**2.06 ± 0.798 (0.751)**	**4.37 ± 1.19 (0.495)**	**2.45 ± 0.889 (0.631)**	**2.68 ± 0.788 (0.497)**	**1.31 ± 0.715 (0.783)**	**2.32 ± 0.967 (1.07)**
Radium-228	E904.0	pCi/L	5	**6.12 ± 1.29 (0.663)**	**5.36 ± 1.15 (0.723) J+**	**3.94 ± 0.920 (0.724)**	**6.03 ± 1.26 (0.670) J+**	**1.31 ± 0.540 (0.870)**	**4.65 ± 1.06 (0.804)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**8.18 ± 2.09 (1.41)**	**9.73 ± 2.34 (1.22) J+**	**6.39 ± 1.81 (1.36)**	**8.71 ± 2.05 (1.17) J+**	**2.62 ± 1.26 (1.65)**	**6.97 ± 2.03 (1.87)**
Thorium-228	HASL300	pCi/L	15	0.162 ± 0.188 (0.363) U	-0.133 ± 0.097 (0.314) U	0.264 ± 0.228 (0.362) U	**0.278 ± 0.182 (0.252) J+**	0.066 ± 0.089 (0.171) U	0.270 ± 0.190 (0.313) U
Thorium-230	HASL300	pCi/L	15	**0.073 ± 0.088 (0.066) J+**	0.015 ± 0.062 (0.123) U	0.025 ± 0.116 (0.161) U	0.053 ± 0.075 (0.109) U	-0.001 ± 0.053 (0.059) U	0 ± 0.060 (0.043) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.087 (0.066) U	-0.006 ± 0.062 (0.090) U	-0.008 ± 0.116 (0.161) U	0 ± 0.075 (0.054) U	0 ± 0.053 (0.038) U	0.010 ± 0.060 (0.088) U
Uranium-234	HASL300	pCi/L	NE	0.092 ± 0.105 (0.155) U	0.094 ± 0.136 (0.263) U	**0.175 ± 0.128 (0.141)**	**0.378 ± 0.239 (0.195)**	0.099 ± 0.110 (0.137) U	0.090 ± 0.123 (0.163) U
Uranium-235	HASL300	pCi/L	NE	0.026 ± 0.122 (0.170) U	-0.001 ± 0.154 (0.206) U	0.028 ± 0.099 (0.075) U	0.084 ± 0.163 (0.217) U	**0.191 ± 0.170 (0.104)**	0.091 ± 0.160 (0.123) U
Uranium-238	HASL300	pCi/L	NE	**0.130 ± 0.116 (0.071)**	**0.266 ± 0.197 (0.206)**	**0.122 ± 0.103 (0.105)**	**0.202 ± 0.172 (0.166)**	0.160 ± 0.144 (0.179) U	0.161 ± 0.156 (0.191) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.90 ± 0.902 (0.445)**	**2.77 ± 0.961 (0.824)**	**3.23 ± 1.02 (0.517)**	**2.42 ± 0.875 (0.686)**	0.286 ± 0.299 (0.421) UJ	**1.98 ± 0.745 (0.456) J-**
Radium-228	E904.0	pCi/L	5	**6.24 ± 1.32 (0.896)**	**6.19 ± 1.29 (0.632)**	**6.26 ± 1.32 (0.846)**	**7.21 ± 1.49 (0.707)**	0.624 ± 0.679 (1.43) U	**5.38 ± 1.33 (1.35) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**9.14 ± 2.22 (1.34)**	**8.96 ± 2.25 (1.46)**	**9.49 ± 2.34 (1.36)**	**9.63 ± 2.37 (1.39)**	0.910 ± 0.978 (1.85) UJ	**7.36 ± 2.08 (1.81) J**
Thorium-228	HASL300	pCi/L	15	0.304 ± 0.213 (0.321) U	0.017 ± 0.129 (0.296) U	**0.289 ± 0.191 (0.236)**	0.099 ± 0.118 (0.217) U	0.128 ± 0.157 (0.304) U	**0.321 ± 0.188 (0.268)**
Thorium-230	HASL300	pCi/L	15	-0.017 ± 0.087 (0.161) U	-0.001 ± 0.058 (0.116) U	0.037 ± 0.088 (0.145) U	-0.006 ± 0.064 (0.094) U	-0.029 ± 0.061 (0.146) U	0.012 ± 0.062 (0.084) U
Thorium-232	HASL300	pCi/L	15	-0.012 ± 0.087 (0.143) U	-0.006 ± 0.058 (0.085) U	-0.006 ± 0.088 (0.122) U	0 ± 0.064 (0.046) U	-0.012 ± 0.061 (0.108) U	-0.006 ± 0.062 (0.090) U
Uranium-234	HASL300	pCi/L	NE	0.084 ± 0.090 (0.112) U	0.148 ± 0.152 (0.240) U	**0.196 ± 0.139 (0.157)**	**0.426 ± 0.239 (0.172)**	0.054 ± 0.094 (0.073) U	0.008 ± 0.099 (0.187) U
Uranium-235	HASL300	pCi/L	NE	-0.007 ± 0.105 (0.146) U	0.037 ± 0.141 (0.188) U	-0.007 ± 0.102 (0.141) U	0.033 ± 0.143 (0.191) U	0.047 ± 0.123 (0.095) U	0.037 ± 0.129 (0.100) U
Uranium-238	HASL300	pCi/L	NE	0.048 ± 0.081 (0.061) U	0.076 ± 0.108 (0.188) U	**0.125 ± 0.106 (0.108)**	**0.307 ± 0.200 (0.146)**	**0.189 ± 0.147 (0.148) J+**	0.097 ± 0.113 (0.173) U
Tritium	E906.0	pCi/L	20,000	62.3 ± 138 (236) U	12.4 ± 151 (264) U	**295 ± 156 (237)**	244 ± 167 (265) U	7.48 ± 135 (237) U	127 ± 143 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409
			Sample Depth (ft BGS)	103.6-113.6	109-119	109-119	109-119	23-33	23-33
			Sample Date	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.896 ± 0.462 (0.388)**	**0.902 ± 0.598 (0.698)**	**0.895 ± 0.597 (0.768)**	**1.13 ± 0.572 (0.550)**	**0.380 ± 0.308 (0.172)**	-0.117 ± 0.362 (0.822) U
Radium-228	E904.0	pCi/L	5	**3.56 ± 0.892 (0.884)**	**2.90 ± 0.752 (0.735)**	**3.11 ± 0.810 (0.834)**	**2.70 ± 0.737 (0.839)**	0.305 ± 0.396 (0.844) U	**0.762 ± 0.405 (0.697)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.46 ± 1.35 (1.27)**	**3.80 ± 1.35 (1.43)**	**4.01 ± 1.41 (1.60)**	**3.83 ± 1.31 (1.39)**	0.685 ± 0.704 (1.02) U	0.762 ± 0.767 (1.52) U
Thorium-228	HASL300	pCi/L	15	0.170 ± 0.153 (0.271) U	0.007 ± 0.058 (0.152) U	0.038 ± 0.151 (0.361) U	0.057 ± 0.179 (0.360) U	0.034 ± 0.108 (0.243) U	0.018 ± 0.079 (0.172) U
Thorium-230	HASL300	pCi/L	15	-0.018 ± 0.055 (0.130) U	0.004 ± 0.056 (0.131) U	-0.006 ± 0.084 (0.117) U	0.064 ± 0.069 (0.076) U	-0.006 ± 0.060 (0.088) U	-0.010 ± 0.077 (0.127) U
Thorium-232	HASL300	pCi/L	15	-0.010 ± 0.055 (0.097) U	-0.005 ± 0.056 (0.081) U	0 ± 0.084 (0.063) U	0 ± 0.068 (0.045) U	0 ± 0.060 (0.043) U	-0.005 ± 0.077 (0.107) U
Uranium-234	HASL300	pCi/L	NE	0.104 ± 0.116 (0.162) U	**0.339 ± 0.160 (0.143) J+**	0.116 ± 0.124 (0.210) U	0.016 ± 0.091 (0.069) U	**0.631 ± 0.229 (0.117) J+**	**0.651 ± 0.261 (0.063)**
Uranium-235	HASL300	pCi/L	NE	0.109 ± 0.136 (0.181) U	**0.243 ± 0.147 (0.115) J+**	0.024 ± 0.108 (0.144) U	0.025 ± 0.119 (0.166) U	0.075 ± 0.093 (0.153) U	0.061 ± 0.109 (0.082) U
Uranium-238	HASL300	pCi/L	NE	0.073 ± 0.104 (0.181) U	**0.164 ± 0.108 (0.106)**	0.006 ± 0.082 (0.153) U	0.046 ± 0.092 (0.199) U	**0.542 ± 0.208 (0.048)**	**0.571 ± 0.245 (0.135)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	1.05 ± 0.747 (1.05) UJ	-0.0477 ± 0.365 (0.769) U	0.568 ± 0.502 (0.744) U	**0.701 ± 0.490 (0.592)**	0.872 ± 0.771 (1.12) U	-0.232 ± 0.395 (0.921) U
Radium-228	E904.0	pCi/L	5	**2.41 ± 0.797 (1.15) J+**	**1.32 ± 0.528 (0.827) J+**	**2.85 ± 0.777 (0.863)**	**2.61 ± 0.775 (1.01) J+**	0.342 ± 0.466 (1.000) U	0.362 ± 0.370 (0.765) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.46 ± 1.54 (2.20) J**	1.32 ± 0.893 (1.60) UJ	**3.42 ± 1.28 (1.61)**	**3.31 ± 1.27 (1.60) J+**	1.21 ± 1.24 (2.12) U	0.362 ± 0.765 (1.69) U
Thorium-228	HASL300	pCi/L	15	**0.226 ± 0.155 (0.221)**	0.074 ± 0.129 (0.265) U	0.059 ± 0.132 (0.298) U	0.145 ± 0.147 (0.262) U	0.079 ± 0.090 (0.156) U	0.118 ± 0.182 (0.380) U
Thorium-230	HASL300	pCi/L	15	0.017 ± 0.066 (0.047) U	-0.012 ± 0.060 (0.107) U	-0.017 ± 0.086 (0.159) U	0.023 ± 0.068 (0.120) U	-0.017 ± 0.060 (0.121) U	-0.006 ± 0.095 (0.132) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.065 (0.096) U	0.016 ± 0.060 (0.043) U	0.012 ± 0.086 (0.141) U	-0.006 ± 0.068 (0.099) U	-0.006 ± 0.060 (0.088) U	0 ± 0.095 (0.071) U
Uranium-234	HASL300	pCi/L	NE	0.064 ± 0.130 (0.292) U	**0.410 ± 0.176 (0.133) J+**	**0.123 ± 0.108 (0.113) J+**	**0.096 ± 0.095 (0.065)**	**0.576 ± 0.207 (0.117) J+**	**0.426 ± 0.226 (0.163)**
Uranium-235	HASL300	pCi/L	NE	0.046 ± 0.169 (0.178) U	**0.212 ± 0.140 (0.139) J+**	0.015 ± 0.106 (0.176) U	0.055 ± 0.113 (0.157) U	**0.153 ± 0.115 (0.111) J+**	0.072 ± 0.129 (0.097) U
Uranium-238	HASL300	pCi/L	NE	0.141 ± 0.147 (0.172) U	**0.208 ± 0.117 (0.043) J+**	0.080 ± 0.091 (0.134) U	0.043 ± 0.087 (0.188) U	**0.388 ± 0.162 (0.042) J+**	**0.384 ± 0.210 (0.074)**
Tritium	E906.0	pCi/L	20,000	**305 ± 156 (236)**	**343 ± 153 (223)**	62.8 ± 148 (253) U	208 ± 134 (210) U	201 ± 142 (225) U	-12.5 ± 130 (231) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2
			Sample Depth (ft BGS)	23-33	15-25	15-25	40-50	40-50
			Sample Date	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	0.113 ± 0.258 (0.416) U	0.0570 ± 0.260 (0.530) U	0.0994 ± 0.338 (0.652) UJ	0.233 ± 0.244 (0.344) UJ	-0.126 ± 0.390 (0.886) U
Radium-228	E904.0	pCi/L	5	0.132 ± 0.296 (0.657) U	**0.742 ± 0.413 (0.738)**	0.765 ± 0.450 (0.829) UJ	0.317 ± 0.386 (0.815) U	0.728 ± 0.475 (0.900) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.245 ± 0.554 (1.07) U	0.799 ± 0.673 (1.27) U	0.864 ± 0.788 (1.48) UJ	0.550 ± 0.630 (1.16) UJ	0.728 ± 0.865 (1.79) UJ
Thorium-228	HASL300	pCi/L	15	0.102 ± 0.172 (0.364) U	0.091 ± 0.149 (0.310) U	0.123 ± 0.179 (0.366) U	0.026 ± 0.121 (0.307) U	0.231 ± 0.183 (0.284) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.102 (0.077) U	-0.006 ± 0.094 (0.130) U	-0.012 ± 0.092 (0.152) U	-0.007 ± 0.099 (0.137) U	0.025 ± 0.085 (0.141) U
Thorium-232	HASL300	pCi/L	15	-0.007 ± 0.102 (0.142) U	0.026 ± 0.094 (0.071) U	0 ± 0.092 (0.070) U	0 ± 0.099 (0.074) U	-0.011 ± 0.085 (0.141) U
Uranium-234	HASL300	pCi/L	NE	**0.850 ± 0.315 (0.206)**	**0.326 ± 0.175 (0.110)**	**0.490 ± 0.245 (0.197)**	**0.548 ± 0.240 (0.164)**	**0.784 ± 0.343 (0.198)**
Uranium-235	HASL300	pCi/L	NE	0.024 ± 0.113 (0.156) U	0.029 ± 0.104 (0.078) U	0.045 ± 0.128 (0.236) U	0.030 ± 0.107 (0.081) U	0.043 ± 0.156 (0.118) U
Uranium-238	HASL300	pCi/L	NE	**0.607 ± 0.258 (0.160)**	**0.144 ± 0.118 (0.131)**	**0.504 ± 0.245 (0.158)**	**0.457 ± 0.217 (0.166)**	**0.933 ± 0.375 (0.090)**
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	0.0556 ± 0.327 (0.668) U	0 ± 0.299 (0.670) U	-0.102 ± 0.232 (0.547) U	0.337 ± 0.286 (0.354) UJ	0.593 ± 0.470 (0.639) U
Radium-228	E904.0	pCi/L	5	0.665 ± 0.429 (0.821) U	0.512 ± 0.678 (1.45) U	0.693 ± 0.515 (1.02) U	0.210 ± 0.477 (1.05) U	**1.45 ± 0.585 (0.949) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.721 ± 0.756 (1.49) U	0.512 ± 0.977 (2.12) U	0.693 ± 0.747 (1.57) U	0.547 ± 0.763 (1.40) UJ	**2.04 ± 1.06 (1.59) J+**
Thorium-228	HASL300	pCi/L	15	-0.011 ± 0.117 (0.332) U	-0.032 ± 0.128 (0.394) U	0.002 ± 0.139 (0.376) U	0.060 ± 0.156 (0.357) U	0.112 ± 0.150 (0.291) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.094 (0.071) U	-0.029 ± 0.115 (0.227) U	-0.035 ± 0.106 (0.229) U	-0.024 ± 0.090 (0.182) U	**0.683 ± 0.289 (0.159)**
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.094 (0.130) U	-0.008 ± 0.115 (0.159) U	0 ± 0.106 (0.080) U	-0.012 ± 0.090 (0.149) U	-0.007 ± 0.096 (0.137) U
Uranium-234	HASL300	pCi/L	NE	**0.757 ± 0.273 (0.174)**	**0.218 ± 0.145 (0.145)**	**0.406 ± 0.239 (0.227)**	**0.889 ± 0.302 (0.140)**	**0.889 ± 0.330 (0.237)**
Uranium-235	HASL300	pCi/L	NE	0.047 ± 0.095 (0.132) U	0 ± 0.102 (0.077) U	**0.146 ± 0.153 (0.110)**	0.048 ± 0.099 (0.137) U	0.065 ± 0.117 (0.088) U
Uranium-238	HASL300	pCi/L	NE	**0.492 ± 0.212 (0.135)**	**0.322 ± 0.173 (0.109)**	**0.568 ± 0.287 (0.258)**	**0.515 ± 0.221 (0.125)**	**0.746 ± 0.299 (0.227)**
Tritium	E906.0	pCi/L	20,000	**316 ± 144 (211)**	-10.0 ± 143 (252) U	-9.98 ± 134 (237) U	140 ± 152 (252) U	99.6 ± 141 (236) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	MW-505-P3	MW-505-P3	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS
			Sample Depth (ft BGS)	65-75	65-75	39-48.8	39-48.8	39-48.8	17.1-26.9
			Sample Date	05-25-2021	08-05-2021	03-01-2021	05-17-2021	08-18-2021	03-10-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0 ± 0.295 (0.661) U	0.428 ± 0.363 (0.450) U	**0.948 ± 0.501 (0.537)**	0.288 ± 0.518 (0.914) U	**1.36 ± 0.627 (0.608)**	**1.73 ± 0.727 (0.730) J-**
Radium-228	E904.0	pCi/L	5	0.677 ± 0.395 (0.715) U	**0.815 ± 0.422 (0.722) J-**	**2.67 ± 0.718 (0.765) J-**	**2.24 ± 1.01 (1.77) J**	**3.46 ± 0.820 (0.693) J-**	**2.58 ± 0.876 (1.26) J**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.677 ± 0.690 (1.38) U	**1.24 ± 0.785 (1.17) J-**	**3.62 ± 1.22 (1.30) J-**	2.53 ± 1.53 (2.68) U	**4.82 ± 1.45 (1.30) J-**	**4.31 ± 1.60 (1.99) J**
Thorium-228	HASL300	pCi/L	15	-0.010 ± 0.119 (0.332) U	-0.071 ± 0.092 (0.309) U	0.045 ± 0.086 (0.181) U	-0.032 ± 0.120 (0.366) U	0.131 ± 0.117 (0.197) U	0.088 ± 0.100 (0.168) U
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.091 (0.150) U	0.039 ± 0.090 (0.141) U	-0.018 ± 0.063 (0.127) U	0 ± 0.102 (0.077) U	-0.008 ± 0.052 (0.119) U	0.012 ± 0.069 (0.102) U
Thorium-232	HASL300	pCi/L	15	0.025 ± 0.091 (0.068) U	-0.005 ± 0.089 (0.120) U	0 ± 0.063 (0.046) U	0 ± 0.102 (0.077) U	0 ± 0.052 (0.038) U	0 ± 0.069 (0.050) U
Uranium-234	HASL300	pCi/L	NE	**0.936 ± 0.320 (0.182)**	**0.335 ± 0.189 (0.147)**	**0.363 ± 0.159 (0.114) J+**	**0.251 ± 0.165 (0.129)**	**0.275 ± 0.190 (0.197)**	**0.251 ± 0.152 (0.176) J+**
Uranium-235	HASL300	pCi/L	NE	0.015 ± 0.103 (0.170) U	0.032 ± 0.116 (0.088) U	0.110 ± 0.108 (0.164) U	0.034 ± 0.121 (0.091) U	0.039 ± 0.136 (0.105) U	0.104 ± 0.105 (0.132) U
Uranium-238	HASL300	pCi/L	NE	**0.797 ± 0.293 (0.192)**	**0.140 ± 0.122 (0.137)**	**0.211 ± 0.121 (0.114)**	**0.155 ± 0.126 (0.070)**	0.162 ± 0.146 (0.182) U	0.046 ± 0.088 (0.186) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.127 ± 0.430 (0.830) U	**0.257 ± 0.295 (0.174)**	0.288 ± 0.401 (0.678) U	0.432 ± 0.521 (0.856) U	**1.85 ± 0.794 (0.809)**	**1.24 ± 0.700 (0.871)**
Radium-228	E904.0	pCi/L	5	0.193 ± 0.333 (0.728) U	0.615 ± 0.425 (0.819) U	**1.32 ± 0.542 (0.828)**	**2.41 ± 0.715 (0.859)**	**2.84 ± 0.705 (0.649) J-**	**1.84 ± 0.637 (0.910)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.320 ± 0.763 (1.56) U	0.872 ± 0.720 (0.993) U	**1.61 ± 0.943 (1.51)**	**2.84 ± 1.24 (1.72)**	**4.69 ± 1.50 (1.46) J-**	**3.08 ± 1.34 (1.78)**
Thorium-228	HASL300	pCi/L	15	0.114 ± 0.170 (0.348) U	-0.053 ± 0.095 (0.285) U	0.076 ± 0.084 (0.127) U	0.189 ± 0.214 (0.410) UJ	0.103 ± 0.121 (0.227) U	-0.071 ± 0.085 (0.281) U
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.091 (0.127) U	-0.031 ± 0.093 (0.201) U	0.036 ± 0.071 (0.141) U	-0.006 ± 0.096 (0.133) U	0.015 ± 0.057 (0.041) U	-0.007 ± 0.072 (0.106) U
Thorium-232	HASL300	pCi/L	15	-0.018 ± 0.092 (0.169) U	-0.006 ± 0.093 (0.129) U	0 ± 0.070 (0.051) U	0.027 ± 0.096 (0.072) U	-0.011 ± 0.057 (0.101) U	0.019 ± 0.072 (0.052) U
Uranium-234	HASL300	pCi/L	NE	**0.766 ± 0.279 (0.108)**	**0.204 ± 0.155 (0.161)**	**0.402 ± 0.169 (0.104) J+**	0.136 ± 0.163 (0.279) U	0.021 ± 0.130 (0.308) U	**0.239 ± 0.133 (0.111) J+**
Uranium-235	HASL300	pCi/L	NE	**0.113 ± 0.112 (0.077) J+**	0.018 ± 0.127 (0.210) U	**0.217 ± 0.137 (0.112) J+**	0.047 ± 0.168 (0.126) U	0.128 ± 0.171 (0.267) U	**0.174 ± 0.127 (0.120) J+**
Uranium-238	HASL300	pCi/L	NE	**0.876 ± 0.303 (0.128)**	**0.238 ± 0.164 (0.136)**	**0.182 ± 0.110 (0.086) J+**	0.134 ± 0.143 (0.178) U	**0.179 ± 0.166 (0.174)**	0.072 ± 0.073 (0.092) U
Tritium	E906.0	pCi/L	20,000	24.9 ± 144 (251) U	94.5 ± 140 (236) U	**270 ± 155 (239)**	173 ± 147 (238) U	**290 ± 160 (247)**	175 ± 141 (227) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8
			Sample Depth (ft BGS)	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8
			Sample Date	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**2.61 ± 0.849 (0.598) J-**	**2.12 ± 0.857 (0.795)**	0.260 ± 0.528 (0.915) UJ	0.557 ± 0.538 (0.836) U	0.598 ± 0.474 (0.643) U	0.225 ± 0.413 (0.737) U
Radium-228	E904.0	pCi/L	5	**1.75 ± 0.570 (0.785) J+**	**1.15 ± 0.435 (0.645)**	0.250 ± 0.399 (0.864) U	**1.22 ± 0.476 (0.744)**	0.383 ± 0.411 (0.860) UJ	**1.31 ± 0.527 (0.851)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.36 ± 1.42 (1.38) J**	**3.27 ± 1.29 (1.44)**	0.510 ± 0.927 (1.78) UJ	**1.78 ± 1.01 (1.58)**	0.981 ± 0.885 (1.50) UJ	1.54 ± 0.940 (1.59) U
Thorium-228	HASL300	pCi/L	15	-0.065 ± 0.108 (0.370) U	0.182 ± 0.186 (0.336) U	-0.063 ± 0.088 (0.279) U	0.011 ± 0.099 (0.238) U	0.107 ± 0.109 (0.180) U	-0.006 ± 0.109 (0.279) U
Thorium-230	HASL300	pCi/L	15	0.015 ± 0.100 (0.166) U	0.034 ± 0.088 (0.151) U	-0.007 ± 0.072 (0.105) U	-0.005 ± 0.096 (0.209) U	-0.001 ± 0.068 (0.137) U	0.018 ± 0.072 (0.144) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.100 (0.076) U	0 ± 0.088 (0.065) U	0 ± 0.072 (0.052) U	0 ± 0.096 (0.073) U	0.018 ± 0.068 (0.049) U	-0.007 ± 0.072 (0.105) U
Uranium-234	HASL300	pCi/L	NE	0.028 ± 0.086 (0.172) U	**0.220 ± 0.181 (0.208)**	**0.409 ± 0.251 (0.293) J+**	0.168 ± 0.137 (0.174) U	**0.086 ± 0.077 (0.047)**	**1.08 ± 0.306 (0.090) J+**
Uranium-235	HASL300	pCi/L	NE	0.031 ± 0.112 (0.085) U	**0.214 ± 0.198 (0.208)**	**0.680 ± 0.330 (0.103) J+**	0.024 ± 0.112 (0.156) U	**0.173 ± 0.125 (0.061)**	**0.097 ± 0.090 (0.058) J+**
Uranium-238	HASL300	pCi/L	NE	0.073 ± 0.097 (0.174) U	0.068 ± 0.120 (0.092) U	**0.242 ± 0.180 (0.194)**	0.036 ± 0.086 (0.142) U	0.057 ± 0.070 (0.115) U	**0.768 ± 0.248 (0.090)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.16 ± 0.572 (0.538) J+**	**1.53 ± 0.709 (0.218)**	**0.218 ± 0.250 (0.148)**	0.355 ± 0.435 (0.710) U	0.181 ± 0.393 (0.724) UJ	0.396 ± 0.402 (0.609) U
Radium-228	E904.0	pCi/L	5	1.02 ± 0.592 (1.11) U	**1.37 ± 0.671 (1.16)**	1.09 ± 0.652 (1.21) U	0.559 ± 0.520 (1.06) U	0.960 ± 0.558 (1.04) U	**1.48 ± 0.507 (0.674)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.18 ± 1.16 (1.65) J+**	**2.90 ± 1.38 (1.38)**	1.31 ± 0.902 (1.36) U	0.914 ± 0.955 (1.77) U	1.14 ± 0.951 (1.76) UJ	**1.88 ± 0.909 (1.28)**
Thorium-228	HASL300	pCi/L	15	0.029 ± 0.088 (0.218) U	**0.190 ± 0.132 (0.172)**	0.036 ± 0.073 (0.147) U	0.020 ± 0.086 (0.223) U	0.057 ± 0.114 (0.242) U	**0.049 ± 0.062 (0.044)**
Thorium-230	HASL300	pCi/L	15	0.012 ± 0.085 (0.140) U	0.016 ± 0.065 (0.131) U	-0.027 ± 0.072 (0.158) U	-0.017 ± 0.083 (0.154) U	0.031 ± 0.067 (0.146) U	0.016 ± 0.061 (0.044) U
Thorium-232	HASL300	pCi/L	15	0.047 ± 0.085 (0.064) U	0 ± 0.065 (0.047) U	0 ± 0.072 (0.052) U	0.018 ± 0.083 (0.116) U	0 ± 0.064 (0.046) U	-0.006 ± 0.060 (0.088) U
Uranium-234	HASL300	pCi/L	NE	**0.175 ± 0.137 (0.160)**	-0.018 ± 0.140 (0.331) U	**0.306 ± 0.210 (0.240) J+**	0.093 ± 0.106 (0.157) U	0.087 ± 0.143 (0.284) U	**1.45 ± 0.370 (0.107) J+**
Uranium-235	HASL300	pCi/L	NE	0.087 ± 0.114 (0.157) U	0.138 ± 0.184 (0.287) U	**0.151 ± 0.162 (0.102) J+**	0 ± 0.124 (0.094) U	0.053 ± 0.186 (0.143) U	0.129 ± 0.113 (0.150) U
Uranium-238	HASL300	pCi/L	NE	**0.157 ± 0.128 (0.143)**	0.113 ± 0.141 (0.187) U	0.070 ± 0.123 (0.078) U	0.067 ± 0.096 (0.157) U	0.074 ± 0.143 (0.190) U	**0.949 ± 0.283 (0.128) J+**
Tritium	E906.0	pCi/L	20,000	100 ± 144 (241) U	102 ± 135 (227) U	100 ± 136 (229) U	87.2 ± 148 (252) U	67.0 ± 149 (255) U	173 ± 141 (228) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	S-8	S-8	S-10	S-10	S-10
			Sample Depth (ft BGS)	6.8-26.8	6.8-26.8	32-52	32-52	32-52
			Sample Date	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	0.398 ± 0.337 (0.418) U	-0.0697 ± 0.410 (0.914) U	0 ± 0.287 (0.463) UJ	0 ± 0.300 (0.673) U	0.0631 ± 0.288 (0.586) U
Radium-228	E904.0	pCi/L	5	**1.54 ± 0.490 (0.587)**	**2.02 ± 0.591 (0.681) J+**	0.791 ± 0.551 (1.05) UJ	0.207 ± 0.321 (0.694) U	**0.860 ± 0.470 (0.856)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.94 ± 0.827 (1.01)**	**2.02 ± 1.00 (1.60) J+**	0.791 ± 0.838 (1.51) UJ	0.207 ± 0.621 (1.37) U	0.923 ± 0.758 (1.44) U
Thorium-228	HASL300	pCi/L	15	-0.042 ± 0.096 (0.271) U	-0.075 ± 0.068 (0.238) U	-0.011 ± 0.071 (0.203) U	-0.067 ± 0.088 (0.315) U	0.088 ± 0.160 (0.332) U
Thorium-230	HASL300	pCi/L	15	-0.022 ± 0.093 (0.181) U	0.016 ± 0.060 (0.043) U	0.048 ± 0.065 (0.095) U	-0.017 ± 0.085 (0.157) U	0.013 ± 0.074 (0.109) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.093 (0.129) U	-0.006 ± 0.060 (0.087) U	-0.006 ± 0.065 (0.095) U	-0.011 ± 0.085 (0.140) U	0 ± 0.074 (0.053) U
Uranium-234	HASL300	pCi/L	NE	**1.07 ± 0.352 (0.137)**	**1.21 ± 0.440 (0.204)**	**0.722 ± 0.251 (0.157) J+**	0.153 ± 0.129 (0.175) U	**0.135 ± 0.123 (0.077)**
Uranium-235	HASL300	pCi/L	NE	0.082 ± 0.109 (0.155) U	0.094 ± 0.153 (0.118) U	**0.366 ± 0.187 (0.062) J+**	**0.088 ± 0.106 (0.080)**	**0.222 ± 0.180 (0.100)**
Uranium-238	HASL300	pCi/L	NE	**0.538 ± 0.237 (0.154)**	**0.917 ± 0.374 (0.183)**	**0.222 ± 0.129 (0.096)**	**0.248 ± 0.153 (0.112)**	**0.211 ± 0.155 (0.077)**
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	0.397 ± 0.336 (0.417) U	0.500 ± 0.468 (0.664) U	0.602 ± 0.558 (0.849) U	0.304 ± 0.397 (0.654) U	0.0591 ± 0.270 (0.549) UJ
Radium-228	E904.0	pCi/L	5	0.754 ± 0.451 (0.851) UJ	**1.37 ± 0.549 (0.904)**	**3.14 ± 0.921 (1.06)**	**0.995 ± 0.508 (0.908) J+**	-0.218 ± 0.599 (1.40) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.15 ± 0.787 (1.27) UJ	**1.87 ± 1.02 (1.57)**	**3.74 ± 1.48 (1.91)**	1.30 ± 0.905 (1.56) U	0.0591 ± 0.869 (1.95) UJ
Thorium-228	HASL300	pCi/L	15	0.042 ± 0.129 (0.307) U	0.063 ± 0.126 (0.266) U	0.063 ± 0.095 (0.187) U	0.088 ± 0.167 (0.363) U	-0.028 ± 0.071 (0.213) U
Thorium-230	HASL300	pCi/L	15	0.045 ± 0.093 (0.129) U	0.018 ± 0.067 (0.048) U	0.021 ± 0.062 (0.110) U	0.024 ± 0.087 (0.066) U	0.032 ± 0.061 (0.044) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.093 (0.070) U	0.029 ± 0.067 (0.098) U	0 ± 0.062 (0.045) U	0 ± 0.087 (0.066) U	0 ± 0.061 (0.044) U
Uranium-234	HASL300	pCi/L	NE	**1.34 ± 0.433 (0.164)**	**0.977 ± 0.376 (0.190)**	**0.410 ± 0.169 (0.086) J+**	0.123 ± 0.131 (0.222) U	0.085 ± 0.121 (0.211) U
Uranium-235	HASL300	pCi/L	NE	-0.004 ± 0.130 (0.180) U	0.041 ± 0.142 (0.110) U	**0.156 ± 0.116 (0.112) J+**	0.030 ± 0.114 (0.152) U	0.045 ± 0.158 (0.122) U
Uranium-238	HASL300	pCi/L	NE	**0.581 ± 0.265 (0.075)**	**0.858 ± 0.349 (0.171)**	0.072 ± 0.070 (0.086) U	0.152 ± 0.129 (0.161) U	0.056 ± 0.121 (0.189) U
Tritium	E906.0	pCi/L	20,000	20.0 ± 133 (232) U	2.50 ± 151 (265) U	**1288 ± 255 (228)**	**938 ± 224 (251)**	**722 ± 195 (236)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS
			Sample Depth (ft BGS)	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8
			Sample Date	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.01 ± 0.657 (0.889) J-**	**1.35 ± 0.617 (0.545)**	**1.34 ± 0.727 (0.932)**	0.193 ± 0.536 (1.04) U	0.381 ± 0.717 (1.27) U	0.0630 ± 0.327 (0.678) U
Radium-228	E904.0	pCi/L	5	**1.55 ± 0.701 (1.18) J**	**2.40 ± 0.719 (0.872) J**	**2.68 ± 0.706 (0.721)**	0.864 ± 0.551 (1.05) U	0.410 ± 0.380 (0.777) U	0.396 ± 0.464 (0.978) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.56 ± 1.36 (2.07) J**	**3.75 ± 1.34 (1.42) J**	**4.02 ± 1.43 (1.65)**	1.06 ± 1.09 (2.09) U	0.791 ± 1.10 (2.05) U	0.459 ± 0.791 (1.66) UJ
Thorium-228	HASL300	pCi/L	15	0.158 ± 0.133 (0.218) U	0.093 ± 0.172 (0.372) U	0.045 ± 0.127 (0.277) U	0.149 ± 0.134 (0.224) U	-0.012 ± 0.138 (0.372) U	0.207 ± 0.193 (0.321) U
Thorium-230	HASL300	pCi/L	15	0.026 ± 0.060 (0.088) U	0.025 ± 0.117 (0.162) U	-0.012 ± 0.056 (0.133) U	-0.001 ± 0.064 (0.128) U	0.014 ± 0.089 (0.067) U	-0.035 ± 0.104 (0.227) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	0 ± 0.117 (0.088) U	-0.011 ± 0.056 (0.099) U	0 ± 0.064 (0.046) U	0 ± 0.089 (0.067) U	0.016 ± 0.104 (0.145) U
Uranium-234	HASL300	pCi/L	NE	**1.25 ± 0.368 (0.056) J+**	**1.03 ± 0.347 (0.120)**	**0.883 ± 0.349 (0.083)**	**0.263 ± 0.133 (0.126) J+**	0.031 ± 0.080 (0.174) U	0.107 ± 0.122 (0.180) U
Uranium-235	HASL300	pCi/L	NE	0.138 ± 0.128 (0.149) U	0.063 ± 0.113 (0.085) U	**0.159 ± 0.158 (0.108)**	**0.065 ± 0.070 (0.050) J+**	0.022 ± 0.104 (0.145) U	-0.019 ± 0.142 (0.235) U
Uranium-238	HASL300	pCi/L	NE	**0.859 ± 0.297 (0.157)**	**0.863 ± 0.312 (0.065)**	**0.700 ± 0.306 (0.083)**	**0.099 ± 0.075 (0.038)**	0.035 ± 0.080 (0.184) U	-0.007 ± 0.109 (0.151) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.319 ± 0.490 (0.843) U	0.274 ± 0.389 (0.658) U	**1.72 ± 0.885 (1.10) J**	0.122 ± 0.294 (0.567) U	0.616 ± 0.524 (0.736) U	**0.180 ± 0.275 (0.163)**
Radium-228	E904.0	pCi/L	5	**1.14 ± 0.461 (0.703)**	**1.48 ± 0.543 (0.839)**	**1.93 ± 0.685 (0.971) J+**	0.439 ± 0.417 (0.860) U	0.0622 ± 0.349 (0.799) UJ	0.704 ± 0.439 (0.822) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.46 ± 0.951 (1.55) U	**1.75 ± 0.932 (1.50)**	**3.65 ± 1.57 (2.07) J**	0.561 ± 0.711 (1.43) U	0.678 ± 0.873 (1.54) UJ	0.884 ± 0.714 (0.985) U
Thorium-228	HASL300	pCi/L	15	0.037 ± 0.062 (0.110) U	0.060 ± 0.140 (0.318) U	0.055 ± 0.092 (0.187) U	0.023 ± 0.078 (0.185) U	-0.057 ± 0.117 (0.338) U	0.176 ± 0.190 (0.348) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	0.045 ± 0.092 (0.127) U	0.015 ± 0.056 (0.040) U	0.022 ± 0.066 (0.116) U	-0.008 ± 0.114 (0.158) U	0.044 ± 0.101 (0.159) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	0 ± 0.091 (0.069) U	-0.005 ± 0.055 (0.081) U	0 ± 0.066 (0.047) U	0.032 ± 0.114 (0.086) U	-0.006 ± 0.101 (0.135) U
Uranium-234	HASL300	pCi/L	NE	**1.29 ± 0.374 (0.166) J+**	**1.31 ± 0.408 (0.190) J+**	**0.890 ± 0.360 (0.150)**	**0.243 ± 0.129 (0.093) J+**	**0.145 ± 0.109 (0.099)**	0.071 ± 0.102 (0.167) U
Uranium-235	HASL300	pCi/L	NE	**0.242 ± 0.168 (0.174) J+**	**0.148 ± 0.136 (0.086)**	0.076 ± 0.147 (0.196) U	**0.133 ± 0.104 (0.056) J+**	-0.006 ± 0.093 (0.129) U	0.003 ± 0.132 (0.100) U
Uranium-238	HASL300	pCi/L	NE	**0.834 ± 0.285 (0.133) J+**	**0.756 ± 0.291 (0.121)**	**0.826 ± 0.345 (0.150)**	**0.138 ± 0.096 (0.087) J+**	0.040 ± 0.071 (0.054) U	0.131 ± 0.126 (0.156) U
Tritium	E906.0	pCi/L	20,000	92.6 ± 135 (228) U	45.1 ± 141 (243) U	-62.3 ± 126 (229) U	-100 ± 138 (252) U	-45.1 ± 132 (237) U	107 ± 142 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD
			Sample Depth (ft BGS)	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6
			Sample Date	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.08 ± 0.660 (0.776) J-**	0.569 ± 0.526 (0.766) U	0.490 ± 0.512 (0.803) U	**1.72 ± 0.623 (0.442)**	**2.20 ± 0.862 (0.778)**	**2.93 ± 0.872 (0.496)**
Radium-228	E904.0	pCi/L	5	**0.933 ± 0.460 (0.818)**	**1.24 ± 0.513 (0.815)**	**0.976 ± 0.464 (0.789) J-**	**0.864 ± 0.421 (0.739) J-**	**1.44 ± 0.502 (0.727)**	0.314 ± 0.338 (0.705) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.01 ± 1.12 (1.59) J-**	**1.81 ± 1.04 (1.58)**	1.47 ± 0.976 (1.59) UJ	**2.58 ± 1.04 (1.18) J-**	**3.64 ± 1.36 (1.51)**	**3.24 ± 1.21 (1.20)**
Thorium-228	HASL300	pCi/L	15	0.089 ± 0.094 (0.138) U	-0.021 ± 0.092 (0.277) U	0.341 ± 0.393 (0.702) UJ	-0.007 ± 0.056 (0.123) U	-0.042 ± 0.090 (0.291) U	0.028 ± 0.105 (0.262) U
Thorium-230	HASL300	pCi/L	15	-0.015 ± 0.077 (0.136) U	-0.006 ± 0.089 (0.123) U	0.030 ± 0.152 (0.291) U	-0.001 ± 0.055 (0.110) U	-0.006 ± 0.087 (0.121) U	-0.006 ± 0.087 (0.120) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.077 (0.055) U	0.019 ± 0.089 (0.123) U	0.050 ± 0.153 (0.101) U	0.015 ± 0.055 (0.040) U	0 ± 0.087 (0.066) U	0 ± 0.087 (0.065) U
Uranium-234	HASL300	pCi/L	NE	**0.317 ± 0.150 (0.045) J+**	0.042 ± 0.074 (0.150) U	**0.284 ± 0.201 (0.249)**	**0.922 ± 0.282 (0.112) J+**	**0.643 ± 0.267 (0.144)**	**0.781 ± 0.333 (0.157)**
Uranium-235	HASL300	pCi/L	NE	0.118 ± 0.105 (0.120) U	0 ± 0.097 (0.073) U	0.160 ± 0.166 (0.229) U	**0.132 ± 0.107 (0.060) J+**	0.082 ± 0.114 (0.158) U	0.081 ± 0.149 (0.147) U
Uranium-238	HASL300	pCi/L	NE	**0.123 ± 0.091 (0.045)**	**0.119 ± 0.101 (0.103)**	0.167 ± 0.181 (0.299) U	**0.379 ± 0.166 (0.046)**	**0.243 ± 0.155 (0.066)**	**0.308 ± 0.202 (0.157)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**0.685 ± 0.482 (0.615)**	0.532 ± 0.456 (0.618) U	**0.287 ± 0.264 (0.156) J-**	**2.74 ± 0.858 (0.519)**	**3.78 ± 1.12 (0.201)**	**2.72 ± 0.859 (0.525)**
Radium-228	E904.0	pCi/L	5	**0.643 ± 0.346 (0.610) J-**	0.743 ± 0.453 (0.844) UJ	**1.04 ± 0.504 (0.873)**	0.581 ± 0.738 (1.58) U	0.553 ± 0.337 (0.616) UJ	0.807 ± 0.520 (0.995) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.33 ± 0.828 (1.23) J-**	1.28 ± 0.909 (1.46) UJ	**1.33 ± 0.768 (1.03) J-**	**3.32 ± 1.60 (2.10)**	**4.33 ± 1.46 (0.817) J-**	**3.53 ± 1.38 (1.52)**
Thorium-228	HASL300	pCi/L	15	0.021 ± 0.081 (0.196) U	0.037 ± 0.100 (0.239) U	0.259 ± 0.218 (0.328) U	-0.029 ± 0.059 (0.185) U	0.024 ± 0.113 (0.288) U	0.104 ± 0.139 (0.269) U
Thorium-230	HASL300	pCi/L	15	0.036 ± 0.069 (0.049) U	0.013 ± 0.089 (0.147) U	0.033 ± 0.111 (0.243) U	0.015 ± 0.058 (0.041) U	-0.006 ± 0.092 (0.128) U	-0.006 ± 0.089 (0.123) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.068 (0.049) U	-0.006 ± 0.089 (0.124) U	0 ± 0.111 (0.074) U	0.031 ± 0.058 (0.041) U	0.020 ± 0.092 (0.128) U	0 ± 0.089 (0.067) U
Uranium-234	HASL300	pCi/L	NE	**0.268 ± 0.126 (0.075) J+**	0.008 ± 0.086 (0.209) U	**0.310 ± 0.199 (0.228)**	**0.965 ± 0.272 (0.108) J+**	**0.804 ± 0.347 (0.194)**	**0.857 ± 0.341 (0.149)**
Uranium-235	HASL300	pCi/L	NE	**0.196 ± 0.120 (0.048) J+**	**0.125 ± 0.124 (0.085)**	0.183 ± 0.167 (0.210) U	**0.163 ± 0.122 (0.155) J+**	0.075 ± 0.154 (0.213) U	0.043 ± 0.140 (0.138) U
Uranium-238	HASL300	pCi/L	NE	**0.114 ± 0.079 (0.037)**	0.060 ± 0.086 (0.142) U	**0.237 ± 0.163 (0.161)**	**0.405 ± 0.164 (0.108) J+**	**0.164 ± 0.146 (0.089)**	**0.440 ± 0.236 (0.149)**
Tritium	E906.0	pCi/L	20,000	130 ± 141 (233) U	62.5 ± 138 (236) U	137 ± 154 (256) U	17.5 ± 137 (239) U	-54.9 ± 131 (236) U	17.4 ± 120 (210) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS
			Sample Depth (ft BGS)	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7
			Sample Date	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.90 ± 0.726 (0.601)**	**2.67 ± 0.881 (0.467)**	**3.28 ± 0.968 (0.447)**	**15.2 ± 2.59 (0.566) J**	**15.6 ± 2.54 (0.717)**	**11.0 ± 1.97 (0.484)**
Radium-228	E904.0	pCi/L	5	0.333 ± 0.361 (0.757) UJ	0.868 ± 0.480 (0.883) U	0.485 ± 0.374 (0.736) U	**1.28 ± 0.605 (1.07) J+**	**2.98 ± 0.957 (1.27) J**	**2.47 ± 0.675 (0.740) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.23 ± 1.09 (1.36) J-**	**3.54 ± 1.36 (1.35)**	**3.77 ± 1.34 (1.18)**	**16.5 ± 3.20 (1.64) J**	**18.6 ± 3.50 (1.99) J**	**13.5 ± 2.65 (1.22) J-**
Thorium-228	HASL300	pCi/L	15	0.075 ± 0.121 (0.246) U	0.095 ± 0.148 (0.304) U	0.131 ± 0.166 (0.322) U	-0.004 ± 0.084 (0.218) U	0.145 ± 0.142 (0.220) U	0.184 ± 0.154 (0.255) U
Thorium-230	HASL300	pCi/L	15	-0.009 ± 0.062 (0.100) U	0.022 ± 0.102 (0.141) U	-0.012 ± 0.093 (0.154) U	-0.006 ± 0.060 (0.088) U	0.052 ± 0.093 (0.070) U	-0.001 ± 0.064 (0.129) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.062 (0.045) U	0 ± 0.102 (0.077) U	-0.006 ± 0.093 (0.130) U	0 ± 0.060 (0.043) U	-0.006 ± 0.093 (0.129) U	0 ± 0.064 (0.046) U
Uranium-234	HASL300	pCi/L	NE	**3.54 ± 0.688 (0.100) J+**	**3.35 ± 0.747 (0.152)**	**3.16 ± 0.730 (0.148)**	0.181 ± 0.143 (0.207) U	0.113 ± 0.134 (0.184) U	0.053 ± 0.114 (0.178) U
Uranium-235	HASL300	pCi/L	NE	**0.320 ± 0.164 (0.107) J+**	**0.092 ± 0.108 (0.081)**	-0.008 ± 0.117 (0.163) U	0.130 ± 0.123 (0.147) U	0.085 ± 0.174 (0.240) U	0.077 ± 0.148 (0.198) U
Uranium-238	HASL300	pCi/L	NE	**1.08 ± 0.296 (0.082)**	**1.25 ± 0.382 (0.062)**	**1.11 ± 0.369 (0.166)**	0.060 ± 0.085 (0.155) U	0.139 ± 0.147 (0.184) U	0.080 ± 0.114 (0.198) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.87 ± 0.975 (0.719)**	**2.03 ± 0.825 (0.807)**	**3.92 ± 1.15 (0.728)**	**13.4 ± 2.34 (0.433)**	**15.1 ± 2.61 (0.954)**	**14.7 ± 2.51 (0.751)**
Radium-228	E904.0	pCi/L	5	0.601 ± 0.462 (0.914) U	0.487 ± 0.305 (0.563) UJ	0.816 ± 0.473 (0.877) U	**3.23 ± 0.965 (1.26) J-**	**1.68 ± 0.552 (0.758)**	**1.68 ± 0.591 (0.908) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**3.47 ± 1.44 (1.63)**	**2.52 ± 1.13 (1.37) J-**	**4.74 ± 1.62 (1.61)**	**16.6 ± 3.31 (1.69) J-**	**16.8 ± 3.16 (1.71)**	**16.4 ± 3.10 (1.66) J-**
Thorium-228	HASL300	pCi/L	15	0.030 ± 0.092 (0.213) U	0.160 ± 0.148 (0.233) U	0.105 ± 0.160 (0.328) U	**0.145 ± 0.107 (0.118)**	0.040 ± 0.104 (0.247) U	0.071 ± 0.119 (0.242) U
Thorium-230	HASL300	pCi/L	15	0.039 ± 0.074 (0.053) U	-0.012 ± 0.087 (0.144) U	**0.385 ± 0.211 (0.157)**	0 ± 0.065 (0.047) U	0.022 ± 0.100 (0.218) U	0.031 ± 0.061 (0.123) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.074 (0.053) U	-0.006 ± 0.087 (0.121) U	-0.006 ± 0.095 (0.132) U	0 ± 0.065 (0.047) U	0 ± 0.100 (0.076) U	0 ± 0.061 (0.044) U
Uranium-234	HASL300	pCi/L	NE	**3.62 ± 0.719 (0.110) J+**	**3.11 ± 0.693 (0.127)**	**3.60 ± 0.806 (0.151)**	**0.458 ± 0.184 (0.130)**	0.061 ± 0.093 (0.181) U	0.015 ± 0.097 (0.226) U
Uranium-235	HASL300	pCi/L	NE	**0.342 ± 0.176 (0.058) J+**	0.108 ± 0.114 (0.144) U	0.092 ± 0.120 (0.166) U	**0.156 ± 0.116 (0.112)**	0.122 ± 0.130 (0.162) U	0 ± 0.126 (0.091) U
Uranium-238	HASL300	pCi/L	NE	**0.992 ± 0.290 (0.045) J+**	**1.27 ± 0.378 (0.142)**	**1.31 ± 0.411 (0.170)**	**0.176 ± 0.110 (0.104)**	0.063 ± 0.090 (0.148) U	0.068 ± 0.097 (0.141) U
Tritium	E906.0	pCi/L	20,000	62.5 ± 139 (239) U	-25.1 ± 133 (237) U	17.5 ± 120 (211) U	**5422 ± 769 (229)**	**6138 ± 863 (243)**	**5749 ± 813 (247)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS
			Sample Depth (ft BGS)	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5
			Sample Date	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.71 ± 0.756 (0.708) J-**	**1.35 ± 0.796 (0.987)**	**2.79 ± 1.05 (0.858)**	**1.36 ± 0.664 (0.709) J-**	**1.86 ± 0.846 (0.860)**	**2.14 ± 0.962 (1.10)**
Radium-228	E904.0	pCi/L	5	**0.996 ± 0.409 (0.637)**	**0.955 ± 0.470 (0.829)**	0.387 ± 0.370 (0.755) U	**1.34 ± 0.495 (0.736)**	**1.20 ± 0.417 (0.551)**	**0.979 ± 0.411 (0.649)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.71 ± 1.17 (1.35) J-**	**2.31 ± 1.27 (1.82)**	**3.18 ± 1.42 (1.61)**	**2.70 ± 1.16 (1.45) J-**	**3.06 ± 1.26 (1.41)**	**3.12 ± 1.37 (1.75)**
Thorium-228	HASL300	pCi/L	15	0.038 ± 0.116 (0.261) U	0.014 ± 0.119 (0.307) U	0.088 ± 0.139 (0.286) U	0.108 ± 0.129 (0.239) U	0.072 ± 0.106 (0.202) U	0.110 ± 0.148 (0.286) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.065 (0.047) U	**0.072 ± 0.087 (0.065)**	0.021 ± 0.093 (0.202) U	-0.007 ± 0.071 (0.104) U	-0.012 ± 0.091 (0.150) U	0.040 ± 0.095 (0.157) U
Thorium-232	HASL300	pCi/L	15	0.017 ± 0.065 (0.047) U	-0.012 ± 0.086 (0.143) U	-0.006 ± 0.093 (0.129) U	0 ± 0.071 (0.051) U	0.019 ± 0.091 (0.126) U	-0.007 ± 0.095 (0.136) U
Uranium-234	HASL300	pCi/L	NE	**1.33 ± 0.342 (0.115) J+**	**1.38 ± 0.399 (0.059)**	**0.977 ± 0.339 (0.145)**	**0.359 ± 0.161 (0.118) J+**	**0.265 ± 0.166 (0.157)**	**0.511 ± 0.252 (0.246)**
Uranium-235	HASL300	pCi/L	NE	**0.141 ± 0.113 (0.132) J+**	0.056 ± 0.102 (0.076) U	0.038 ± 0.115 (0.190) U	0.026 ± 0.077 (0.136) U	0.075 ± 0.111 (0.083) U	0.034 ± 0.121 (0.091) U
Uranium-238	HASL300	pCi/L	NE	**0.661 ± 0.221 (0.101)**	**0.552 ± 0.232 (0.126)**	**0.680 ± 0.274 (0.122)**	**0.177 ± 0.111 (0.104)**	0.112 ± 0.105 (0.117) U	**0.414 ± 0.226 (0.236)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.75 ± 0.668 (0.416)**	**2.45 ± 0.921 (0.221) J+**	**2.15 ± 0.887 (0.713)**	**2.49 ± 0.789 (0.398)**	**2.73 ± 0.961 (0.734) J+**	**1.99 ± 0.793 (0.726)**
Radium-228	E904.0	pCi/L	5	**0.954 ± 0.427 (0.696) J-**	**1.07 ± 0.501 (0.847) J+**	**1.21 ± 0.506 (0.828)**	**1.23 ± 0.424 (0.587) J-**	**1.17 ± 0.559 (0.977) J+**	0.398 ± 0.445 (0.930) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.70 ± 1.10 (1.11) J-**	**3.52 ± 1.42 (1.07) J+**	**3.36 ± 1.39 (1.54)**	**3.72 ± 1.21 (0.985) J-**	**3.90 ± 1.52 (1.71) J+**	**2.39 ± 1.24 (1.66)**
Thorium-228	HASL300	pCi/L	15	0.035 ± 0.119 (0.271) U	0.027 ± 0.143 (0.353) U	0.085 ± 0.170 (0.374) U	0.080 ± 0.100 (0.181) U	0.114 ± 0.142 (0.269) U	-0.015 ± 0.140 (0.398) U
Thorium-230	HASL300	pCi/L	15	-0.020 ± 0.069 (0.139) U	-0.012 ± 0.089 (0.146) U	-0.013 ± 0.094 (0.156) U	0 ± 0.066 (0.048) U	-0.018 ± 0.089 (0.165) U	-0.015 ± 0.112 (0.185) U
Thorium-232	HASL300	pCi/L	15	-0.007 ± 0.069 (0.101) U	-0.006 ± 0.089 (0.123) U	0 ± 0.094 (0.071) U	0 ± 0.066 (0.048) U	0 ± 0.089 (0.067) U	-0.007 ± 0.112 (0.155) U
Uranium-234	HASL300	pCi/L	NE	**1.03 ± 0.308 (0.144) J+**	**1.29 ± 0.387 (0.150)**	**1.09 ± 0.371 (0.185)**	**0.423 ± 0.171 (0.128) J+**	**0.241 ± 0.155 (0.144)**	**0.494 ± 0.235 (0.179)**
Uranium-235	HASL300	pCi/L	NE	**0.204 ± 0.137 (0.061) J+**	0.083 ± 0.104 (0.143) U	0.066 ± 0.120 (0.090) U	**0.177 ± 0.116 (0.051) J+**	0.113 ± 0.120 (0.150) U	0.073 ± 0.116 (0.214) U
Uranium-238	HASL300	pCi/L	NE	**0.729 ± 0.246 (0.047)**	**0.696 ± 0.265 (0.109)**	**0.636 ± 0.267 (0.069)**	**0.121 ± 0.084 (0.039)**	0.078 ± 0.093 (0.149) U	**0.285 ± 0.174 (0.144)**
Tritium	E906.0	pCi/L	20,000	-27.4 ± 130 (232) U	0 ± 124 (219) U	-257 ± 154 (285) UJ	-45.1 ± 130 (234) U	-19.9 ± 121 (217) U	-219 ± 155 (285) UJ

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS
			Sample Depth (ft BGS)	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17
			Sample Date	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021	02-24-2021
			Sample Type	N	FD	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**4.01 ± 1.08 (0.540) J**	**6.87 ± 1.54 (0.477) J**	**5.34 ± 1.29 (0.689) J-**	**6.12 ± 1.50 (0.977) J-**	**5.43 ± 1.30 (0.548)**	0.141 ± 0.380 (0.705) U
Radium-228	E904.0	pCi/L	5	**3.06 ± 0.839 (0.951) J+**	**2.09 ± 0.701 (1.04) J+**	**4.31 ± 0.984 (0.659) J+**	**3.81 ± 0.917 (0.747) J+**	**2.97 ± 0.755 (0.704)**	0.568 ± 0.342 (0.625) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**7.07 ± 1.92 (1.49) J**	**8.96 ± 2.24 (1.52) J**	**9.65 ± 2.27 (1.35) J**	**9.93 ± 2.42 (1.72) J**	**8.40 ± 2.06 (1.25)**	0.709 ± 0.722 (1.33) U
Thorium-228	HASL300	pCi/L	15	0.039 ± 0.085 (0.185) U	-0.008 ± 0.109 (0.273) U	0.150 ± 0.178 (0.340) U	-0.042 ± 0.113 (0.343) U	0.086 ± 0.145 (0.303) U	**0.111 ± 0.090 (0.050)**
Thorium-230	HASL300	pCi/L	15	0.026 ± 0.059 (0.087) U	0.005 ± 0.062 (0.109) U	-0.012 ± 0.093 (0.153) U	0.001 ± 0.087 (0.175) U	0.007 ± 0.064 (0.110) U	0 ± 0.068 (0.049) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.059 (0.087) U	0 ± 0.062 (0.045) U	0 ± 0.093 (0.070) U	0.013 ± 0.087 (0.143) U	0.009 ± 0.064 (0.104) U	-0.007 ± 0.068 (0.100) U
Uranium-234	HASL300	pCi/L	NE	**0.308 ± 0.150 (0.138) J+**	**0.572 ± 0.214 (0.137) J+**	0.086 ± 0.106 (0.175) U	0.074 ± 0.107 (0.207) U	0.158 ± 0.147 (0.199) U	**0.602 ± 0.239 (0.135) J+**
Uranium-235	HASL300	pCi/L	NE	**0.202 ± 0.129 (0.055) J+**	**0.222 ± 0.146 (0.144) J+**	0.034 ± 0.124 (0.093) U	-0.016 ± 0.117 (0.194) U	0.076 ± 0.138 (0.152) U	0.049 ± 0.100 (0.190) U
Uranium-238	HASL300	pCi/L	NE	**0.103 ± 0.082 (0.085)**	**0.108 ± 0.085 (0.045)**	0.020 ± 0.095 (0.131) U	0.033 ± 0.091 (0.218) U	0.019 ± 0.105 (0.165) U	**0.229 ± 0.148 (0.161)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**6.75 ± 1.56 (0.719)**	**6.67 ± 1.62 (1.03)**	**6.53 ± 1.45 (0.445) J+**	**6.38 ± 1.52 (1.09) J+**	**7.16 ± 1.72 (0.598)**	0 ± 0.316 (0.657) U
Radium-228	E904.0	pCi/L	5	**3.81 ± 1.21 (1.73) J-**	**2.03 ± 0.931 (1.63) J-**	**3.28 ± 0.790 (0.676)**	**3.03 ± 0.840 (0.885)**	**1.90 ± 0.629 (0.842)**	0.719 ± 0.546 (1.08) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**10.6 ± 2.77 (2.45) J-**	**8.70 ± 2.55 (2.66) J-**	**9.81 ± 2.24 (1.12) J+**	**9.41 ± 2.36 (1.98) J+**	**9.06 ± 2.35 (1.44)**	0.719 ± 0.862 (1.74) U
Thorium-228	HASL300	pCi/L	15	0.072 ± 0.099 (0.188) U	0.101 ± 0.106 (0.174) U	0.283 ± 0.205 (0.317) U	**0.314 ± 0.197 (0.218)**	0.160 ± 0.127 (0.177) U	**0.203 ± 0.125 (0.134)**
Thorium-230	HASL300	pCi/L	15	0.005 ± 0.063 (0.111) U	-0.027 ± 0.072 (0.158) U	0.041 ± 0.083 (0.115) U	0.019 ± 0.092 (0.127) U	0.002 ± 0.070 (0.136) U	0.029 ± 0.060 (0.088) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.063 (0.045) U	0.012 ± 0.072 (0.105) U	-0.017 ± 0.083 (0.154) U	0 ± 0.092 (0.069) U	0 ± 0.070 (0.052) U	0.010 ± 0.060 (0.088) U
Uranium-234	HASL300	pCi/L	NE	**0.254 ± 0.126 (0.079) J+**	**0.192 ± 0.120 (0.113) J+**	0.141 ± 0.131 (0.190) U	**0.186 ± 0.136 (0.119)**	**0.335 ± 0.215 (0.196) J+**	**0.305 ± 0.167 (0.174) J+**
Uranium-235	HASL300	pCi/L	NE	**0.122 ± 0.099 (0.104) J+**	**0.133 ± 0.113 (0.122) J+**	0.029 ± 0.114 (0.159) U	**0.125 ± 0.124 (0.085)**	0.118 ± 0.148 (0.196) U	**0.099 ± 0.098 (0.067) J+**
Uranium-238	HASL300	pCi/L	NE	**0.138 ± 0.092 (0.079) J+**	0.090 ± 0.081 (0.094) U	0.058 ± 0.088 (0.154) U	0.060 ± 0.087 (0.142) U	0.043 ± 0.112 (0.087) U	**0.157 ± 0.116 (0.126)**
Tritium	E906.0	pCi/L	20,000	**14190 ± 1895 (230)**	**13640 ± 1824 (224)**	**14410 ± 1924 (241)**	**14980 ± 1998 (242)**	**15510 ± 2086 (263)**	92.2 ± 138 (232) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD
			Sample Depth (ft BGS)	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245
			Sample Date	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021
			Sample Type	N	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	-0.0597 ± 0.273 (0.643) U	-0.0724 ± 0.650 (1.31) U	**1.55 ± 0.950 (1.17)**	**1.54 ± 0.684 (0.684)**	**2.34 ± 0.867 (0.786)**	**1.84 ± 0.744 (0.588)**
Radium-228	E904.0	pCi/L	5	0.304 ± 0.485 (1.05) U	**1.02 ± 0.481 (0.831)**	0.610 ± 0.398 (0.750) U	**1.07 ± 0.457 (0.732) J**	**0.891 ± 0.399 (0.645)**	**1.30 ± 0.482 (0.710)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.304 ± 0.758 (1.69) U	1.02 ± 1.13 (2.14) U	**2.16 ± 1.35 (1.92)**	**2.61 ± 1.14 (1.42) J**	**3.23 ± 1.27 (1.43)**	**3.14 ± 1.23 (1.30)**
Thorium-228	HASL300	pCi/L	15	-0.004 ± 0.090 (0.239) U	-0.011 ± 0.109 (0.310) U	0.018 ± 0.084 (0.202) U	0.127 ± 0.137 (0.236) U	**0.188 ± 0.138 (0.186) J+**	-0.032 ± 0.117 (0.311) U
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.088 (0.145) U	-0.005 ± 0.087 (0.189) U	-0.012 ± 0.065 (0.114) U	-0.018 ± 0.088 (0.163) U	0 ± 0.071 (0.052) U	-0.011 ± 0.065 (0.111) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.088 (0.066) U	0.024 ± 0.087 (0.066) U	0 ± 0.065 (0.051) U	-0.006 ± 0.088 (0.122) U	0 ± 0.071 (0.052) U	-0.005 ± 0.065 (0.093) U
Uranium-234	HASL300	pCi/L	NE	**0.414 ± 0.214 (0.166)**	**0.373 ± 0.203 (0.180)**	**0.662 ± 0.238 (0.146) J+**	0.073 ± 0.090 (0.148) U	0.162 ± 0.157 (0.193) U	0.005 ± 0.129 (0.258) U
Uranium-235	HASL300	pCi/L	NE	0.065 ± 0.117 (0.088) U	0.032 ± 0.116 (0.088) U	**0.276 ± 0.161 (0.062) J+**	**0.116 ± 0.115 (0.079)**	-0.008 ± 0.160 (0.214) U	0 ± 0.168 (0.130) U
Uranium-238	HASL300	pCi/L	NE	0.119 ± 0.111 (0.124) U	**0.262 ± 0.175 (0.205)**	**0.275 ± 0.145 (0.097)**	0.062 ± 0.081 (0.111) U	0.134 ± 0.139 (0.164) U	0.030 ± 0.129 (0.172) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.175 ± 0.343 (0.626) U	**0.617 ± 0.452 (0.505)**	**1.83 ± 0.652 (0.505)**	**1.26 ± 0.783 (1.05)**	**2.31 ± 0.898 (0.224)**	**2.76 ± 0.981 (0.565)**
Radium-228	E904.0	pCi/L	5	0.842 ± 0.469 (0.864) U	0.428 ± 0.378 (0.761) U	**1.67 ± 0.623 (0.959)**	0.597 ± 0.428 (0.844) U	**0.884 ± 0.378 (0.583)**	**1.10 ± 0.441 (0.677)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.02 ± 0.812 (1.49) U	1.05 ± 0.830 (1.27) U	**3.50 ± 1.28 (1.46)**	1.86 ± 1.21 (1.89) U	**3.19 ± 1.28 (0.807)**	**3.86 ± 1.42 (1.24)**
Thorium-228	HASL300	pCi/L	15	0.060 ± 0.123 (0.271) U	0.120 ± 0.170 (0.345) U	0.091 ± 0.098 (0.161) U	0.127 ± 0.135 (0.222) U	0.112 ± 0.109 (0.174) U	0.229 ± 0.173 (0.275) U
Thorium-230	HASL300	pCi/L	15	0.007 ± 0.084 (0.155) U	0.063 ± 0.091 (0.149) U	-0.006 ± 0.065 (0.096) U	-0.006 ± 0.091 (0.127) U	0.002 ± 0.069 (0.134) U	0.005 ± 0.069 (0.121) U
Thorium-232	HASL300	pCi/L	15	-0.011 ± 0.084 (0.138) U	0.019 ± 0.090 (0.125) U	0 ± 0.065 (0.047) U	0 ± 0.091 (0.069) U	0 ± 0.069 (0.051) U	0 ± 0.069 (0.049) U
Uranium-234	HASL300	pCi/L	NE	**0.298 ± 0.168 (0.142)**	**0.241 ± 0.171 (0.168) J+**	**0.217 ± 0.122 (0.113) J+**	0.096 ± 0.101 (0.155) U	0.048 ± 0.146 (0.293) U	0.172 ± 0.181 (0.268) U
Uranium-235	HASL300	pCi/L	NE	0.056 ± 0.101 (0.076) U	0.037 ± 0.133 (0.100) U	0.068 ± 0.081 (0.130) U	0.122 ± 0.120 (0.139) U	0.109 ± 0.192 (0.148) U	0.035 ± 0.184 (0.246) U
Uranium-238	HASL300	pCi/L	NE	0.134 ± 0.114 (0.142) U	**0.272 ± 0.181 (0.156)**	**0.169 ± 0.106 (0.100) J+**	0.047 ± 0.077 (0.107) U	0.118 ± 0.148 (0.195) U	**0.201 ± 0.180 (0.109) J+**
Tritium	E906.0	pCi/L	20,000	17.5 ± 132 (232) U	-179 ± 156 (285) UJ	**662 ± 195 (249)**	**725 ± 198 (242)**	**872 ± 224 (263)**	**711 ± 206 (263)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS
			Sample Depth (ft BGS)	134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3
			Sample Date	02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.01 ± 0.533 (0.571)**	**1.40 ± 0.770 (0.919)**	1.03 ± 0.744 (1.04) U	**1.47 ± 0.708 (0.651)**	**1.61 ± 0.737 (0.650)**	**1.71 ± 0.729 (0.707)**
Radium-228	E904.0	pCi/L	5	0.395 ± 0.389 (0.807) U	**1.34 ± 0.537 (0.844)**	**1.03 ± 0.461 (0.786)**	**0.775 ± 0.428 (0.760)**	**1.14 ± 0.549 (0.971)**	**1.23 ± 0.605 (1.10) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.41 ± 0.922 (1.38)**	**2.74 ± 1.31 (1.76)**	**2.06 ± 1.21 (1.83)**	**2.25 ± 1.14 (1.41)**	**2.75 ± 1.29 (1.62)**	**2.94 ± 1.33 (1.81) J-**
Thorium-228	HASL300	pCi/L	15	0.063 ± 0.074 (0.122) U	0.117 ± 0.116 (0.164) U	-0.015 ± 0.138 (0.393) U	0.014 ± 0.065 (0.129) U	-0.078 ± 0.126 (0.401) UJ	0.133 ± 0.142 (0.257) U
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.060 (0.088) U	0.018 ± 0.087 (0.120) U	0.016 ± 0.110 (0.182) U	-0.024 ± 0.063 (0.139) U	0.020 ± 0.094 (0.130) U	-0.019 ± 0.065 (0.130) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	-0.006 ± 0.087 (0.120) U	0.023 ± 0.111 (0.153) U	0 ± 0.063 (0.046) U	0 ± 0.094 (0.071) U	0 ± 0.065 (0.047) U
Uranium-234	HASL300	pCi/L	NE	**1.02 ± 0.292 (0.043) J+**	**1.21 ± 0.395 (0.170)**	**0.857 ± 0.322 (0.185)**	**1.26 ± 0.360 (0.106) J+**	**0.639 ± 0.265 (0.172)**	**0.873 ± 0.361 (0.180)**
Uranium-235	HASL300	pCi/L	NE	**0.083 ± 0.082 (0.056) J+**	0.049 ± 0.120 (0.091) U	0.076 ± 0.120 (0.222) U	**0.190 ± 0.143 (0.139) J+**	0.085 ± 0.112 (0.154) U	0.078 ± 0.151 (0.200) U
Uranium-238	HASL300	pCi/L	NE	**0.792 ± 0.249 (0.043)**	**0.592 ± 0.259 (0.128)**	**0.499 ± 0.237 (0.149)**	**0.536 ± 0.217 (0.106)**	**0.414 ± 0.207 (0.140)**	**0.409 ± 0.241 (0.201)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.15 ± 0.604 (0.595)**	**1.55 ± 0.669 (0.617) J+**	**1.05 ± 0.619 (0.744)**	**2.76 ± 0.983 (1.02)**	**1.88 ± 0.811 (0.921)**	**2.16 ± 0.882 (0.950)**
Radium-228	E904.0	pCi/L	5	0.689 ± 0.402 (0.737) U	0.711 ± 0.400 (0.733) U	0.839 ± 0.495 (0.931) U	**0.901 ± 0.426 (0.736)**	**1.11 ± 0.562 (1.01)**	**1.11 ± 0.583 (1.06) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.84 ± 1.01 (1.33)**	**2.26 ± 1.07 (1.35) J+**	**1.89 ± 1.11 (1.68)**	**3.66 ± 1.41 (1.76)**	**2.99 ± 1.37 (1.93)**	**3.27 ± 1.47 (2.01) J-**
Thorium-228	HASL300	pCi/L	15	0.056 ± 0.070 (0.115) U	0.073 ± 0.147 (0.326) U	0.023 ± 0.126 (0.319) U	-0.033 ± 0.082 (0.236) U	0.145 ± 0.166 (0.309) U	0.121 ± 0.135 (0.252) U
Thorium-230	HASL300	pCi/L	15	0.034 ± 0.064 (0.046) U	-0.014 ± 0.089 (0.153) U	-0.011 ± 0.092 (0.146) U	0.005 ± 0.062 (0.109) U	-0.018 ± 0.089 (0.165) U	-0.017 ± 0.060 (0.119) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.064 (0.046) U	0.013 ± 0.089 (0.148) U	-0.005 ± 0.092 (0.124) U	0 ± 0.062 (0.044) U	-0.012 ± 0.089 (0.147) U	0.016 ± 0.060 (0.043) U
Uranium-234	HASL300	pCi/L	NE	**1.13 ± 0.324 (0.131) J+**	**0.921 ± 0.327 (0.154)**	**0.606 ± 0.262 (0.224) J+**	**1.23 ± 0.322 (0.041) J+**	**1.06 ± 0.345 (0.133) J+**	**0.828 ± 0.353 (0.218) J+**
Uranium-235	HASL300	pCi/L	NE	0.097 ± 0.103 (0.151) U	0.013 ± 0.113 (0.186) U	0.031 ± 0.110 (0.083) U	**0.208 ± 0.131 (0.107) J+**	0.029 ± 0.106 (0.080) U	0.121 ± 0.151 (0.200) U
Uranium-238	HASL300	pCi/L	NE	**0.688 ± 0.239 (0.096)**	**0.507 ± 0.230 (0.065)**	**0.401 ± 0.211 (0.215)**	**0.453 ± 0.178 (0.113) J+**	**0.551 ± 0.236 (0.133)**	**0.491 ± 0.260 (0.089)**
Tritium	E906.0	pCi/L	20,000	60.1 ± 133 (228) U	42.5 ± 134 (232) U	-187 ± 156 (285) UJ	**532 ± 175 (232)**	**422 ± 170 (243)**	**436 ± 173 (248)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD
			Sample Depth (ft BGS)	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59
			Sample Date	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.154 ± 0.352 (0.566) U	0.554 ± 0.501 (0.739) U	0.259 ± 0.360 (0.602) U	**0.764 ± 0.568 (0.747) J**	**0.806 ± 0.510 (0.576)**	**1.18 ± 0.738 (0.982)**
Radium-228	E904.0	pCi/L	5	0.380 ± 0.358 (0.729) U	0.687 ± 0.410 (0.763) U	**0.822 ± 0.369 (0.592) J+**	0.553 ± 0.407 (0.791) U	0.618 ± 0.408 (0.783) U	**1.13 ± 0.417 (0.599) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.534 ± 0.710 (1.30) U	1.24 ± 0.911 (1.50) U	1.08 ± 0.729 (1.19) U	1.32 ± 0.975 (1.54) UJ	**1.42 ± 0.918 (1.36)**	**2.31 ± 1.16 (1.58) J+**
Thorium-228	HASL300	pCi/L	15	0.007 ± 0.096 (0.233) U	0.076 ± 0.157 (0.347) U	0.027 ± 0.093 (0.213) U	0.036 ± 0.089 (0.199) U	0.048 ± 0.138 (0.328) U	0.109 ± 0.133 (0.251) U
Thorium-230	HASL300	pCi/L	15	-0.008 ± 0.059 (0.095) U	-0.006 ± 0.087 (0.121) U	0 ± 0.058 (0.042) U	0.033 ± 0.062 (0.044) U	0.023 ± 0.107 (0.149) U	-0.012 ± 0.065 (0.115) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.059 (0.042) U	0 ± 0.087 (0.065) U	-0.010 ± 0.058 (0.100) U	0 ± 0.062 (0.044) U	0 ± 0.107 (0.081) U	-0.012 ± 0.065 (0.115) U
Uranium-234	HASL300	pCi/L	NE	**1.77 ± 0.443 (0.121) J+**	**1.58 ± 0.448 (0.148)**	**1.28 ± 0.503 (0.296)**	**0.161 ± 0.100 (0.094) J+**	0.122 ± 0.121 (0.160) U	**0.221 ± 0.180 (0.100)**
Uranium-235	HASL300	pCi/L	NE	**0.286 ± 0.167 (0.065) J+**	0.166 ± 0.148 (0.179) U	-0.010 ± 0.189 (0.252) U	0.054 ± 0.070 (0.076) U	0.004 ± 0.127 (0.095) U	0.135 ± 0.170 (0.225) U
Uranium-238	HASL300	pCi/L	NE	**0.605 ± 0.225 (0.049)**	**0.393 ± 0.196 (0.063)**	**0.600 ± 0.340 (0.346)**	0.051 ± 0.057 (0.078) U	**0.081 ± 0.098 (0.073)**	0.151 ± 0.166 (0.262) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**0.459 ± 0.336 (0.375)**	0.640 ± 0.566 (0.840) U	0.0668 ± 0.305 (0.620) U	**1.08 ± 0.438 (0.293) J**	**1.95 ± 0.857 (0.917) J+**	**0.745 ± 0.486 (0.498)**
Radium-228	E904.0	pCi/L	5	**0.681 ± 0.368 (0.653)**	0.620 ± 0.462 (0.912) U	0.598 ± 0.378 (0.706) U	**0.802 ± 0.414 (0.710) J-**	**1.03 ± 0.480 (0.816) J+**	-0.158 ± 0.538 (1.25) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.14 ± 0.704 (1.03)**	1.26 ± 1.03 (1.75) U	0.665 ± 0.683 (1.33) U	**1.88 ± 0.852 (1.00) J**	**2.98 ± 1.34 (1.73) J+**	0.745 ± 1.02 (1.75) U
Thorium-228	HASL300	pCi/L	15	0.049 ± 0.090 (0.189) U	0.030 ± 0.092 (0.227) U	0.015 ± 0.090 (0.216) U	0.025 ± 0.108 (0.250) U	0.055 ± 0.088 (0.163) U	0.158 ± 0.153 (0.267) U
Thorium-230	HASL300	pCi/L	15	-0.018 ± 0.063 (0.126) U	0.045 ± 0.089 (0.118) U	0.016 ± 0.059 (0.043) U	0.008 ± 0.063 (0.102) U	0 ± 0.086 (0.065) U	0.024 ± 0.069 (0.122) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.063 (0.045) U	0 ± 0.089 (0.067) U	-0.010 ± 0.059 (0.102) U	0 ± 0.063 (0.045) U	0.024 ± 0.086 (0.065) U	-0.013 ± 0.069 (0.122) U
Uranium-234	HASL300	pCi/L	NE	**1.74 ± 0.436 (0.137) J+**	**1.78 ± 0.498 (0.147)**	**1.42 ± 0.484 (0.237) J+**	**0.173 ± 0.104 (0.094) J+**	**0.159 ± 0.128 (0.152)**	**0.098 ± 0.116 (0.089) J+**
Uranium-235	HASL300	pCi/L	NE	0.132 ± 0.129 (0.197) U	0.065 ± 0.117 (0.088) U	0.165 ± 0.172 (0.202) U	0.049 ± 0.069 (0.101) U	**0.119 ± 0.118 (0.081)**	0.002 ± 0.150 (0.200) U
Uranium-238	HASL300	pCi/L	NE	**0.534 ± 0.213 (0.137) J+**	**0.392 ± 0.204 (0.124)**	**0.414 ± 0.253 (0.277)**	**0.056 ± 0.056 (0.038) J+**	0.017 ± 0.082 (0.114) U	0.036 ± 0.115 (0.233) U
Tritium	E906.0	pCi/L	20,000	-70.0 ± 139 (251) U	62.6 ± 128 (219) U	-171 ± 143 (264) U	**662 ± 196 (251)**	**560 ± 177 (230)**	74.8 ± 155 (265) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS
			Sample Depth (ft BGS)	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4
			Sample Date	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	11.3 ± 2.27 (0.901)	8.64 ± 1.73 (0.162)	9.53 ± 2.01 (0.795)	10.1 ± 1.96 (0.457) J-	8.33 ± 1.69 (0.685)	7.14 ± 1.58 (0.793)
Radium-228	E904.0	pCi/L	5	1.72 ± 0.558 (0.727)	1.57 ± 0.505 (0.632)	2.31 ± 0.609 (0.578) J+	4.06 ± 1.09 (1.10) J	5.78 ± 1.31 (0.864)	4.48 ± 1.02 (0.741)
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	13.0 ± 2.83 (1.63)	10.2 ± 2.24 (0.794)	11.8 ± 2.62 (1.37) J+	14.2 ± 3.05 (1.56) J	14.1 ± 3.00 (1.55)	11.6 ± 2.60 (1.53)
Thorium-228	HASL300	pCi/L	15	-0.002 ± 0.076 (0.201) U	0.071 ± 0.146 (0.323) U	0.137 ± 0.104 (0.133) J+	0.254 ± 0.162 (0.233)	0.245 ± 0.192 (0.299) U	0.154 ± 0.160 (0.296) U
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.061 (0.108) U	-0.014 ± 0.089 (0.153) U	0.012 ± 0.059 (0.075) U	0.037 ± 0.062 (0.109) U	0.007 ± 0.086 (0.160) U	-0.011 ± 0.068 (0.117) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.061 (0.090) U	-0.012 ± 0.089 (0.147) U	0 ± 0.059 (0.042) U	0.010 ± 0.062 (0.090) U	-0.012 ± 0.086 (0.142) U	0 ± 0.068 (0.050) U
Uranium-234	HASL300	pCi/L	NE	0.328 ± 0.150 (0.113) J+	0.232 ± 0.153 (0.155)	0.105 ± 0.132 (0.175) U	0.572 ± 0.210 (0.046) J+	0.198 ± 0.159 (0.188)	0.089 ± 0.165 (0.344) U
Uranium-235	HASL300	pCi/L	NE	0.047 ± 0.081 (0.163) U	0.023 ± 0.107 (0.148) U	0.049 ± 0.171 (0.132) U	0.068 ± 0.083 (0.121) U	0.111 ± 0.134 (0.100)	0 ± 0.192 (0.138) U
Uranium-238	HASL300	pCi/L	NE	0.089 ± 0.081 (0.113) U	0.290 ± 0.167 (0.113)	0.261 ± 0.198 (0.101)	0.139 ± 0.105 (0.127)	0.135 ± 0.126 (0.141) U	0.142 ± 0.157 (0.215) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	10.2 ± 1.88 (0.494)	9.61 ± 2.00 (0.843) J+	10.8 ± 2.07 (0.599)	11.0 ± 2.13 (0.852)	9.94 ± 1.86 (0.404)	14.4 ± 2.71 (0.599)
Radium-228	E904.0	pCi/L	5	0.728 ± 0.411 (0.763) U	1.26 ± 0.663 (1.19) J+	1.74 ± 0.611 (0.931)	3.46 ± 0.890 (0.926)	5.24 ± 1.21 (1.00)	3.93 ± 0.902 (0.624)
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	10.9 ± 2.29 (1.26)	10.9 ± 2.66 (2.03) J+	12.5 ± 2.68 (1.53)	14.5 ± 3.02 (1.78)	15.2 ± 3.07 (1.40)	18.3 ± 3.61 (1.22)
Thorium-228	HASL300	pCi/L	15	0.070 ± 0.075 (0.112) U	-0.003 ± 0.087 (0.229) U	0.159 ± 0.114 (0.138)	0.180 ± 0.179 (0.306) U	0.185 ± 0.199 (0.355) U	0.346 ± 0.184 (0.238)
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.061 (0.108) U	-0.017 ± 0.085 (0.158) U	0.013 ± 0.061 (0.078) U	0.007 ± 0.094 (0.166) U	-0.007 ± 0.112 (0.155) U	-0.001 ± 0.060 (0.121) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.061 (0.044) U	0 ± 0.085 (0.064) U	0.016 ± 0.061 (0.044) U	-0.009 ± 0.094 (0.137) U	0 ± 0.112 (0.084) U	0 ± 0.060 (0.043) U
Uranium-234	HASL300	pCi/L	NE	0.415 ± 0.166 (0.097) J+	0.180 ± 0.132 (0.145)	0.225 ± 0.175 (0.154)	0.428 ± 0.189 (0.147) J+	0.399 ± 0.210 (0.189) J+	0.478 ± 0.257 (0.208) J+
Uranium-235	HASL300	pCi/L	NE	0.202 ± 0.128 (0.104) J+	0.085 ± 0.103 (0.077)	0.131 ± 0.152 (0.117)	0.030 ± 0.087 (0.154) U	0.119 ± 0.126 (0.158) U	0.038 ± 0.143 (0.158) U
Uranium-238	HASL300	pCi/L	NE	0.169 ± 0.102 (0.080) J+	0.223 ± 0.146 (0.145)	0.229 ± 0.174 (0.089)	0.289 ± 0.151 (0.118) J+	0.192 ± 0.143 (0.154)	0.114 ± 0.125 (0.172) U
Tritium	E906.0	pCi/L	20,000	1427 ± 278 (251)	1290 ± 252 (219)	975 ± 233 (265)	2346 ± 382 (230)	2771 ± 436 (237)	3334 ± 504 (226)

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS
			Sample Depth (ft BGS)	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96
			Sample Date	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.453 ± 0.589 (0.986) U	**0.876 ± 0.581 (0.678)**	**1.45 ± 0.679 (0.758)**	0.186 ± 0.341 (0.609) U	0.154 ± 0.428 (0.831) U	0.387 ± 0.328 (0.407) U
Radium-228	E904.0	pCi/L	5	0.445 ± 0.404 (0.829) U	0.664 ± 0.401 (0.745) U	0.408 ± 0.365 (0.743) U	0.379 ± 0.350 (0.703) U	0.526 ± 0.357 (0.684) U	0.416 ± 0.629 (1.36) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.898 ± 0.993 (1.82) U	**1.54 ± 0.982 (1.42)**	**1.86 ± 1.04 (1.50)**	0.565 ± 0.691 (1.31) U	0.680 ± 0.785 (1.52) U	0.803 ± 0.957 (1.77) U
Thorium-228	HASL300	pCi/L	15	0.053 ± 0.078 (0.151) U	0.039 ± 0.133 (0.321) U	**0.478 ± 0.251 (0.287) J+**	0.173 ± 0.136 (0.213) U	-0.002 ± 0.099 (0.283) U	0.297 ± 0.222 (0.353) U
Thorium-230	HASL300	pCi/L	15	0.009 ± 0.059 (0.130) U	-0.024 ± 0.090 (0.181) U	-0.012 ± 0.090 (0.149) U	-0.006 ± 0.060 (0.088) U	0.007 ± 0.092 (0.170) U	-0.006 ± 0.091 (0.127) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.059 (0.086) U	-0.012 ± 0.090 (0.148) U	-0.006 ± 0.090 (0.126) U	-0.006 ± 0.060 (0.088) U	-0.006 ± 0.092 (0.127) U	-0.005 ± 0.091 (0.121) U
Uranium-234	HASL300	pCi/L	NE	**0.431 ± 0.184 (0.049) J+**	**0.260 ± 0.162 (0.147)**	**0.250 ± 0.159 (0.139)**	**5.77 ± 1.09 (0.109) J+**	**6.10 ± 1.22 (0.196)**	**5.82 ± 1.10 (0.123)**
Uranium-235	HASL300	pCi/L	NE	**0.094 ± 0.093 (0.063) J+**	0.045 ± 0.108 (0.177) U	0.023 ± 0.110 (0.152) U	**0.279 ± 0.176 (0.143) J+**	**0.131 ± 0.130 (0.089)**	**0.219 ± 0.155 (0.073)**
Uranium-238	HASL300	pCi/L	NE	**0.220 ± 0.132 (0.119)**	**0.229 ± 0.146 (0.062)**	**0.164 ± 0.124 (0.063)**	**1.79 ± 0.460 (0.143)**	**2.00 ± 0.539 (0.125)**	**2.17 ± 0.527 (0.104)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.31 ± 0.715 (0.783)**	**1.31 ± 0.639 (0.509) J+**	**1.77 ± 0.656 (0.396)**	0.245 ± 0.417 (0.736) U	0.401 ± 0.526 (0.877) U	0.369 ± 0.316 (0.429) U
Radium-228	E904.0	pCi/L	5	**0.841 ± 0.460 (0.833)**	0.495 ± 0.440 (0.898) U	0.697 ± 0.513 (1.00) U	0.698 ± 0.400 (0.728) U	-0.0988 ± 0.472 (1.10) U	**1.17 ± 0.596 (1.05)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.15 ± 1.18 (1.62)**	**1.81 ± 1.08 (1.41) J+**	**2.47 ± 1.17 (1.40)**	0.943 ± 0.817 (1.46) U	0.401 ± 0.998 (1.98) U	**1.54 ± 0.912 (1.48)**
Thorium-228	HASL300	pCi/L	15	0.066 ± 0.089 (0.165) U	0.051 ± 0.122 (0.280) U	**0.461 ± 0.245 (0.277) J+**	**0.167 ± 0.109 (0.047) J+**	0.078 ± 0.118 (0.238) U	0.181 ± 0.166 (0.271) U
Thorium-230	HASL300	pCi/L	15	**0.051 ± 0.065 (0.046)**	0.013 ± 0.091 (0.150) U	0.020 ± 0.090 (0.196) U	0 ± 0.064 (0.125) U	-0.016 ± 0.082 (0.151) U	-0.012 ± 0.090 (0.148) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.064 (0.094) U	-0.012 ± 0.091 (0.150) U	-0.006 ± 0.090 (0.126) U	0.005 ± 0.064 (0.114) U	0 ± 0.082 (0.062) U	-0.007 ± 0.090 (0.128) U
Uranium-234	HASL300	pCi/L	NE	**0.411 ± 0.178 (0.096) J+**	**0.249 ± 0.152 (0.061)**	**0.236 ± 0.151 (0.133) J+**	**5.37 ± 1.05 (0.138) J+**	**5.70 ± 1.11 (0.156)**	**6.53 ± 1.34 (0.181)**
Uranium-235	HASL300	pCi/L	NE	0.037 ± 0.086 (0.125) U	0 ± 0.106 (0.080) U	**0.088 ± 0.106 (0.079) J+**	**0.081 ± 0.102 (0.073) J+**	**0.112 ± 0.111 (0.076)**	**0.239 ± 0.195 (0.108)**
Uranium-238	HASL300	pCi/L	NE	**0.261 ± 0.138 (0.047) J+**	**0.148 ± 0.120 (0.132)**	**0.306 ± 0.171 (0.124)**	**2.29 ± 0.552 (0.114) J+**	**1.95 ± 0.500 (0.107)**	**2.66 ± 0.694 (0.083)**
Tritium	E906.0	pCi/L	20,000	29.9 ± 131 (227) U	70.3 ± 129 (219) U	-45.0 ± 132 (236) U	**373 ± 157 (226)**	75.3 ± 129 (219) U	-87.6 ± 130 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS
			Sample Depth (ft BGS)	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5
			Sample Date	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021
			Sample Type	N	N	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.967 ± 0.569 (0.683)**	**0.947 ± 0.508 (0.183)**	**1.31 ± 0.604 (0.458)**	**15.1 ± 2.76 (0.815) J**	**11.0 ± 2.20 (0.786) J**	**13.8 ± 2.38 (0.831)**
Radium-228	E904.0	pCi/L	5	0.571 ± 0.439 (0.867) U	**1.28 ± 0.476 (0.718)**	0.356 ± 0.587 (1.28) U	**3.20 ± 0.862 (0.888)**	**3.53 ± 0.919 (0.980)**	**5.70 ± 1.34 (1.24)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.54 ± 1.01 (1.55) U	**2.23 ± 0.984 (0.901)**	1.67 ± 1.19 (1.74) U	**18.3 ± 3.62 (1.70) J**	**14.5 ± 3.12 (1.77) J**	**19.5 ± 3.72 (2.07)**
Thorium-228	HASL300	pCi/L	15	0.047 ± 0.116 (0.252) U	0.055 ± 0.088 (0.163) U	0.278 ± 0.205 (0.308) U	0.028 ± 0.079 (0.179) U	0.123 ± 0.142 (0.261) U	0.191 ± 0.155 (0.210) U
Thorium-230	HASL300	pCi/L	15	0.006 ± 0.065 (0.130) U	0 ± 0.086 (0.065) U	0 ± 0.090 (0.068) U	-0.013 ± 0.060 (0.142) U	-0.021 ± 0.074 (0.149) U	0 ± 0.088 (0.066) U
Thorium-232	HASL300	pCi/L	15	0.011 ± 0.065 (0.095) U	0 ± 0.086 (0.065) U	0.002 ± 0.090 (0.153) U	-0.006 ± 0.060 (0.087) U	0 ± 0.074 (0.053) U	-0.006 ± 0.088 (0.122) U
Uranium-234	HASL300	pCi/L	NE	**0.677 ± 0.236 (0.128) J+**	**0.437 ± 0.208 (0.062)**	**0.317 ± 0.212 (0.249)**	**0.473 ± 0.224 (0.187) J+**	**0.405 ± 0.213 (0.219) J+**	**0.256 ± 0.168 (0.131)**
Uranium-235	HASL300	pCi/L	NE	**0.092 ± 0.089 (0.060) J+**	0.053 ± 0.108 (0.150) U	0.176 ± 0.170 (0.195) U	0.082 ± 0.112 (0.162) U	**0.181 ± 0.153 (0.165) J+**	0.026 ± 0.123 (0.171) U
Uranium-238	HASL300	pCi/L	NE	**0.435 ± 0.182 (0.093)**	**0.363 ± 0.189 (0.115)**	**0.390 ± 0.220 (0.081)**	**0.232 ± 0.153 (0.150)**	**0.241 ± 0.172 (0.232)**	0.099 ± 0.105 (0.131) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.46 ± 0.668 (0.589)**	**1.31 ± 0.592 (0.177) J+**	**1.21 ± 0.548 (0.406)**	**18.5 ± 3.02 (1.01) J**	**11.7 ± 2.05 (0.484) J**	**10.6 ± 1.99 (0.441)**
Radium-228	E904.0	pCi/L	5	0.307 ± 0.370 (0.784) U	0.396 ± 0.390 (0.805) U	0.0325 ± 0.467 (1.09) U	**3.98 ± 0.920 (0.719)**	**3.05 ± 0.785 (0.769)**	**4.94 ± 1.10 (0.784)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.77 ± 1.04 (1.37)**	**1.71 ± 0.982 (0.982) J+**	1.24 ± 1.02 (1.50) U	**22.5 ± 3.94 (1.73) J**	**14.8 ± 2.84 (1.25) J**	**15.5 ± 3.09 (1.23)**
Thorium-228	HASL300	pCi/L	15	0.033 ± 0.063 (0.045) U	-0.062 ± 0.090 (0.312) U	**0.306 ± 0.206 (0.290)**	0.086 ± 0.090 (0.146) U	0.065 ± 0.102 (0.204) U	0.091 ± 0.123 (0.231) U
Thorium-230	HASL300	pCi/L	15	0.016 ± 0.062 (0.044) U	0.025 ± 0.088 (0.177) U	-0.029 ± 0.088 (0.191) U	-0.011 ± 0.060 (0.106) U	-0.014 ± 0.073 (0.128) U	-0.005 ± 0.093 (0.203) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.062 (0.090) U	-0.012 ± 0.088 (0.144) U	-0.006 ± 0.088 (0.122) U	0.016 ± 0.060 (0.043) U	0 ± 0.073 (0.052) U	0 ± 0.093 (0.070) U
Uranium-234	HASL300	pCi/L	NE	**0.637 ± 0.219 (0.087) J+**	**0.577 ± 0.242 (0.172)**	**0.638 ± 0.266 (0.186)**	**0.541 ± 0.235 (0.190) J+**	**0.576 ± 0.213 (0.112) J+**	0.098 ± 0.110 (0.176) U
Uranium-235	HASL300	pCi/L	NE	**0.062 ± 0.078 (0.056) J+**	0 ± 0.101 (0.076) U	0.031 ± 0.112 (0.084) U	**0.384 ± 0.210 (0.075) J+**	0.085 ± 0.091 (0.121) U	-0.008 ± 0.114 (0.158) U
Uranium-238	HASL300	pCi/L	NE	**0.341 ± 0.154 (0.087) J+**	**0.275 ± 0.159 (0.108)**	**0.238 ± 0.152 (0.065)**	**0.353 ± 0.180 (0.117) J+**	**0.112 ± 0.089 (0.092) J+**	0.061 ± 0.088 (0.144) U
Tritium	E906.0	pCi/L	20,000	200 ± 143 (228) U	37.5 ± 126 (218) U	-92.6 ± 129 (237) U	**439 ± 166 (232)**	**298 ± 166 (256)**	**283 ± 158 (242)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD
			Sample Depth (ft BGS)	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4
			Sample Date	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021
			Sample Type	FD	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**12.4 ± 2.21 (0.158)**	**12.7 ± 2.28 (0.989)**	**1.60 ± 0.724 (0.691)**	**2.75 ± 0.978 (0.858)**	**1.46 ± 0.668 (0.711)**	**1.41 ± 0.706 (0.858)**
Radium-228	E904.0	pCi/L	5	**4.53 ± 1.09 (1.07)**	**3.11 ± 0.747 (0.593)**	**6.08 ± 1.29 (0.748) J-**	**5.45 ± 1.16 (0.654) J-**	**6.42 ± 1.36 (0.654)**	**6.14 ± 1.30 (0.654)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**16.9 ± 3.30 (1.23)**	**15.8 ± 3.03 (1.58)**	**7.68 ± 2.01 (1.44) J-**	**8.20 ± 2.14 (1.51) J-**	**7.88 ± 2.03 (1.37)**	**7.55 ± 2.01 (1.51)**
Thorium-228	HASL300	pCi/L	15	0.106 ± 0.173 (0.360) U	0.053 ± 0.124 (0.275) U	**0.174 ± 0.123 (0.111)**	0.084 ± 0.115 (0.217) U	0.167 ± 0.148 (0.216) U	0.093 ± 0.160 (0.341) U
Thorium-230	HASL300	pCi/L	15	0.055 ± 0.113 (0.157) U	0.022 ± 0.073 (0.141) U	-0.010 ± 0.075 (0.120) U	0.020 ± 0.076 (0.055) U	-0.006 ± 0.089 (0.123) U	-0.007 ± 0.098 (0.136) U
Thorium-232	HASL300	pCi/L	15	0.031 ± 0.113 (0.085) U	0 ± 0.073 (0.054) U	0 ± 0.075 (0.054) U	0.020 ± 0.076 (0.055) U	0 ± 0.089 (0.067) U	0 ± 0.098 (0.074) U
Uranium-234	HASL300	pCi/L	NE	**0.316 ± 0.170 (0.107)**	**0.304 ± 0.192 (0.081)**	**0.336 ± 0.149 (0.041) J+**	**0.492 ± 0.192 (0.120) J+**	0.115 ± 0.119 (0.187) U	**0.210 ± 0.145 (0.151)**
Uranium-235	HASL300	pCi/L	NE	**0.084 ± 0.101 (0.076)**	0.064 ± 0.137 (0.214) U	**0.141 ± 0.109 (0.110) J+**	**0.218 ± 0.142 (0.139) J+**	0.031 ± 0.112 (0.085) U	0.030 ± 0.106 (0.080) U
Uranium-238	HASL300	pCi/L	NE	**0.171 ± 0.121 (0.058)**	-0.005 ± 0.105 (0.140) U	**0.275 ± 0.133 (0.041)**	**0.130 ± 0.096 (0.106)**	0.018 ± 0.086 (0.119) U	0.017 ± 0.081 (0.113) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**9.20 ± 1.81 (0.442)**	**9.74 ± 2.08 (0.735)**	**1.32 ± 0.662 (0.790)**	**2.48 ± 0.832 (0.606)**	**2.11 ± 0.759 (0.443)**	**2.72 ± 0.861 (0.527)**
Radium-228	E904.0	pCi/L	5	**3.54 ± 0.869 (0.779)**	**3.15 ± 0.800 (0.771)**	**4.31 ± 1.09 (1.02)**	**4.90 ± 1.13 (0.820)**	**5.85 ± 1.29 (0.895)**	**5.84 ± 1.29 (0.900)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**12.7 ± 2.68 (1.22)**	**12.9 ± 2.88 (1.51)**	**5.63 ± 1.75 (1.81)**	**7.38 ± 1.96 (1.43)**	**7.96 ± 2.05 (1.34)**	**8.56 ± 2.15 (1.43)**
Thorium-228	HASL300	pCi/L	15	0.285 ± 0.220 (0.340) U	0.123 ± 0.159 (0.315) U	0.095 ± 0.124 (0.235) U	**0.141 ± 0.116 (0.138)**	0.181 ± 0.171 (0.296) U	0.081 ± 0.148 (0.319) U
Thorium-230	HASL300	pCi/L	15	0.021 ± 0.098 (0.136) U	0.007 ± 0.065 (0.112) U	0.012 ± 0.070 (0.102) U	0.006 ± 0.077 (0.136) U	0.046 ± 0.083 (0.062) U	-0.006 ± 0.093 (0.129) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.098 (0.074) U	-0.005 ± 0.065 (0.094) U	0.019 ± 0.070 (0.050) U	0 ± 0.077 (0.055) U	0 ± 0.083 (0.062) U	0 ± 0.093 (0.070) U
Uranium-234	HASL300	pCi/L	NE	**0.329 ± 0.177 (0.162)**	**0.186 ± 0.152 (0.169)**	**0.475 ± 0.173 (0.075) J+**	**0.265 ± 0.153 (0.156) J+**	0.094 ± 0.115 (0.210) U	0.042 ± 0.074 (0.149) U
Uranium-235	HASL300	pCi/L	NE	**0.136 ± 0.121 (0.074)**	-0.012 ± 0.131 (0.201) U	**0.292 ± 0.147 (0.048) J+**	**0.098 ± 0.098 (0.067) J+**	0.024 ± 0.108 (0.144) U	0.047 ± 0.097 (0.134) U
Uranium-238	HASL300	pCi/L	NE	**0.266 ± 0.153 (0.104)**	**0.241 ± 0.173 (0.175) J+**	**0.204 ± 0.107 (0.037) J+**	**0.132 ± 0.100 (0.051) J+**	0.052 ± 0.083 (0.153) U	0.057 ± 0.074 (0.102) U
Tritium	E906.0	pCi/L	20,000	**328 ± 161 (242)**	**311 ± 152 (226)**	-17.5 ± 135 (239) U	19.9 ± 136 (238) U	-20.9 ± 140 (249) U	67.5 ± 139 (238) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS
			Sample Depth (ft BGS)	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7
			Sample Date	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021
			Sample Type	N	FD	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**2.04 ± 0.723 (0.417)**	**1.38 ± 0.661 (0.725)**	**0.508 ± 0.377 (0.472)**	**0.597 ± 0.390 (0.400)**	0.630 ± 0.584 (0.889) U	0.721 ± 0.606 (0.902) U
Radium-228	E904.0	pCi/L	5	**4.16 ± 0.981 (0.928) J-**	**3.82 ± 0.901 (0.821) J-**	**1.34 ± 0.466 (0.650) J-**	1.11 ± 0.657 (1.20) U	**1.22 ± 0.523 (0.853)**	**1.07 ± 0.465 (0.743)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**6.20 ± 1.70 (1.35) J-**	**5.20 ± 1.56 (1.55) J-**	**1.85 ± 0.843 (1.12) J-**	**1.71 ± 1.05 (1.60)**	**1.85 ± 1.11 (1.74)**	**1.79 ± 1.07 (1.65)**
Thorium-228	HASL300	pCi/L	15	**0.294 ± 0.155 (0.160) J+**	0.188 ± 0.145 (0.235) U	0.029 ± 0.111 (0.254) U	0.257 ± 0.201 (0.317) U	-0.036 ± 0.111 (0.299) U	0.137 ± 0.126 (0.210) U
Thorium-230	HASL300	pCi/L	15	-0.017 ± 0.061 (0.122) U	-0.016 ± 0.056 (0.111) U	0.017 ± 0.063 (0.046) U	0.049 ± 0.089 (0.067) U	-0.013 ± 0.069 (0.123) U	0.016 ± 0.061 (0.044) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0 ± 0.056 (0.040) U	0 ± 0.063 (0.046) U	0 ± 0.089 (0.067) U	0.012 ± 0.069 (0.101) U	0 ± 0.061 (0.044) U
Uranium-234	HASL300	pCi/L	NE	**0.115 ± 0.120 (0.086)**	**0.225 ± 0.170 (0.087)**	**1.27 ± 0.337 (0.094) J+**	**0.902 ± 0.317 (0.177)**	**1.30 ± 0.508 (0.297)**	**0.853 ± 0.350 (0.149)**
Uranium-235	HASL300	pCi/L	NE	**0.192 ± 0.177 (0.112)**	**0.210 ± 0.187 (0.114)**	**0.330 ± 0.170 (0.057) J+**	**0.228 ± 0.165 (0.080)**	0.099 ± 0.191 (0.255) U	0.034 ± 0.146 (0.195) U
Uranium-238	HASL300	pCi/L	NE	0.052 ± 0.111 (0.174) U	**0.289 ± 0.194 (0.087)**	**0.956 ± 0.282 (0.088)**	**0.682 ± 0.266 (0.113)**	**0.666 ± 0.344 (0.113)**	**0.758 ± 0.328 (0.149)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.32 ± 0.663 (0.773)**	**1.81 ± 0.678 (0.495)**	0.531 ± 0.429 (0.623) U	0.330 ± 0.343 (0.510) U	0.583 ± 0.650 (1.06) U	0.378 ± 0.430 (0.678) U
Radium-228	E904.0	pCi/L	5	**4.53 ± 0.978 (0.596) J-**	**4.11 ± 0.932 (0.724) J-**	0.748 ± 0.491 (0.926) U	**0.797 ± 0.409 (0.723)**	**0.852 ± 0.435 (0.763) J-**	0.716 ± 0.452 (0.869) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**5.85 ± 1.64 (1.37) J-**	**5.92 ± 1.61 (1.22) J-**	1.28 ± 0.920 (1.55) U	1.13 ± 0.752 (1.23) U	1.44 ± 1.09 (1.82) UJ	1.09 ± 0.882 (1.55) UJ
Thorium-228	HASL300	pCi/L	15	0.218 ± 0.150 (0.223) U	**0.287 ± 0.152 (0.157) J+**	0.065 ± 0.118 (0.245) U	-0.009 ± 0.136 (0.361) U	0.042 ± 0.143 (0.315) U	0.182 ± 0.138 (0.204) U
Thorium-230	HASL300	pCi/L	15	-0.009 ± 0.059 (0.135) U	-0.017 ± 0.059 (0.119) U	0.032 ± 0.063 (0.125) U	-0.006 ± 0.084 (0.117) U	0.016 ± 0.061 (0.044) U	0.015 ± 0.064 (0.071) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.059 (0.042) U	0.016 ± 0.059 (0.043) U	-0.006 ± 0.063 (0.091) U	0 ± 0.084 (0.064) U	-0.006 ± 0.061 (0.089) U	0.017 ± 0.064 (0.046) U
Uranium-234	HASL300	pCi/L	NE	0.171 ± 0.154 (0.193) U	**0.277 ± 0.203 (0.223) J+**	**1.30 ± 0.348 (0.137) J+**	**0.913 ± 0.334 (0.225)**	**0.920 ± 0.366 (0.174)**	**0.906 ± 0.393 (0.178)**
Uranium-235	HASL300	pCi/L	NE	0.075 ± 0.144 (0.192) U	0.069 ± 0.153 (0.169) U	**0.172 ± 0.122 (0.058) J+**	0.058 ± 0.116 (0.154) U	0.034 ± 0.145 (0.194) U	0.099 ± 0.175 (0.135) U
Uranium-238	HASL300	pCi/L	NE	0.040 ± 0.110 (0.085) U	0 ± 0.117 (0.184) U	**0.687 ± 0.233 (0.091) J+**	**0.746 ± 0.293 (0.164)**	**0.680 ± 0.310 (0.194)**	**0.595 ± 0.313 (0.209)**
Tritium	E906.0	pCi/L	20,000	-49.6 ± 138 (247) U	-99.7 ± 136 (248) U	**355 ± 162 (239)**	-12.6 ± 135 (239) U	112 ± 129 (214) U	49.6 ± 124 (214) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS
			Sample Depth (ft BGS)	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7
			Sample Date	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.13 ± 0.574 (0.552) J-**	**1.97 ± 0.700 (0.157)**	**1.59 ± 0.722 (0.734)**	**1.08 ± 0.570 (0.610) J-**	**0.760 ± 0.529 (0.712)**	0.843 ± 0.610 (0.849) U
Radium-228	E904.0	pCi/L	5	0.703 ± 0.390 (0.704) U	**1.38 ± 0.494 (0.703)**	0.718 ± 0.452 (0.853) U	0.618 ± 0.569 (1.16) UJ	**1.08 ± 0.454 (0.712)**	**1.28 ± 0.456 (0.670) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.83 ± 0.964 (1.26) J-**	**3.35 ± 1.19 (0.860)**	**2.31 ± 1.17 (1.59)**	1.70 ± 1.14 (1.77) UJ	**1.84 ± 0.983 (1.42)**	**2.12 ± 1.07 (1.52) J-**
Thorium-228	HASL300	pCi/L	15	0.054 ± 0.090 (0.182) U	-0.012 ± 0.139 (0.376) U	0.140 ± 0.130 (0.223) U	-0.003 ± 0.089 (0.227) U	0.050 ± 0.146 (0.344) U	0.148 ± 0.145 (0.262) U
Thorium-230	HASL300	pCi/L	15	0.015 ± 0.063 (0.127) U	0.025 ± 0.090 (0.068) U	0.009 ± 0.060 (0.133) U	0.020 ± 0.060 (0.105) U	0.021 ± 0.099 (0.137) U	0.035 ± 0.057 (0.101) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.063 (0.046) U	0 ± 0.090 (0.068) U	0.016 ± 0.060 (0.043) U	0.032 ± 0.060 (0.043) U	0.022 ± 0.099 (0.075) U	0 ± 0.057 (0.041) U
Uranium-234	HASL300	pCi/L	NE	**1.05 ± 0.295 (0.115) J+**	**0.656 ± 0.259 (0.168)**	**0.846 ± 0.363 (0.163)**	**0.271 ± 0.152 (0.165) J+**	0.098 ± 0.098 (0.129) U	0.129 ± 0.142 (0.225) U
Uranium-235	HASL300	pCi/L	NE	0.110 ± 0.108 (0.164) U	0.021 ± 0.101 (0.141) U	0 ± 0.159 (0.123) U	**0.263 ± 0.159 (0.124) J+**	0.093 ± 0.115 (0.189) U	0.034 ± 0.144 (0.193) U
Uranium-238	HASL300	pCi/L	NE	**0.364 ± 0.159 (0.115)**	**0.271 ± 0.166 (0.179)**	**0.523 ± 0.282 (0.214)**	0.129 ± 0.114 (0.175) U	**0.087 ± 0.086 (0.059)**	**0.095 ± 0.112 (0.086)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.70 ± 0.759 (0.657)**	**1.16 ± 0.605 (0.596)**	**1.57 ± 0.654 (0.445)**	**0.744 ± 0.518 (0.697)**	**0.582 ± 0.367 (0.158)**	**0.757 ± 0.479 (0.541)**
Radium-228	E904.0	pCi/L	5	0.787 ± 0.508 (0.977) UJ	0.512 ± 0.393 (0.775) UJ	0.668 ± 0.432 (0.825) UJ	0.460 ± 0.456 (0.943) U	**0.993 ± 0.460 (0.787)**	**1.28 ± 0.438 (0.604) J-**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	2.49 ± 1.27 (1.63) UJ	**1.67 ± 0.998 (1.37) J-**	**2.24 ± 1.09 (1.27) J-**	1.20 ± 0.974 (1.64) U	**1.58 ± 0.827 (0.945)**	**2.04 ± 0.917 (1.15) J-**
Thorium-228	HASL300	pCi/L	15	0.071 ± 0.075 (0.110) U	0.034 ± 0.120 (0.292) U	0.063 ± 0.148 (0.317) U	0.042 ± 0.067 (0.132) U	0.001 ± 0.108 (0.297) U	0.105 ± 0.166 (0.336) U
Thorium-230	HASL300	pCi/L	15	-0.018 ± 0.061 (0.122) U	0.019 ± 0.088 (0.122) U	-0.014 ± 0.064 (0.153) U	-0.002 ± 0.054 (0.120) U	-0.006 ± 0.086 (0.120) U	-0.013 ± 0.067 (0.119) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0 ± 0.088 (0.066) U	-0.012 ± 0.064 (0.114) U	-0.005 ± 0.054 (0.080) U	0 ± 0.086 (0.065) U	0.025 ± 0.067 (0.113) U
Uranium-234	HASL300	pCi/L	NE	**1.26 ± 0.334 (0.105) J+**	**0.737 ± 0.289 (0.145)**	**0.986 ± 0.365 (0.079)**	**0.245 ± 0.121 (0.089) J+**	0.105 ± 0.112 (0.139) U	0.209 ± 0.189 (0.235) U
Uranium-235	HASL300	pCi/L	NE	**0.211 ± 0.136 (0.114) J+**	0.156 ± 0.144 (0.159) U	0.038 ± 0.133 (0.103) U	**0.199 ± 0.122 (0.096) J+**	0.101 ± 0.132 (0.182) U	0.104 ± 0.176 (0.234) U
Uranium-238	HASL300	pCi/L	NE	**0.532 ± 0.197 (0.087) J+**	**0.293 ± 0.172 (0.066)**	**0.406 ± 0.222 (0.079)**	**0.089 ± 0.071 (0.074) J+**	0.072 ± 0.101 (0.139) U	0.070 ± 0.135 (0.180) U
Tritium	E906.0	pCi/L	20,000	25.0 ± 134 (233) U	-142 ± 127 (236) U	-4.98 ± 121 (215) U	226 ± 147 (231) U	80.2 ± 140 (239) U	-50.0 ± 139 (249) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS
			Sample Depth (ft BGS)	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161
			Sample Date	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**11.0 ± 2.06 (0.710) J-**	**13.8 ± 2.44 (0.468)**	**13.4 ± 2.42 (0.939)**	0.0590 ± 0.306 (0.635) UJ	0.505 ± 0.499 (0.758) U	0.105 ± 0.386 (0.742) U
Radium-228	E904.0	pCi/L	5	0.293 ± 0.372 (0.792) U	0.819 ± 0.554 (1.09) U	0.426 ± 0.404 (0.821) U	0.608 ± 0.371 (0.694) U	0.237 ± 0.323 (0.692) U	0.518 ± 0.518 (1.07) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**11.3 ± 2.43 (1.50) J-**	**14.6 ± 2.99 (1.56)**	**13.8 ± 2.82 (1.76)**	0.667 ± 0.677 (1.33) UJ	0.742 ± 0.822 (1.45) U	0.623 ± 0.904 (1.81) U
Thorium-228	HASL300	pCi/L	15	0.002 ± 0.066 (0.177) U	0.025 ± 0.132 (0.334) U	0.081 ± 0.111 (0.214) U	0.011 ± 0.066 (0.096) U	0.044 ± 0.099 (0.226) U	0.061 ± 0.151 (0.327) U
Thorium-230	HASL300	pCi/L	15	-0.018 ± 0.062 (0.124) U	-0.006 ± 0.096 (0.133) U	**0.051 ± 0.064 (0.046)**	0.008 ± 0.065 (0.104) U	0.007 ± 0.094 (0.175) U	-0.002 ± 0.071 (0.079) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.062 (0.044) U	0 ± 0.096 (0.072) U	-0.006 ± 0.064 (0.093) U	0 ± 0.065 (0.047) U	-0.006 ± 0.094 (0.131) U	0.019 ± 0.071 (0.051) U
Uranium-234	HASL300	pCi/L	NE	**2.74 ± 0.582 (0.109) J+**	**2.20 ± 0.550 (0.149)**	**2.49 ± 0.666 (0.189)**	**4.47 ± 0.825 (0.040) J+**	**3.89 ± 0.844 (0.185)**	**4.74 ± 1.06 (0.249)**
Uranium-235	HASL300	pCi/L	NE	**0.320 ± 0.170 (0.088) J+**	**0.088 ± 0.106 (0.079)**	**0.163 ± 0.160 (0.109)**	**0.280 ± 0.151 (0.105) J+**	0.077 ± 0.112 (0.154) U	0.117 ± 0.147 (0.195) U
Uranium-238	HASL300	pCi/L	NE	**1.38 ± 0.360 (0.090)**	**1.34 ± 0.396 (0.112)**	**1.43 ± 0.469 (0.169)**	**1.13 ± 0.301 (0.040)**	**1.01 ± 0.347 (0.196)**	**1.03 ± 0.394 (0.196)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**11.4 ± 2.10 (0.438)**	**13.4 ± 2.35 (0.557)**	**12.4 ± 2.27 (0.803)**	0.588 ± 0.494 (0.706) U	**1.45 ± 0.743 (0.780)**	0.256 ± 0.435 (0.769) U
Radium-228	E904.0	pCi/L	5	**0.912 ± 0.417 (0.707) J-**	**1.40 ± 0.520 (0.781)**	0.337 ± 0.421 (0.896) UJ	0.532 ± 0.397 (0.788) UJ	0.497 ± 0.362 (0.703) UJ	0.728 ± 0.540 (1.05) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**12.3 ± 2.52 (1.15) J-**	**14.8 ± 2.87 (1.34)**	**12.7 ± 2.69 (1.70) J-**	1.12 ± 0.891 (1.49) UJ	**1.95 ± 1.11 (1.48) J-**	0.984 ± 0.975 (1.82) U
Thorium-228	HASL300	pCi/L	15	0.023 ± 0.067 (0.118) U	0.084 ± 0.136 (0.285) U	0.103 ± 0.126 (0.237) U	0.183 ± 0.149 (0.235) U	-0.042 ± 0.096 (0.270) U	0.069 ± 0.095 (0.183) U
Thorium-230	HASL300	pCi/L	15	-0.019 ± 0.065 (0.131) U	-0.006 ± 0.083 (0.115) U	-0.025 ± 0.064 (0.142) U	-0.007 ± 0.070 (0.102) U	0.004 ± 0.093 (0.181) U	0.024 ± 0.054 (0.079) U
Thorium-232	HASL300	pCi/L	15	0.017 ± 0.065 (0.047) U	0 ± 0.083 (0.063) U	0.003 ± 0.064 (0.046) U	0 ± 0.070 (0.050) U	-0.006 ± 0.093 (0.128) U	0 ± 0.054 (0.039) U
Uranium-234	HASL300	pCi/L	NE	**2.51 ± 0.526 (0.129) J+**	**2.13 ± 0.531 (0.155) J+**	**2.61 ± 0.733 (0.170)**	**3.99 ± 0.744 (0.077) J+**	**4.19 ± 0.845 (0.117) J+**	**4.03 ± 0.859 (0.158)**
Uranium-235	HASL300	pCi/L	NE	**0.255 ± 0.141 (0.051) J+**	0.105 ± 0.111 (0.139) U	**0.238 ± 0.212 (0.129) J+**	**0.201 ± 0.122 (0.050) J+**	0.071 ± 0.093 (0.128) U	0.062 ± 0.112 (0.084) U
Uranium-238	HASL300	pCi/L	NE	**1.44 ± 0.353 (0.039) J+**	**1.30 ± 0.382 (0.107)**	**1.07 ± 0.426 (0.223)**	**0.966 ± 0.268 (0.038)**	**1.08 ± 0.329 (0.053) J+**	**0.845 ± 0.308 (0.141)**
Tritium	E906.0	pCi/L	20,000	155 ± 143 (233) U	-25.0 ± 136 (242) U	129 ± 130 (214) U	-2.50 ± 132 (233) U	-117 ± 127 (235) U	-147 ± 141 (296) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS
			Sample Depth (ft BGS)	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8
			Sample Date	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.673 ± 0.426 (0.481)**	0.307 ± 0.436 (0.738) U	0.215 ± 0.702 (1.30) U	0.252 ± 0.436 (0.779) U	0 ± 0.355 (0.770) U	0.0663 ± 0.595 (1.15) U
Radium-228	E904.0	pCi/L	5	**0.813 ± 0.399 (0.682)**	**1.17 ± 0.594 (1.05)**	0.451 ± 0.458 (0.951) UJ	0.424 ± 0.400 (0.816) U	0.490 ± 0.417 (0.840) U	0.760 ± 0.425 (0.762) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.49 ± 0.825 (1.16)**	1.48 ± 1.03 (1.79) U	0.666 ± 1.16 (2.25) UJ	0.676 ± 0.836 (1.60) U	0.490 ± 0.772 (1.61) U	0.826 ± 1.02 (1.91) U
Thorium-228	HASL300	pCi/L	15	0.125 ± 0.125 (0.218) U	-0.011 ± 0.110 (0.312) U	0.093 ± 0.139 (0.276) U	0.063 ± 0.123 (0.260) U	-0.015 ± 0.087 (0.249) U	0.149 ± 0.142 (0.249) U
Thorium-230	HASL300	pCi/L	15	0.023 ± 0.063 (0.108) U	0 ± 0.087 (0.066) U	0.005 ± 0.071 (0.125) U	-0.021 ± 0.074 (0.149) U	-0.002 ± 0.085 (0.098) U	0.016 ± 0.061 (0.044) U
Thorium-232	HASL300	pCi/L	15	0.005 ± 0.063 (0.112) U	-0.012 ± 0.088 (0.144) U	-0.014 ± 0.071 (0.125) U	0.020 ± 0.074 (0.053) U	0 ± 0.085 (0.064) U	-0.012 ± 0.061 (0.108) U
Uranium-234	HASL300	pCi/L	NE	**0.415 ± 0.191 (0.109) J+**	**0.285 ± 0.167 (0.135)**	**0.238 ± 0.164 (0.190)**	**2.21 ± 0.485 (0.102) J+**	**2.38 ± 0.617 (0.181)**	**1.48 ± 0.476 (0.236)**
Uranium-235	HASL300	pCi/L	NE	0.094 ± 0.104 (0.142) U	0.030 ± 0.107 (0.081) U	0.064 ± 0.115 (0.086) U	**0.299 ± 0.160 (0.110) J+**	0.127 ± 0.136 (0.172) U	0.121 ± 0.138 (0.144) U
Uranium-238	HASL300	pCi/L	NE	**0.279 ± 0.158 (0.143)**	**0.365 ± 0.194 (0.165)**	**0.316 ± 0.178 (0.066)**	**1.36 ± 0.346 (0.084)**	**1.64 ± 0.481 (0.132)**	**1.28 ± 0.430 (0.139)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**0.846 ± 0.439 (0.153)**	**0.577 ± 0.428 (0.536) J+**	**1.51 ± 0.642 (0.446)**	0.101 ± 0.343 (0.662) U	0.379 ± 0.413 (0.650) U	0.277 ± 0.608 (1.10) U
Radium-228	E904.0	pCi/L	5	**0.840 ± 0.471 (0.838)**	0.691 ± 0.430 (0.813) U	**0.902 ± 0.404 (0.654) J+**	0.266 ± 0.336 (0.712) U	0.624 ± 0.412 (0.789) U	0.140 ± 0.318 (0.706) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.69 ± 0.910 (0.991)**	1.27 ± 0.858 (1.35) UJ	**2.41 ± 1.05 (1.10) J+**	0.367 ± 0.679 (1.37) U	1.00 ± 0.825 (1.44) U	0.417 ± 0.926 (1.81) UJ
Thorium-228	HASL300	pCi/L	15	0.035 ± 0.114 (0.261) U	-0.009 ± 0.140 (0.388) U	0.134 ± 0.173 (0.335) U	-0.013 ± 0.067 (0.185) U	0.155 ± 0.132 (0.164) U	0.049 ± 0.130 (0.286) U
Thorium-230	HASL300	pCi/L	15	0.055 ± 0.079 (0.115) U	-0.007 ± 0.106 (0.147) U	0.037 ± 0.104 (0.192) U	0.040 ± 0.066 (0.117) U	0.018 ± 0.087 (0.120) U	-0.013 ± 0.066 (0.117) U
Thorium-232	HASL300	pCi/L	15	0.013 ± 0.078 (0.115) U	-0.009 ± 0.106 (0.155) U	-0.014 ± 0.104 (0.172) U	0 ± 0.066 (0.047) U	0.039 ± 0.087 (0.120) U	-0.006 ± 0.066 (0.097) U
Uranium-234	HASL300	pCi/L	NE	**0.585 ± 0.223 (0.121) J+**	**0.323 ± 0.183 (0.167)**	**0.217 ± 0.157 (0.181)**	**2.52 ± 0.528 (0.040) J+**	**2.28 ± 0.590 (0.167)**	**2.31 ± 0.621 (0.206) J+**
Uranium-235	HASL300	pCi/L	NE	**0.091 ± 0.092 (0.064) J+**	0.030 ± 0.108 (0.082) U	0.032 ± 0.117 (0.088) U	**0.204 ± 0.129 (0.106) J+**	**0.131 ± 0.130 (0.089)**	0.072 ± 0.133 (0.177) U
Uranium-238	HASL300	pCi/L	NE	**0.356 ± 0.168 (0.100)**	**0.340 ± 0.183 (0.115)**	**0.250 ± 0.159 (0.067)**	**1.54 ± 0.372 (0.040) J+**	**1.52 ± 0.451 (0.125)**	**1.50 ± 0.469 (0.078)**
Tritium	E906.0	pCi/L	20,000	60.1 ± 133 (228) U	62.4 ± 135 (231) U	-34.8 ± 132 (236) U	-32.6 ± 142 (252) U	7.45 ± 131 (230) U	37.3 ± 124 (214) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS
			Sample Depth (ft BGS)	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4
			Sample Date	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.90 ± 0.702 (0.423) J-**	**1.51 ± 0.683 (0.652)**	**2.54 ± 0.910 (0.637)**	**1.67 ± 0.909 (0.996)**	**1.00 ± 0.666 (0.876)**	**1.95 ± 0.740 (0.651)**
Radium-228	E904.0	pCi/L	5	**2.66 ± 0.756 (0.832) J**	**2.05 ± 0.726 (1.13)**	**1.37 ± 0.489 (0.688)**	0.441 ± 0.374 (0.747) U	0.760 ± 0.439 (0.799) U	0.781 ± 0.508 (0.979) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**4.56 ± 1.46 (1.26) J**	**3.56 ± 1.41 (1.78)**	**3.91 ± 1.40 (1.33)**	**2.11 ± 1.28 (1.74)**	**1.76 ± 1.11 (1.68)**	**2.73 ± 1.25 (1.63)**
Thorium-228	HASL300	pCi/L	15	0.138 ± 0.115 (0.175) U	0.069 ± 0.117 (0.246) U	0.100 ± 0.152 (0.309) U	0.004 ± 0.063 (0.113) U	0.037 ± 0.097 (0.231) U	0.146 ± 0.162 (0.300) U
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.058 (0.139) U	-0.012 ± 0.087 (0.144) U	-0.013 ± 0.081 (0.140) U	0.037 ± 0.062 (0.109) U	-0.005 ± 0.093 (0.203) U	-0.013 ± 0.069 (0.123) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.058 (0.085) U	0 ± 0.087 (0.066) U	0 ± 0.081 (0.060) U	0 ± 0.062 (0.044) U	0.026 ± 0.093 (0.070) U	-0.007 ± 0.069 (0.101) U
Uranium-234	HASL300	pCi/L	NE	**0.620 ± 0.227 (0.167) J+**	0.041 ± 0.084 (0.116) U	0.163 ± 0.147 (0.183) U	**1.67 ± 0.415 (0.102) J+**	**0.976 ± 0.331 (0.165)**	**1.36 ± 0.472 (0.206)**
Uranium-235	HASL300	pCi/L	NE	**0.292 ± 0.164 (0.119) J+**	**0.122 ± 0.121 (0.083)**	0.110 ± 0.138 (0.183) U	**0.260 ± 0.155 (0.061) J+**	0.052 ± 0.107 (0.148) U	0.044 ± 0.154 (0.119) U
Uranium-238	HASL300	pCi/L	NE	**0.131 ± 0.101 (0.125)**	-0.011 ± 0.084 (0.138) U	**0.179 ± 0.146 (0.081)**	**0.340 ± 0.160 (0.095)**	**0.239 ± 0.153 (0.135)**	**0.425 ± 0.247 (0.185)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**3.81 ± 1.05 (0.673)**	**1.74 ± 0.662 (0.412)**	**3.03 ± 1.06 (0.234)**	0.552 ± 0.552 (0.875) U	**1.46 ± 0.667 (0.589)**	**1.68 ± 0.692 (0.556) J**
Radium-228	E904.0	pCi/L	5	**2.67 ± 0.775 (0.922)**	**1.74 ± 0.594 (0.858)**	**1.07 ± 0.472 (0.774)**	0.333 ± 0.300 (0.608) U	**1.02 ± 0.435 (0.705)**	0.182 ± 0.399 (0.884) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**6.48 ± 1.83 (1.60)**	**3.48 ± 1.26 (1.27)**	**4.10 ± 1.53 (1.01)**	0.885 ± 0.852 (1.48) U	**2.48 ± 1.10 (1.29)**	**1.86 ± 1.09 (1.44) J**
Thorium-228	HASL300	pCi/L	15	0.043 ± 0.073 (0.149) U	0.027 ± 0.121 (0.308) U	0.145 ± 0.163 (0.301) U	0.112 ± 0.129 (0.240) U	0.025 ± 0.094 (0.239) U	0.129 ± 0.119 (0.195) U
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.061 (0.108) U	-0.007 ± 0.099 (0.137) U	-0.030 ± 0.084 (0.184) U	0.015 ± 0.063 (0.126) U	0.032 ± 0.089 (0.165) U	-0.002 ± 0.061 (0.068) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0 ± 0.099 (0.074) U	0 ± 0.084 (0.062) U	0.011 ± 0.063 (0.092) U	-0.006 ± 0.089 (0.124) U	0 ± 0.061 (0.044) U
Uranium-234	HASL300	pCi/L	NE	**0.361 ± 0.166 (0.136) J+**	**0.171 ± 0.134 (0.156)**	0.106 ± 0.135 (0.246) U	**1.61 ± 0.387 (0.124) J+**	**1.10 ± 0.365 (0.146)**	**1.23 ± 0.423 (0.166)**
Uranium-235	HASL300	pCi/L	NE	**0.206 ± 0.137 (0.117) J+**	0.033 ± 0.110 (0.083) U	**0.296 ± 0.221 (0.213) J+**	**0.117 ± 0.095 (0.053) J+**	0.064 ± 0.116 (0.087) U	0.111 ± 0.139 (0.184) U
Uranium-238	HASL300	pCi/L	NE	0.086 ± 0.081 (0.109) U	0.088 ± 0.094 (0.117) U	0.064 ± 0.105 (0.139) U	**0.427 ± 0.170 (0.082) J+**	**0.333 ± 0.188 (0.146) J+**	**0.285 ± 0.193 (0.185)**
Tritium	E906.0	pCi/L	20,000	**11070 ± 1494 (228)**	**8200 ± 1126 (238)**	**5802 ± 838 (263)**	105 ± 149 (251) U	-2.50 ± 144 (253) U	137 ± 143 (236) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS
			Sample Depth (ft BGS)	79.5-89.1	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35
			Sample Date	03-10-2021	05-19-2021	08-19-2021	03-10-2021	05-19-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	0.399 ± 0.454 (0.716) UJ	**1.20 ± 0.533 (0.155)**	0.348 ± 0.361 (0.538) U	**0.557 ± 0.351 (0.151) J-**	0.0536 ± 0.458 (0.893) U
Radium-228	E904.0	pCi/L	5	0.681 ± 0.532 (1.06) UJ	**1.10 ± 0.549 (0.983)**	0.562 ± 0.409 (0.807) UJ	0.725 ± 0.508 (0.998) UJ	0.747 ± 0.535 (1.06) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.08 ± 0.986 (1.78) UJ	**2.30 ± 1.08 (1.14)**	0.910 ± 0.770 (1.35) UJ	**1.28 ± 0.859 (1.15) J-**	0.801 ± 0.993 (1.95) U
Thorium-228	HASL300	pCi/L	15	0.048 ± 0.068 (0.125) U	0.117 ± 0.129 (0.214) U	0.152 ± 0.140 (0.244) U	-0.025 ± 0.058 (0.177) U	0.045 ± 0.137 (0.324) U
Thorium-230	HASL300	pCi/L	15	-0.007 ± 0.061 (0.134) U	-0.006 ± 0.089 (0.124) U	0.014 ± 0.058 (0.116) U	0.042 ± 0.057 (0.083) U	-0.006 ± 0.085 (0.117) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.061 (0.044) U	0.050 ± 0.090 (0.067) U	0 ± 0.058 (0.042) U	-0.005 ± 0.057 (0.083) U	-0.017 ± 0.085 (0.157) U
Uranium-234	HASL300	pCi/L	NE	**1.99 ± 0.458 (0.142) J+**	**0.898 ± 0.325 (0.146)**	**2.29 ± 0.630 (0.084)**	**1.91 ± 0.453 (0.111) J+**	**1.22 ± 0.391 (0.176)**
Uranium-235	HASL300	pCi/L	NE	**0.228 ± 0.139 (0.056) J+**	0.054 ± 0.116 (0.214) U	**0.202 ± 0.180 (0.110)**	**0.219 ± 0.146 (0.149) J+**	**0.127 ± 0.126 (0.086)**
Uranium-238	HASL300	pCi/L	NE	**1.28 ± 0.338 (0.087)**	**0.935 ± 0.331 (0.067)**	**2.20 ± 0.613 (0.084)**	**0.889 ± 0.274 (0.095)**	**0.537 ± 0.245 (0.177)**
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	0.512 ± 0.473 (0.689) U	**1.50 ± 0.649 (0.461)**	-0.0635 ± 0.374 (0.833) U	0.371 ± 0.422 (0.666) U	0.185 ± 0.401 (0.739) U
Radium-228	E904.0	pCi/L	5	0.294 ± 0.644 (1.42) U	0.358 ± 0.407 (0.858) U	0.373 ± 0.466 (0.994) UJ	0.290 ± 0.490 (1.07) U	**0.909 ± 0.459 (0.815)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.806 ± 1.12 (2.11) U	**1.86 ± 1.06 (1.32)**	0.373 ± 0.840 (1.83) UJ	0.661 ± 0.912 (1.74) U	1.09 ± 0.860 (1.55) U
Thorium-228	HASL300	pCi/L	15	0.101 ± 0.121 (0.228) U	-0.043 ± 0.105 (0.333) U	**0.263 ± 0.148 (0.162)**	0.064 ± 0.111 (0.228) U	0.150 ± 0.153 (0.270) U
Thorium-230	HASL300	pCi/L	15	-0.011 ± 0.060 (0.106) U	-0.012 ± 0.091 (0.150) U	-0.018 ± 0.061 (0.123) U	-0.006 ± 0.063 (0.092) U	0.034 ± 0.081 (0.113) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.060 (0.043) U	0 ± 0.091 (0.068) U	0.016 ± 0.061 (0.044) U	0 ± 0.063 (0.045) U	0 ± 0.081 (0.061) U
Uranium-234	HASL300	pCi/L	NE	**2.02 ± 0.457 (0.086) J+**	**1.12 ± 0.411 (0.263)**	**1.90 ± 0.554 (0.200) J+**	**1.59 ± 0.374 (0.105) J+**	**1.62 ± 0.457 (0.156) J+**
Uranium-235	HASL300	pCi/L	NE	**0.213 ± 0.136 (0.112) J+**	0.045 ± 0.141 (0.106) U	**0.193 ± 0.174 (0.152)**	**0.057 ± 0.069 (0.049) J+**	0.054 ± 0.110 (0.152) U
Uranium-238	HASL300	pCi/L	NE	**1.33 ± 0.344 (0.086) J+**	**1.19 ± 0.418 (0.179)**	**1.64 ± 0.504 (0.165)**	**0.835 ± 0.244 (0.038) J+**	**0.760 ± 0.288 (0.139)**
Tritium	E906.0	pCi/L	20,000	**9690 ± 1317 (234)**	**10550 ± 1427 (237)**	**4878 ± 702 (248)**	5.00 ± 129 (228) U	-2.49 ± 134 (237) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS
			Sample Depth (ft BGS)	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37
			Sample Date	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.419 ± 0.539 (0.898) U	**2.58 ± 0.965 (0.838)**	**3.58 ± 1.08 (0.808) J-**	**4.38 ± 0.974 (0.111) J-**	0.673 ± 0.544 (0.791) U	**0.929 ± 0.553 (0.526)**
Radium-228	E904.0	pCi/L	5	0.739 ± 0.412 (0.753) UJ	**3.83 ± 0.901 (0.684)**	**4.31 ± 0.983 (0.677) J+**	**4.33 ± 0.969 (0.748) J-**	0.518 ± 0.400 (0.794) U	**0.962 ± 0.439 (0.726)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.16 ± 0.951 (1.65) UJ	**6.41 ± 1.87 (1.52)**	**7.89 ± 2.06 (1.49) J**	**8.71 ± 1.94 (0.859) J-**	1.19 ± 0.944 (1.59) U	**1.89 ± 0.992 (1.25)**
Thorium-228	HASL300	pCi/L	15	**0.221 ± 0.140 (0.168) J+**	**0.239 ± 0.160 (0.211)**	0.085 ± 0.148 (0.313) U	0.126 ± 0.129 (0.220) UJ	-0.003 ± 0.088 (0.229) U	0.048 ± 0.101 (0.227) U
Thorium-230	HASL300	pCi/L	15	-0.018 ± 0.064 (0.128) U	-0.002 ± 0.073 (0.146) U	0.047 ± 0.111 (0.183) U	-0.011 ± 0.054 (0.119) UJ	0.028 ± 0.065 (0.094) U	-0.011 ± 0.085 (0.140) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.064 (0.046) U	-0.007 ± 0.073 (0.107) U	0.031 ± 0.111 (0.084) U	0.013 ± 0.054 (0.036) UJ	0.008 ± 0.065 (0.094) U	-0.006 ± 0.085 (0.118) U
Uranium-234	HASL300	pCi/L	NE	**1.81 ± 0.529 (0.079)**	**0.651 ± 0.232 (0.140) J+**	0.174 ± 0.142 (0.180) U	0.111 ± 0.136 (0.225) UJ	**0.636 ± 0.221 (0.130) J+**	**1.09 ± 0.337 (0.147)**
Uranium-235	HASL300	pCi/L	NE	0.067 ± 0.134 (0.103) U	**0.494 ± 0.217 (0.060) J+**	0.032 ± 0.116 (0.088) U	0.036 ± 0.155 (0.207) UJ	**0.123 ± 0.100 (0.055) J+**	0.026 ± 0.095 (0.071) U
Uranium-238	HASL300	pCi/L	NE	**0.806 ± 0.327 (0.160)**	**0.314 ± 0.154 (0.113)**	0.044 ± 0.089 (0.123) U	0.068 ± 0.119 (0.092) UJ	**0.418 ± 0.172 (0.086)**	**0.519 ± 0.217 (0.101)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.428 ± 0.552 (0.919) U	**3.70 ± 1.21 (0.951) J+**	**6.03 ± 1.43 (0.596) J+**	**3.90 ± 1.08 (0.872)**	**0.963 ± 0.565 (0.648)**	**1.05 ± 0.519 (0.488) J+**
Radium-228	E904.0	pCi/L	5	**0.880 ± 0.470 (0.877) J-**	**4.18 ± 1.01 (0.877)**	**5.72 ± 1.33 (1.07)**	**3.54 ± 0.877 (0.809) J-**	**1.16 ± 0.496 (0.785) J+**	0.785 ± 0.433 (0.790) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.31 ± 1.02 (1.80) UJ	**7.88 ± 2.22 (1.83) J+**	**11.8 ± 2.76 (1.67) J+**	**7.44 ± 1.96 (1.68) J-**	**2.12 ± 1.06 (1.43) J+**	**1.84 ± 0.952 (1.28) J+**
Thorium-228	HASL300	pCi/L	15	0.094 ± 0.128 (0.248) U	0.188 ± 0.190 (0.335) U	0.217 ± 0.204 (0.339) U	0.108 ± 0.150 (0.279) U	**0.084 ± 0.075 (0.045)**	-0.042 ± 0.102 (0.237) U
Thorium-230	HASL300	pCi/L	15	-0.028 ± 0.066 (0.150) U	0.024 ± 0.092 (0.066) U	0.023 ± 0.109 (0.151) U	0.022 ± 0.050 (0.096) U	0 ± 0.062 (0.121) U	-0.020 ± 0.099 (0.184) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.066 (0.047) U	0 ± 0.092 (0.066) U	0 ± 0.109 (0.082) U	-0.007 ± 0.050 (0.078) U	-0.012 ± 0.062 (0.110) U	-0.007 ± 0.099 (0.138) U
Uranium-234	HASL300	pCi/L	NE	**1.63 ± 0.529 (0.207) J+**	**0.674 ± 0.282 (0.072)**	0.130 ± 0.121 (0.164) U	0.072 ± 0.108 (0.202) U	**0.495 ± 0.199 (0.129) J+**	**0.731 ± 0.279 (0.192)**
Uranium-235	HASL300	pCi/L	NE	0.080 ± 0.155 (0.206) U	**0.350 ± 0.232 (0.230) J+**	0 ± 0.115 (0.087) U	-0.007 ± 0.139 (0.186) U	**0.223 ± 0.142 (0.061) J+**	**0.086 ± 0.104 (0.078)**
Uranium-238	HASL300	pCi/L	NE	**0.776 ± 0.340 (0.091)**	**0.308 ± 0.187 (0.146)**	0.081 ± 0.099 (0.164) U	**0.122 ± 0.121 (0.082) J+**	**0.250 ± 0.136 (0.094) J+**	**0.669 ± 0.260 (0.130)**
Tritium	E906.0	pCi/L	20,000	-94.9 ± 136 (248) U	**57230 ± 7449 (238)**	**51260 ± 6673 (241)**	**55460 ± 7227 (247)**	91.8 ± 134 (226) U	117 ± 139 (231) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS
			Sample Depth (ft BGS)	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7
			Sample Date	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**1.05 ± 0.658 (0.875)**	**1.49 ± 0.792 (0.895)**	**1.67 ± 0.662 (0.606)**	**1.82 ± 0.643 (0.444)**	**0.519 ± 0.327 (0.141) J-**	**1.09 ± 0.618 (0.727)**
Radium-228	E904.0	pCi/L	5	**1.62 ± 0.494 (0.595)**	0.457 ± 0.460 (0.955) U	0.899 ± 0.641 (1.25) U	0.644 ± 0.374 (0.679) U	0.524 ± 0.496 (1.01) UJ	**1.72 ± 0.718 (1.16) J**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.67 ± 1.15 (1.47)**	**1.95 ± 1.25 (1.85)**	**2.57 ± 1.30 (1.86)**	**2.46 ± 1.02 (1.12)**	1.04 ± 0.823 (1.15) UJ	**2.81 ± 1.34 (1.89) J**
Thorium-228	HASL300	pCi/L	15	0.105 ± 0.118 (0.189) U	0.001 ± 0.081 (0.203) U	-0.012 ± 0.113 (0.326) U	-0.004 ± 0.122 (0.322) U	0.111 ± 0.137 (0.258) U	0.206 ± 0.190 (0.324) U
Thorium-230	HASL300	pCi/L	15	-0.003 ± 0.091 (0.112) U	-0.015 ± 0.053 (0.107) U	0.020 ± 0.094 (0.131) U	-0.014 ± 0.087 (0.149) U	-0.007 ± 0.071 (0.104) U	0.033 ± 0.094 (0.173) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.091 (0.069) U	-0.005 ± 0.053 (0.078) U	0 ± 0.094 (0.071) U	-0.014 ± 0.087 (0.149) U	0 ± 0.071 (0.051) U	-0.012 ± 0.093 (0.154) U
Uranium-234	HASL300	pCi/L	NE	**1.08 ± 0.411 (0.204)**	**0.251 ± 0.121 (0.037) J+**	0.100 ± 0.105 (0.156) U	0.062 ± 0.088 (0.145) U	**0.181 ± 0.129 (0.175) J+**	0.097 ± 0.094 (0.109) U
Uranium-235	HASL300	pCi/L	NE	0.087 ± 0.153 (0.118) U	0.083 ± 0.080 (0.098) U	0 ± 0.110 (0.083) U	0.056 ± 0.115 (0.159) U	0.073 ± 0.086 (0.124) U	0.015 ± 0.102 (0.169) U
Uranium-238	HASL300	pCi/L	NE	**0.753 ± 0.334 (0.183)**	**0.078 ± 0.065 (0.037)**	0.111 ± 0.104 (0.117) U	0.043 ± 0.088 (0.122) U	0.055 ± 0.074 (0.131) U	0.055 ± 0.079 (0.129) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**2.03 ± 0.844 (0.896)**	**1.49 ± 0.724 (0.893)**	**2.12 ± 0.860 (0.841)**	**1.10 ± 0.546 (0.561)**	0.197 ± 0.428 (0.790) U	**0.918 ± 0.561 (0.689)**
Radium-228	E904.0	pCi/L	5	0.259 ± 0.545 (1.20) U	**0.768 ± 0.422 (0.758)**	0.528 ± 0.404 (0.796) U	0.494 ± 0.427 (0.870) U	**0.935 ± 0.500 (0.909)**	**1.24 ± 0.460 (0.672)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.29 ± 1.39 (2.10)**	**2.26 ± 1.15 (1.65)**	**2.65 ± 1.26 (1.64)**	**1.59 ± 0.973 (1.43)**	1.13 ± 0.928 (1.70) U	**2.16 ± 1.02 (1.36)**
Thorium-228	HASL300	pCi/L	15	0.034 ± 0.139 (0.311) U	0.027 ± 0.066 (0.144) U	-0.026 ± 0.105 (0.321) U	0.068 ± 0.112 (0.227) U	0.004 ± 0.065 (0.117) U	0.146 ± 0.180 (0.340) U
Thorium-230	HASL300	pCi/L	15	-0.001 ± 0.061 (0.122) U	-0.018 ± 0.064 (0.128) U	-0.006 ± 0.094 (0.130) U	-0.006 ± 0.067 (0.099) U	0 ± 0.064 (0.046) U	-0.007 ± 0.107 (0.149) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.061 (0.089) U	0.028 ± 0.064 (0.046) U	0.026 ± 0.094 (0.071) U	0 ± 0.067 (0.049) U	0 ± 0.064 (0.046) U	0 ± 0.107 (0.081) U
Uranium-234	HASL300	pCi/L	NE	**0.914 ± 0.372 (0.233)**	**0.199 ± 0.111 (0.080) J+**	0.131 ± 0.123 (0.174) U	**0.171 ± 0.129 (0.135) J+**	**0.205 ± 0.138 (0.161) J+**	**0.068 ± 0.082 (0.061) J+**
Uranium-235	HASL300	pCi/L	NE	-0.008 ± 0.149 (0.199) U	0.038 ± 0.072 (0.052) U	0.081 ± 0.113 (0.156) U	-0.007 ± 0.107 (0.148) U	**0.176 ± 0.138 (0.140) J+**	0.029 ± 0.106 (0.080) U
Uranium-238	HASL300	pCi/L	NE	**0.668 ± 0.318 (0.272)**	**0.204 ± 0.111 (0.039) J+**	0.042 ± 0.086 (0.119) U	0.040 ± 0.082 (0.113) U	0.103 ± 0.097 (0.129) U	**0.090 ± 0.089 (0.061)**
Tritium	E906.0	pCi/L	20,000	**244 ± 153 (239)**	**1045 ± 235 (250)**	**984 ± 226 (243)**	**1062 ± 224 (211)**	118 ± 137 (228) U	67.7 ± 140 (239) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD
			Sample Depth (ft BGS)	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250
			Sample Date	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.743 ± 0.609 (0.906) U	0.416 ± 0.561 (0.944) U	0.283 ± 0.394 (0.657) U	0.278 ± 0.387 (0.647) U	0.306 ± 0.647 (1.15) U	0.321 ± 0.419 (0.690) U
Radium-228	E904.0	pCi/L	5	**1.31 ± 0.444 (0.605) J**	0.349 ± 0.368 (0.765) U	**0.707 ± 0.386 (0.690)**	**1.55 ± 0.555 (0.843) J+**	0.291 ± 0.291 (0.596) U	-0.396 ± 0.483 (1.17) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.05 ± 1.05 (1.51) J**	0.765 ± 0.929 (1.71) U	0.990 ± 0.780 (1.35) U	**1.83 ± 0.942 (1.49) J+**	0.597 ± 0.938 (1.75) U	0.321 ± 0.902 (1.86) U
Thorium-228	HASL300	pCi/L	15	0.035 ± 0.142 (0.337) U	0.044 ± 0.072 (0.143) U	-0.018 ± 0.107 (0.222) U	0.051 ± 0.139 (0.303) U	0.112 ± 0.133 (0.244) U	0.009 ± 0.126 (0.349) U
Thorium-230	HASL300	pCi/L	15	-0.014 ± 0.088 (0.151) U	0.011 ± 0.064 (0.093) U	-0.014 ± 0.104 (0.172) U	-0.016 ± 0.064 (0.122) U	0.032 ± 0.073 (0.107) U	-0.008 ± 0.117 (0.162) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.088 (0.065) U	-0.006 ± 0.064 (0.093) U	-0.014 ± 0.104 (0.172) U	0 ± 0.064 (0.046) U	-0.007 ± 0.073 (0.107) U	0 ± 0.117 (0.088) U
Uranium-234	HASL300	pCi/L	NE	0.167 ± 0.167 (0.229) U	**1.70 ± 0.433 (0.167) J+**	**1.73 ± 0.476 (0.200)**	**1.38 ± 0.468 (0.178)**	**4.20 ± 0.852 (0.133) J+**	**2.72 ± 0.651 (0.141)**
Uranium-235	HASL300	pCi/L	NE	0.040 ± 0.171 (0.228) U	**0.191 ± 0.135 (0.065) J+**	0.010 ± 0.107 (0.081) U	0.077 ± 0.148 (0.198) U	**0.235 ± 0.158 (0.071) J+**	0.030 ± 0.111 (0.160) U
Uranium-238	HASL300	pCi/L	NE	0.116 ± 0.151 (0.266) U	**0.772 ± 0.262 (0.122)**	**0.561 ± 0.241 (0.136)**	**0.758 ± 0.333 (0.198)**	**1.52 ± 0.413 (0.110)**	**1.36 ± 0.412 (0.158)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**0.455 ± 0.368 (0.206)**	0.0642 ± 0.293 (0.473) U	**0.890 ± 0.554 (0.546)**	0.480 ± 0.630 (1.05) U	0.397 ± 0.403 (0.610) U	0.276 ± 0.448 (0.779) U
Radium-228	E904.0	pCi/L	5	**1.57 ± 0.543 (0.773)**	0.649 ± 0.392 (0.724) U	**0.779 ± 0.416 (0.750) J**	**1.06 ± 0.440 (0.687)**	**1.33 ± 0.529 (0.820) J+**	-0.172 ± 0.514 (1.20) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.03 ± 0.911 (0.979)**	0.713 ± 0.685 (1.20) U	**1.67 ± 0.970 (1.30) J**	1.54 ± 1.07 (1.74) U	**1.73 ± 0.932 (1.43) J+**	0.276 ± 0.962 (1.98) U
Thorium-228	HASL300	pCi/L	15	0.185 ± 0.142 (0.197) U	0.054 ± 0.104 (0.218) U	0.066 ± 0.105 (0.207) U	0.144 ± 0.159 (0.298) U	**0.171 ± 0.124 (0.156)**	-0.002 ± 0.105 (0.301) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.075 (0.055) U	0.014 ± 0.062 (0.075) U	-0.013 ± 0.097 (0.160) U	0.018 ± 0.063 (0.120) U	**0.185 ± 0.122 (0.120)**	0.074 ± 0.097 (0.134) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.075 (0.055) U	0 ± 0.062 (0.044) U	-0.013 ± 0.097 (0.160) U	0 ± 0.063 (0.045) U	**0.180 ± 0.115 (0.049)**	0.020 ± 0.097 (0.134) U
Uranium-234	HASL300	pCi/L	NE	**0.267 ± 0.179 (0.080)**	**1.58 ± 0.391 (0.127) J+**	**1.44 ± 0.420 (0.176)**	**1.78 ± 0.540 (0.173)**	**4.59 ± 0.916 (0.167) J+**	**3.23 ± 0.712 (0.141)**
Uranium-235	HASL300	pCi/L	NE	0.102 ± 0.137 (0.213) U	**0.101 ± 0.091 (0.057) J+**	0.022 ± 0.106 (0.147) U	0.163 ± 0.166 (0.192) U	**0.158 ± 0.129 (0.071) J+**	**0.100 ± 0.104 (0.075)**
Uranium-238	HASL300	pCi/L	NE	0.054 ± 0.104 (0.139) U	**0.720 ± 0.235 (0.043)**	**0.894 ± 0.316 (0.187)**	**0.925 ± 0.367 (0.192)**	**1.80 ± 0.463 (0.134) J+**	**0.945 ± 0.314 (0.126)**
Tritium	E906.0	pCi/L	20,000	77.2 ± 133 (226) U	10.0 ± 130 (228) U	-5.00 ± 131 (231) U	-135 ± 145 (265) U	62.4 ± 133 (227) U	-44.9 ± 128 (231) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD
			Sample Depth (ft BGS)	240-250	140-150	140-150	140-150	238-248	238-248
			Sample Date	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	0.285 ± 0.373 (0.615) U	0.605 ± 0.535 (0.792) UJ	0.363 ± 0.473 (0.780) U	0.420 ± 0.458 (0.721) U	**0.954 ± 0.634 (0.810) J-**	**1.47 ± 0.779 (0.957)**
Radium-228	E904.0	pCi/L	5	0.825 ± 0.493 (0.909) UJ	0.727 ± 0.425 (0.786) U	0.494 ± 0.369 (0.721) U	0.760 ± 0.458 (0.851) UJ	0.690 ± 0.397 (0.711) U	0.194 ± 0.340 (0.743) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.11 ± 0.866 (1.52) UJ	1.33 ± 0.960 (1.58) UJ	0.857 ± 0.842 (1.50) U	1.18 ± 0.916 (1.57) UJ	**1.64 ± 1.03 (1.52) J-**	1.66 ± 1.12 (1.70) U
Thorium-228	HASL300	pCi/L	15	0.180 ± 0.182 (0.313) U	0.024 ± 0.070 (0.163) U	0.082 ± 0.135 (0.283) U	0.016 ± 0.123 (0.325) U	0.105 ± 0.103 (0.172) U	-0.011 ± 0.102 (0.294) U
Thorium-230	HASL300	pCi/L	15	0.015 ± 0.104 (0.171) U	0.032 ± 0.060 (0.043) U	0.018 ± 0.085 (0.118) U	0.008 ± 0.101 (0.186) U	0.019 ± 0.057 (0.101) U	0.042 ± 0.086 (0.119) U
Thorium-232	HASL300	pCi/L	15	-0.008 ± 0.104 (0.148) U	0 ± 0.060 (0.043) U	0.024 ± 0.085 (0.064) U	-0.013 ± 0.101 (0.166) U	0.015 ± 0.057 (0.041) U	0 ± 0.086 (0.065) U
Uranium-234	HASL300	pCi/L	NE	**2.37 ± 0.634 (0.274)**	**1.14 ± 0.312 (0.105) J+**	**0.909 ± 0.318 (0.136)**	**0.351 ± 0.199 (0.182)**	**0.983 ± 0.303 (0.122) J+**	**0.987 ± 0.328 (0.159)**
Uranium-235	HASL300	pCi/L	NE	**0.118 ± 0.136 (0.102)**	**0.245 ± 0.144 (0.085) J+**	0.082 ± 0.109 (0.155) U	0.033 ± 0.117 (0.089) U	0.039 ± 0.090 (0.131) U	0.022 ± 0.103 (0.143) U
Uranium-238	HASL300	pCi/L	NE	**1.06 ± 0.388 (0.263)**	**0.419 ± 0.172 (0.087)**	**0.213 ± 0.147 (0.153)**	**0.400 ± 0.205 (0.068)**	**0.457 ± 0.192 (0.050)**	**0.345 ± 0.180 (0.109)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.458 ± 0.429 (0.608) U	**1.24 ± 0.659 (0.745)**	**0.465 ± 0.364 (0.428)**	**0.819 ± 0.521 (0.630)**	**1.82 ± 0.701 (0.528)**	0.367 ± 0.588 (1.02) UJ
Radium-228	E904.0	pCi/L	5	-0.338 ± 0.433 (1.05) U	0.610 ± 0.412 (0.794) UJ	**0.848 ± 0.403 (0.669) J-**	0.279 ± 0.389 (0.836) U	0.476 ± 0.364 (0.716) U	0.241 ± 0.419 (0.914) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.458 ± 0.862 (1.66) U	**1.85 ± 1.07 (1.54) J-**	**1.31 ± 0.767 (1.10) J-**	1.10 ± 0.910 (1.47) U	**2.30 ± 1.07 (1.24)**	0.608 ± 1.01 (1.93) UJ
Thorium-228	HASL300	pCi/L	15	0.179 ± 0.169 (0.290) U	0.005 ± 0.126 (0.303) U	0.051 ± 0.130 (0.303) U	0.041 ± 0.139 (0.331) U	0.041 ± 0.105 (0.232) U	0.173 ± 0.152 (0.218) U
Thorium-230	HASL300	pCi/L	15	**0.182 ± 0.138 (0.143)**	0.010 ± 0.068 (0.150) U	-0.007 ± 0.102 (0.141) U	0.085 ± 0.097 (0.143) U	0.005 ± 0.061 (0.109) U	**0.102 ± 0.101 (0.069)**
Thorium-232	HASL300	pCi/L	15	-0.012 ± 0.087 (0.143) U	0.018 ± 0.068 (0.049) U	0.028 ± 0.102 (0.077) U	-0.006 ± 0.086 (0.120) U	0.059 ± 0.066 (0.090) U	0.019 ± 0.092 (0.127) U
Uranium-234	HASL300	pCi/L	NE	**2.31 ± 0.643 (0.189)**	**1.04 ± 0.290 (0.101) J+**	**0.761 ± 0.276 (0.140)**	**0.411 ± 0.222 (0.242)**	**0.824 ± 0.258 (0.107) J+**	**1.03 ± 0.386 (0.152)**
Uranium-235	HASL300	pCi/L	NE	**0.119 ± 0.150 (0.113)**	**0.171 ± 0.120 (0.109) J+**	**0.126 ± 0.117 (0.074)**	0.064 ± 0.116 (0.087) U	0.003 ± 0.079 (0.057) U	0.030 ± 0.143 (0.199) U
Uranium-238	HASL300	pCi/L	NE	**0.732 ± 0.320 (0.086)**	**0.334 ± 0.148 (0.041) J+**	**0.305 ± 0.166 (0.124)**	**0.210 ± 0.158 (0.204)**	**0.358 ± 0.159 (0.088) J+**	**0.420 ± 0.234 (0.152) J+**
Tritium	E906.0	pCi/L	20,000	-47.3 ± 131 (236) U	-27.5 ± 130 (233) U	-143 ± 127 (237) U	-130 ± 128 (237) U	99.9 ± 149 (251) U	-75.3 ± 140 (254) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-210-SD	PZ-210-SS	PZ-210-SS	PZ-210-SS	PZ-211-SD
			Sample Depth (ft BGS)	238-248	138-148	138-148	138-148	237-247
			Sample Date	08-12-2021	03-05-2021	05-12-2021	08-16-2021	03-04-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	**0.652 ± 0.411 (0.177)**	0.681 ± 0.580 (0.814) U	**2.38 ± 0.926 (0.777)**	**2.36 ± 0.860 (0.510)**	**1.27 ± 0.698 (0.622)**
Radium-228	E904.0	pCi/L	5	0.135 ± 0.393 (0.878) U	0.703 ± 0.405 (0.743) U	0.749 ± 0.415 (0.757) U	**0.889 ± 0.436 (0.740)**	0.158 ± 0.333 (0.738) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.787 ± 0.804 (1.06) U	1.38 ± 0.985 (1.56) U	**3.13 ± 1.34 (1.53)**	**3.25 ± 1.30 (1.25)**	**1.43 ± 1.03 (1.36)**
Thorium-228	HASL300	pCi/L	15	0.090 ± 0.107 (0.198) U	-0.013 ± 0.060 (0.142) U	0.097 ± 0.128 (0.237) U	-0.018 ± 0.080 (0.219) U	-0.008 ± 0.068 (0.150) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.057 (0.041) U	-0.022 ± 0.059 (0.129) U	-0.007 ± 0.098 (0.135) U	-0.023 ± 0.060 (0.131) U	-0.001 ± 0.067 (0.134) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.057 (0.041) U	-0.006 ± 0.058 (0.085) U	0 ± 0.098 (0.074) U	0 ± 0.059 (0.043) U	0.018 ± 0.067 (0.048) U
Uranium-234	HASL300	pCi/L	NE	**1.09 ± 0.400 (0.241)**	**0.305 ± 0.167 (0.162) J+**	0.043 ± 0.087 (0.121) U	**0.281 ± 0.183 (0.134)**	**2.36 ± 0.505 (0.111) J+**
Uranium-235	HASL300	pCi/L	NE	**0.236 ± 0.194 (0.147)**	0.147 ± 0.132 (0.169) U	0.063 ± 0.114 (0.086) U	0.075 ± 0.132 (0.101) U	**0.266 ± 0.150 (0.128) J+**
Uranium-238	HASL300	pCi/L	NE	**0.329 ± 0.204 (0.142)**	**0.142 ± 0.112 (0.130)**	**0.073 ± 0.088 (0.066)**	**0.185 ± 0.152 (0.175)**	**0.879 ± 0.259 (0.098)**
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	**1.26 ± 0.569 (0.421) J-**	**0.915 ± 0.633 (0.897)**	0.986 ± 0.734 (1.07) U	**1.36 ± 0.664 (0.740) J**	**0.828 ± 0.464 (0.481)**
Radium-228	E904.0	pCi/L	5	-0.0855 ± 0.392 (0.933) U	0.303 ± 0.325 (0.675) U	**1.03 ± 0.510 (0.903)**	0.252 ± 0.543 (1.20) U	-0.0521 ± 0.315 (0.742) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	1.26 ± 0.961 (1.35) UJ	1.22 ± 0.958 (1.57) U	**2.02 ± 1.24 (1.97)**	1.61 ± 1.21 (1.94) UJ	0.828 ± 0.779 (1.22) U
Thorium-228	HASL300	pCi/L	15	0.171 ± 0.141 (0.228) U	-0.030 ± 0.079 (0.231) U	0.038 ± 0.089 (0.204) U	0.018 ± 0.120 (0.282) U	0.052 ± 0.091 (0.187) U
Thorium-230	HASL300	pCi/L	15	0.081 ± 0.085 (0.136) U	-0.006 ± 0.064 (0.093) U	0.024 ± 0.086 (0.065) U	0.022 ± 0.066 (0.116) U	0.015 ± 0.058 (0.042) U
Thorium-232	HASL300	pCi/L	15	0.016 ± 0.062 (0.044) U	0 ± 0.064 (0.046) U	0.018 ± 0.086 (0.119) U	-0.006 ± 0.065 (0.096) U	0.015 ± 0.058 (0.042) U
Uranium-234	HASL300	pCi/L	NE	**1.07 ± 0.415 (0.163) J+**	**0.296 ± 0.152 (0.129) J+**	0.136 ± 0.127 (0.142) U	0.090 ± 0.117 (0.207) U	**2.43 ± 0.558 (0.155) J+**
Uranium-235	HASL300	pCi/L	NE	**0.182 ± 0.180 (0.123) J+**	**0.089 ± 0.088 (0.060) J+**	-0.009 ± 0.134 (0.185) U	0.063 ± 0.133 (0.178) U	**0.293 ± 0.172 (0.066) J+**
Uranium-238	HASL300	pCi/L	NE	**0.370 ± 0.234 (0.191)**	**0.128 ± 0.093 (0.046) J+**	0.050 ± 0.103 (0.142) U	**0.116 ± 0.115 (0.079)**	**0.974 ± 0.302 (0.051) J+**
Tritium	E906.0	pCi/L	20,000	44.9 ± 137 (237) U	**636 ± 194 (252)**	**834 ± 214 (254)**	**1237 ± 249 (229)**	**1323 ± 266 (251)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD
			Sample Depth (ft BGS)	237-247	237-247	137-147	137-147	137-147	234-244
			Sample Date	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.949 ± 0.657 (0.930)**	0.402 ± 0.418 (0.622) U	**0.840 ± 0.463 (0.412)**	0.433 ± 0.367 (0.455) U	0.411 ± 0.468 (0.738) U	0.181 ± 0.282 (0.488) UJ
Radium-228	E904.0	pCi/L	5	-0.116 ± 0.541 (1.29) U	-0.347 ± 0.309 (0.796) UJ	0.153 ± 0.286 (0.627) U	0.903 ± 0.518 (0.970) U	0.378 ± 0.373 (0.768) U	**0.846 ± 0.400 (0.675)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.949 ± 1.20 (2.22) U	0.402 ± 0.725 (1.40) UJ	0.993 ± 0.749 (1.04) U	1.34 ± 0.885 (1.43) U	0.789 ± 0.841 (1.51) U	1.03 ± 0.682 (1.16) UJ
Thorium-228	HASL300	pCi/L	15	0.022 ± 0.096 (0.225) U	0.104 ± 0.149 (0.295) U	0.118 ± 0.125 (0.223) U	-0.017 ± 0.105 (0.297) U	-0.056 ± 0.098 (0.323) U	0.023 ± 0.067 (0.118) U
Thorium-230	HASL300	pCi/L	15	-0.006 ± 0.093 (0.129) U	-0.020 ± 0.070 (0.140) U	-0.003 ± 0.063 (0.077) U	0.004 ± 0.102 (0.199) U	-0.011 ± 0.085 (0.140) U	-0.019 ± 0.065 (0.131) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.093 (0.070) U	0 ± 0.070 (0.050) U	0 ± 0.063 (0.045) U	-0.007 ± 0.102 (0.142) U	-0.006 ± 0.085 (0.118) U	0 ± 0.065 (0.047) U
Uranium-234	HASL300	pCi/L	NE	**1.68 ± 0.472 (0.174)**	**1.16 ± 0.334 (0.051)**	**1.15 ± 0.337 (0.147) J+**	**1.34 ± 0.409 (0.186)**	**0.933 ± 0.308 (0.123)**	**2.24 ± 0.475 (0.076) J+**
Uranium-235	HASL300	pCi/L	NE	0.086 ± 0.113 (0.156) U	0.024 ± 0.092 (0.066) U	0.048 ± 0.092 (0.066) U	0.148 ± 0.139 (0.155) U	0.027 ± 0.098 (0.074) U	**0.217 ± 0.127 (0.049) J+**
Uranium-238	HASL300	pCi/L	NE	**0.852 ± 0.310 (0.119)**	**0.466 ± 0.195 (0.051)**	**0.502 ± 0.204 (0.050)**	**0.417 ± 0.215 (0.197)**	**0.346 ± 0.176 (0.115)**	**1.48 ± 0.354 (0.038)**
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	**1.28 ± 0.743 (0.969)**	**1.08 ± 0.659 (0.849) J-**	**1.07 ± 0.536 (0.438)**	**0.602 ± 0.399 (0.466) J+**	0.129 ± 0.536 (1.02) U	**0.817 ± 0.421 (0.354) J+**
Radium-228	E904.0	pCi/L	5	0.630 ± 0.400 (0.754) U	0.256 ± 0.401 (0.870) U	0.416 ± 0.397 (0.812) U	0.668 ± 0.424 (0.803) U	0.558 ± 0.431 (0.849) U	0.260 ± 0.319 (0.675) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.91 ± 1.14 (1.72)**	1.34 ± 1.06 (1.72) UJ	**1.49 ± 0.933 (1.25)**	**1.27 ± 0.823 (1.27) J+**	0.687 ± 0.967 (1.87) U	**1.08 ± 0.740 (1.03) J**
Thorium-228	HASL300	pCi/L	15	0.154 ± 0.180 (0.342) U	0.050 ± 0.087 (0.177) U	0.083 ± 0.118 (0.232) U	0.051 ± 0.116 (0.265) U	0.089 ± 0.150 (0.316) U	0.032 ± 0.075 (0.109) U
Thorium-230	HASL300	pCi/L	15	0 ± 0.095 (0.072) U	0.016 ± 0.067 (0.133) U	0.042 ± 0.068 (0.115) U	0.095 ± 0.109 (0.161) U	-0.032 ± 0.095 (0.207) U	0.029 ± 0.073 (0.117) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.095 (0.072) U	0 ± 0.067 (0.048) U	-0.013 ± 0.067 (0.119) U	0 ± 0.097 (0.073) U	0.020 ± 0.095 (0.132) U	0 ± 0.073 (0.052) U
Uranium-234	HASL300	pCi/L	NE	**1.79 ± 0.532 (0.146)**	**1.32 ± 0.453 (0.175) J+**	**1.27 ± 0.377 (0.117) J+**	**1.20 ± 0.380 (0.156)**	**0.915 ± 0.318 (0.166)**	**2.59 ± 0.543 (0.100) J+**
Uranium-235	HASL300	pCi/L	NE	0.106 ± 0.139 (0.191) U	0.117 ± 0.147 (0.194) U	0.073 ± 0.105 (0.152) U	0.038 ± 0.110 (0.083) U	**0.119 ± 0.118 (0.081)**	**0.127 ± 0.101 (0.081) J+**
Uranium-238	HASL300	pCi/L	NE	**0.786 ± 0.324 (0.146)**	**0.439 ± 0.243 (0.149)**	**0.384 ± 0.192 (0.153) J+**	**0.299 ± 0.172 (0.117)**	**0.196 ± 0.147 (0.189)**	**1.65 ± 0.392 (0.083) J+**
Tritium	E906.0	pCi/L	20,000	**974 ± 224 (241)**	**589 ± 191 (256)**	67.5 ± 136 (233) U	0 ± 131 (232) U	-294 ± 153 (285) UJ	17.3 ± 132 (231) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS	PZ-212-SS
			Sample Depth (ft BGS)	234-244	234-244	134-144	134-144	134-144
			Sample Date	05-11-2021	08-10-2021	02-26-2021	05-11-2021	08-10-2021
			Sample Type	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL					
Radiochemistry, Dissolved								
Radium-226	E903.1	pCi/L	5	0.290 ± 0.343 (0.539) U	-0.0590 ± 0.417 (0.886) U	0.346 ± 0.322 (0.424) UJ	**0.375 ± 0.303 (0.170)**	0.0554 ± 0.326 (0.665) U
Radium-228	E904.0	pCi/L	5	0.435 ± 0.421 (0.863) U	0.378 ± 0.292 (0.570) U	0.315 ± 0.349 (0.730) U	0.548 ± 0.436 (0.863) U	-0.0834 ± 0.373 (0.874) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.725 ± 0.764 (1.40) U	0.378 ± 0.709 (1.46) U	0.661 ± 0.671 (1.15) UJ	0.923 ± 0.739 (1.03) U	0.0554 ± 0.699 (1.54) U
Thorium-228	HASL300	pCi/L	15	-0.011 ± 0.088 (0.203) U	0.007 ± 0.105 (0.256) U	0.023 ± 0.107 (0.248) U	-0.048 ± 0.101 (0.291) U	-0.067 ± 0.118 (0.320) U
Thorium-230	HASL300	pCi/L	15	0.007 ± 0.085 (0.157) U	0.017 ± 0.064 (0.046) U	-0.001 ± 0.063 (0.127) U	-0.020 ± 0.097 (0.180) U	-0.018 ± 0.063 (0.126) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.085 (0.118) U	-0.006 ± 0.064 (0.094) U	-0.006 ± 0.063 (0.092) U	-0.007 ± 0.097 (0.135) U	-0.006 ± 0.063 (0.092) U
Uranium-234	HASL300	pCi/L	NE	**2.55 ± 0.608 (0.172)**	**3.22 ± 0.733 (0.189)**	**0.649 ± 0.222 (0.117) J+**	**0.361 ± 0.186 (0.130)**	**0.395 ± 0.223 (0.082)**
Uranium-235	HASL300	pCi/L	NE	**0.194 ± 0.152 (0.143)**	0.118 ± 0.126 (0.157) U	**0.194 ± 0.138 (0.168) J+**	**0.086 ± 0.103 (0.077)**	0.072 ± 0.140 (0.186) U
Uranium-238	HASL300	pCi/L	NE	**1.22 ± 0.376 (0.182)**	**1.76 ± 0.489 (0.223)**	**0.335 ± 0.154 (0.117)**	**0.164 ± 0.125 (0.130)**	0.185 ± 0.162 (0.217) U
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	5	-0.0529 ± 0.427 (0.881) U	0 ± 0.394 (0.807) U	0.569 ± 0.487 (0.661) U	0.364 ± 0.378 (0.563) U	-0.177 ± 0.383 (0.884) U
Radium-228	E904.0	pCi/L	5	0.229 ± 0.468 (1.03) U	0.838 ± 0.532 (0.997) U	0.173 ± 0.290 (0.631) UJ	**1.08 ± 0.463 (0.774)**	0.0908 ± 0.580 (1.32) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.229 ± 0.895 (1.91) U	0.838 ± 0.926 (1.80) U	0.742 ± 0.777 (1.29) UJ	**1.44 ± 0.841 (1.34)**	0.0908 ± 0.963 (2.20) U
Thorium-228	HASL300	pCi/L	15	0.036 ± 0.113 (0.274) U	0.028 ± 0.136 (0.320) U	0.056 ± 0.107 (0.226) U	-0.001 ± 0.094 (0.195) U	0.134 ± 0.139 (0.242) U
Thorium-230	HASL300	pCi/L	15	-0.022 ± 0.094 (0.183) U	-0.015 ± 0.071 (0.131) U	0 ± 0.079 (0.057) U	-0.012 ± 0.091 (0.150) U	-0.006 ± 0.076 (0.108) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.094 (0.130) U	0.019 ± 0.071 (0.052) U	0 ± 0.079 (0.057) U	-0.012 ± 0.091 (0.150) U	0 ± 0.076 (0.056) U
Uranium-234	HASL300	pCi/L	NE	**2.46 ± 0.589 (0.130)**	**2.52 ± 0.677 (0.148) J+**	**0.515 ± 0.186 (0.094) J+**	**0.298 ± 0.179 (0.127)**	**1.02 ± 0.397 (0.092) J+**
Uranium-235	HASL300	pCi/L	NE	0.050 ± 0.103 (0.142) U	**0.247 ± 0.201 (0.112) J+**	0.075 ± 0.078 (0.102) U	0.066 ± 0.119 (0.090) U	0.154 ± 0.168 (0.207) U
Uranium-238	HASL300	pCi/L	NE	**1.35 ± 0.395 (0.059) J+**	**1.86 ± 0.555 (0.148)**	**0.392 ± 0.158 (0.078) J+**	**0.254 ± 0.162 (0.069)**	**0.511 ± 0.279 (0.241)**
Tritium	E906.0	pCi/L	20,000	-45.2 ± 142 (253) U	-87.0 ± 131 (238) U	**379 ± 161 (232)**	54.8 ± 146 (251) U	77.0 ± 158 (295) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
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			Sample Location	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS
			Sample Depth (ft BGS)	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22
			Sample Date	03-12-2021	05-18-2021	08-23-2021	03-09-2021	03-10-2021	05-18-2021
			Sample Type	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.477 ± 0.335 (0.162) J**	0.536 ± 0.563 (0.894) U	0.181 ± 0.393 (0.726) U	0.510 ± 0.434 (0.610) UJ	NA	NA
Radium-228	E904.0	pCi/L	5	0.948 ± 0.520 (0.961) U	**0.827 ± 0.371 (0.582)**	**1.25 ± 0.442 (0.632)**	0.103 ± 0.502 (1.15) UJ	NA	NA
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.43 ± 0.855 (1.12) J**	1.36 ± 0.934 (1.48) U	**1.43 ± 0.835 (1.36)**	0.613 ± 0.936 (1.76) UJ	NA	NA
Thorium-228	HASL300	pCi/L	15	-0.003 ± 0.062 (0.157) U	0.057 ± 0.100 (0.209) U	0.245 ± 0.199 (0.323) U	NA	-0.046 ± 0.074 (0.230) U	NA
Thorium-230	HASL300	pCi/L	15	-0.001 ± 0.060 (0.121) U	0.024 ± 0.088 (0.066) U	0.002 ± 0.086 (0.166) U	NA	0.005 ± 0.061 (0.108) U	NA
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.060 (0.088) U	-0.006 ± 0.088 (0.122) U	0 ± 0.086 (0.063) U	NA	-0.006 ± 0.061 (0.089) U	NA
Uranium-234	HASL300	pCi/L	NE	**4.66 ± 0.865 (0.116) J+**	**4.71 ± 0.942 (0.151)**	**4.75 ± 1.08 (0.278)**	NA	**0.612 ± 0.288 (0.199) J+**	NA
Uranium-235	HASL300	pCi/L	NE	**0.507 ± 0.213 (0.111) J+**	**0.268 ± 0.174 (0.135)**	**0.335 ± 0.249 (0.241)**	NA	**0.162 ± 0.158 (0.106) J+**	NA
Uranium-238	HASL300	pCi/L	NE	**3.62 ± 0.707 (0.042)**	**3.45 ± 0.741 (0.123)**	**3.25 ± 0.822 (0.157)**	NA	**0.308 ± 0.199 (0.164)**	NA
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.220 ± 0.336 (0.540) U	0.229 ± 0.356 (0.617) U	0.695 ± 0.665 (1.01) U	0.589 ± 0.645 (1.04) U	NA	NA
Radium-228	E904.0	pCi/L	5	0.232 ± 0.831 (1.86) UJ	0.814 ± 0.519 (1.00) U	**1.77 ± 0.542 (0.679)**	0.141 ± 0.349 (0.777) U	NA	NA
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	0.452 ± 1.17 (2.40) UJ	1.04 ± 0.875 (1.62) U	**2.47 ± 1.21 (1.69)**	0.730 ± 0.994 (1.82) U	NA	NA
Thorium-228	HASL300	pCi/L	15	0.075 ± 0.093 (0.168) U	0.036 ± 0.092 (0.219) U	0.159 ± 0.132 (0.216) U	NA	-0.012 ± 0.065 (0.192) U	NA
Thorium-230	HASL300	pCi/L	15	-0.012 ± 0.061 (0.145) U	-0.005 ± 0.089 (0.193) U	-0.024 ± 0.057 (0.131) U	NA	0.039 ± 0.064 (0.113) U	NA
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.061 (0.090) U	0 ± 0.089 (0.067) U	0 ± 0.057 (0.041) U	NA	0.017 ± 0.064 (0.046) U	NA
Uranium-234	HASL300	pCi/L	NE	**4.97 ± 0.931 (0.140)**	**4.15 ± 0.857 (0.125)**	**4.44 ± 0.978 (0.176)**	NA	**0.746 ± 0.281 (0.148) J+**	NA
Uranium-235	HASL300	pCi/L	NE	**0.551 ± 0.231 (0.060) J+**	**0.232 ± 0.161 (0.075)**	**0.368 ± 0.239 (0.175) J+**	NA	**0.197 ± 0.157 (0.160) J+**	NA
Uranium-238	HASL300	pCi/L	NE	**3.97 ± 0.778 (0.112)**	**3.54 ± 0.759 (0.125)**	**2.44 ± 0.642 (0.204) J+**	NA	**0.401 ± 0.195 (0.060) J+**	NA
Tritium	E906.0	pCi/L	20,000	151 ± 137 (223) U	160 ± 146 (238) U	157 ± 139 (226) U	**268 ± 149 (229)**	NA	**312 ± 157 (237)**

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
			Sample Depth (ft BGS)	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8
			Sample Date	05-19-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021
			Sample Type	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL						
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L	5	**0.621 ± 0.435 (0.524)**	0.112 ± 0.410 (0.787) U	0.346 ± 0.491 (0.832) U	**0.676 ± 0.473 (0.571)**	0 ± 0.448 (0.898) UJ	**0.686 ± 0.480 (0.633) J-**
Radium-228	E904.0	pCi/L	5	**1.35 ± 0.517 (0.770)**	**0.888 ± 0.346 (0.505)**	**1.11 ± 0.491 (0.800)**	0.710 ± 0.456 (0.869) U	**1.15 ± 0.474 (0.759) J+**	**1.38 ± 0.541 (0.862) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.97 ± 0.952 (1.29)**	1.000 ± 0.756 (1.29) U	1.46 ± 0.982 (1.63) U	1.39 ± 0.929 (1.44) U	1.15 ± 0.922 (1.66) UJ	**2.07 ± 1.02 (1.50) J**
Thorium-228	HASL300	pCi/L	15	-0.015 ± 0.094 (0.282) U	0.071 ± 0.097 (0.183) U	-0.112 ± 0.068 (0.268) U	0.011 ± 0.068 (0.174) U	0.150 ± 0.185 (0.359) U	-0.023 ± 0.136 (0.383) U
Thorium-230	HASL300	pCi/L	15	0.018 ± 0.085 (0.118) U	-0.020 ± 0.069 (0.139) U	-0.006 ± 0.064 (0.094) U	0 ± 0.065 (0.047) U	0.014 ± 0.098 (0.162) U	-0.026 ± 0.097 (0.195) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.085 (0.064) U	0 ± 0.069 (0.050) U	0 ± 0.064 (0.046) U	-0.006 ± 0.065 (0.095) U	0 ± 0.098 (0.074) U	-0.013 ± 0.097 (0.159) U
Uranium-234	HASL300	pCi/L	NE	**5.99 ± 1.20 (0.167)**	**2.73 ± 0.714 (0.186)**	**0.392 ± 0.169 (0.119) J+**	**0.526 ± 0.204 (0.113) J+**	0.103 ± 0.120 (0.190) U	**0.210 ± 0.158 (0.204)**
Uranium-235	HASL300	pCi/L	NE	**0.266 ± 0.191 (0.164)**	0.106 ± 0.145 (0.221) U	**0.195 ± 0.130 (0.113) J+**	**0.370 ± 0.186 (0.060) J+**	0 ± 0.134 (0.101) U	0.081 ± 0.116 (0.190) U
Uranium-238	HASL300	pCi/L	NE	**5.24 ± 1.08 (0.149)**	**1.78 ± 0.541 (0.192)**	**0.152 ± 0.101 (0.087)**	**0.140 ± 0.106 (0.128)**	0.079 ± 0.103 (0.142) U	-0.017 ± 0.088 (0.215) U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	5	0.655 ± 0.529 (0.769) U	**0.869 ± 0.608 (0.734)**	0.254 ± 0.493 (0.861) U	0.0641 ± 0.453 (0.904) U	0.271 ± 0.320 (0.503) U	0.799 ± 0.632 (0.922) U
Radium-228	E904.0	pCi/L	5	**1.44 ± 0.551 (0.858)**	**1.64 ± 0.830 (1.48)**	**0.933 ± 0.465 (0.814)**	**1.26 ± 0.642 (1.10) J-**	**1.22 ± 0.619 (1.11)**	**0.908 ± 0.466 (0.836)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**2.10 ± 1.08 (1.63)**	**2.51 ± 1.44 (2.21)**	1.19 ± 0.958 (1.68) U	1.32 ± 1.10 (2.00) UJ	1.49 ± 0.939 (1.61) U	1.71 ± 1.10 (1.76) U
Thorium-228	HASL300	pCi/L	15	0.127 ± 0.186 (0.376) U	0.003 ± 0.102 (0.255) U	0.008 ± 0.150 (0.357) U	-0.178 ± 0.157 (0.540) UJ	0.052 ± 0.178 (0.426) UJ	-0.023 ± 0.106 (0.245) U
Thorium-230	HASL300	pCi/L	15	0.003 ± 0.109 (0.216) U	-0.011 ± 0.068 (0.154) U	-0.014 ± 0.147 (0.215) U	0.022 ± 0.129 (0.189) U	0.024 ± 0.112 (0.155) U	0.050 ± 0.103 (0.143) U
Thorium-232	HASL300	pCi/L	15	-0.007 ± 0.109 (0.152) U	0 ± 0.067 (0.049) U	0.039 ± 0.147 (0.106) U	0.034 ± 0.129 (0.093) U	-0.022 ± 0.112 (0.207) U	0 ± 0.103 (0.078) U
Uranium-234	HASL300	pCi/L	NE	**0.815 ± 0.301 (0.169)**	**0.672 ± 0.300 (0.183)**	**0.373 ± 0.183 (0.155) J+**	**0.540 ± 0.210 (0.131) J+**	0.151 ± 0.127 (0.173) U	0.094 ± 0.100 (0.125) U
Uranium-235	HASL300	pCi/L	NE	**0.091 ± 0.110 (0.082)**	0.149 ± 0.155 (0.183) U	0.083 ± 0.103 (0.168) U	**0.234 ± 0.150 (0.125) J+**	0.054 ± 0.104 (0.144) U	0.065 ± 0.118 (0.088) U
Uranium-238	HASL300	pCi/L	NE	**0.762 ± 0.287 (0.116)**	**0.713 ± 0.308 (0.140) J+**	**0.147 ± 0.110 (0.106) J+**	**0.127 ± 0.097 (0.096) J+**	0.009 ± 0.080 (0.141) U	**0.163 ± 0.133 (0.148)**
Tritium	E906.0	pCi/L	20,000	NA	**376 ± 157 (226)**	62.1 ± 131 (223) U	128 ± 136 (225) U	20.1 ± 139 (242) U	0 ± 136 (240) U

Notes and definitions are presented on Page 58

Table 12a: Validated Groundwater Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
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			Sample Location	PZ-303-AS
			Sample Depth (ft BGS)	16-25.8
			Sample Date	08-24-2021
			Sample Type	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	
Radiochemistry, Dissolved				
Radium-226	E903.1	pCi/L	5	**0.883 ± 0.487 (0.433)**
Radium-228	E904.0	pCi/L	5	**0.737 ± 0.402 (0.722)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.62 ± 0.889 (1.16)**
Thorium-228	HASL300	pCi/L	15	**0.235 ± 0.150 (0.176) J+**
Thorium-230	HASL300	pCi/L	15	0.002 ± 0.070 (0.135) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.070 (0.051) U
Uranium-234	HASL300	pCi/L	NE	**0.152 ± 0.135 (0.082)**
Uranium-235	HASL300	pCi/L	NE	0.099 ± 0.140 (0.218) U
Uranium-238	HASL300	pCi/L	NE	0.116 ± 0.121 (0.142) U
Radiochemistry, Total				
Radium-226	E903.1	pCi/L	5	**0.720 ± 0.478 (0.217)**
Radium-228	E904.0	pCi/L	5	**0.893 ± 0.480 (0.842)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**1.61 ± 0.958 (1.06)**
Thorium-228	HASL300	pCi/L	15	0.172 ± 0.198 (0.382) U
Thorium-230	HASL300	pCi/L	15	0.009 ± 0.080 (0.137) U
Thorium-232	HASL300	pCi/L	15	-0.006 ± 0.080 (0.114) U
Uranium-234	HASL300	pCi/L	NE	**0.244 ± 0.189 (0.201) J+**
Uranium-235	HASL300	pCi/L	NE	0.074 ± 0.156 (0.239) U
Uranium-238	HASL300	pCi/L	NE	0.200 ± 0.173 (0.208) U
Tritium	E906.0	pCi/L	20,000	-62.1 ± 133 (263) U

Notes:

ft BGS = feet below ground surface

pCi/L = picoCuries per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
MCLs are for combined radium 226/228 (5 pCi/L) and gross alpha excluding uranium (15 pCi/L). Radium-226 contributes to both the combined radium-226/228 and gross alpha; the lower of the two MCLs is shown in the table for comparison. There is a total Uranium MCL of 30 ug/L presented in the metals result tables.

Bold = Detected

Blue Font = Exceeds USEPA Primary MCL

NE = Not Established

Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced minimum detectable concentration.

UJ = The analyte was analyzed for, but was not detected. The minimum detectable concentration is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 58

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13
				Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133
				Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021
				Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.035 U	< 0.034 U	< 0.033 U	< 0.038 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**30.5**	NA	NA	**39.2**	**39.0**	NA	NA	**24.3 J**	**27.0 J**	NA	NA	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	NA	< 100 UJ	< 100 UJ	NA	NA	< 100 U	< 100 U	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**2.7**	**2.8**	**1.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**17.7**	**18.4**	**16.7**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	**0.36 J**	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	D-81	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87
				Sample Depth (ft BGS)	45-60	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111
				Sample Date	03-09-2021	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021
				Sample Type	N	N	N	N	N	N	N	N	N	FD	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.033 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.038 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	< 3.00 U	NA	NA	< 3.00 UJ	NA	NA	< 3.00 U	< 3.00 U	NA	NA	**29.6**	**24.7**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 U	NA	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 UJ	NA	NA	**51.1 J**	< 100 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**2.6 J**	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**0.68 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	**3.5**	**3.5**	**4.3**	**6.4**	**6.4**	**3.5**	**3.6**	< 1.0 U	**0.73 J**	**0.59 J**	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	**1.9 J**	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	**0.43 J**	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	**0.83 J**	**0.64 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	D-89	D-89	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9
				Sample Depth (ft BGS)	33-48	33-48	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1
				Sample Date	03-10-2021	03-10-2021	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021
				Sample Type	N	FD	N	FD	N	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	**0.39 J**	< 5.0 U	**0.36 J**	**0.39 J**	**0.42 J**	< 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
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.037 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.56 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	NA	NA	**247 J**	NA	NA	NA	NA	**118**	NA	NA	**512**	**421**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 UJ	**77.2 J**	**177 J**	NA	< 100 UJ	< 100 UJ	< 100 UJ	**245 J**	NA	**70.5 J**	**516 J**	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	**5.4 J**	**5.7 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.9 J**	**6.1 J**
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**126**	**125**	**175**	**176**	**189**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**2.9**	**2.5**	**2.8**	**2.7**	**3.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**3.6**	**3.5**	**2.5**	**2.6**
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.82 J**	< 1.0 U	**0.58 J**	**0.58 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	I-11	I-11	I-11	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67
				Sample Depth (ft BGS)	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4
				Sample Date	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 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 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.2**	**1.5**	**1.3**	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.34 J**	< 1.0 U	**0.74 J**	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.7 J+**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.2 J+**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.034 U	< 0.038 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**46.0**	NA	NA	< 3.00 UJ	NA	NA	< 3.00 U	NA	NA	**4.86**	NA	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 R	**260 J**	NA	< 100 R	< 100 UJ	NA	< 100 UJ	< 100 U	NA	< 100 UJ	< 100 U	NA	< 100 UJ	< 100 U
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	**4.2 J**	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 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 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**2.8**	**2.4**	**2.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	I-67	I-68	I-68	I-68	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR
				Sample Depth (ft BGS)	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82
				Sample Date	08-04-2021	02-23-2021	05-04-2021	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021
				Sample Type	N	N	N	N	N	FD	N	FD	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.2 J**	**2.7 J**	**2.3 J**	< 25.0 U	**2.3 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.034 U	< 0.034 U	< 0.038 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.033 U	< 0.040 U	< 0.036 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	**0.48 J**	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.60 J**	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.7**	**5.6**	< 5.0 U	< 5.0 U	< 1.0 U	**6.1**	**5.5**	**5.6**	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	< 3.00 U	NA	NA	< 3.00 U	NA	NA	NA	NA	**2,270 J-**	NA	NA	**22.1**	NA	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	< 100 UJ	< 100 U	NA	**936 J**	**1,390 J**	**2,610 J**	**3,740 J**	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 100 U	**25.7 J**	**6.9 J**	< 20.0 U	**3.3 J**	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 500 U	< 500 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 100 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 100 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**431**	**435**	**526**	**538**	**632**	**8.5**	**7.9**	**9.0**	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**8.4**	**9.7**	**8.1**	**8.0**	**8.9**	**43.4**	**37.6**	**42.0**	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 U	< 100 U	< 20.0 U	**0.74 J**	**0.88 J**	**0.58 J**	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3
				Sample Depth (ft BGS)	-	-	-	-	39-49	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100
				Sample Date	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.038 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	**227**	NA	< 3.00 U	NA	**14.7**	NA	**37.6**	NA	**164**	**31.4**	**37.3**	**69.3**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**165**	< 20.0 U	< 20.0 U	< 20.0 U	**10.5 J**
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	**16.9 J**	**111**	**4.6 J**	< 20.0 U	< 20.0 U	**9.2 J**
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	**2.0**	< 1.0 U	< 1.0 U	**0.74 J**	**0.52 J**	**0.59 J**	**0.65 J**	**1.3**	**0.97 J**	< 1.0 U	**4.2**	**2.3**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 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	< 5.0 UJ	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.71 J**	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**2.1**	**3.3**	**3.4**	**2.5**	**1.9**	**20.6**	**47.5**	**47.7**
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.97 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1
					Sample Depth (ft BGS)	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60
					Sample Date	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021
					Sample Type	N	N	N	N	FD	N	N	FD	N	FD	N	N	N	N
Volatile Organic Compounds, Total (#–C)																			
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	**3.3 J**	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033		< 0.036 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.037 U	< 0.041 U	< 0.039 U	< 0.037 U	< 0.034 U	< 0.036 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46		**6.64**	NA	< 3.00 U	NA	NA	**16.5**	NA	NA	NA	NA	**144**	NA	**10.7**	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NE	0.46		NA	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	< 100 UJ	**86.1 J**	NA	< 500 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 UJ	< 5.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800		< 20.0 U	< 20.0 U	< 20.0 U	**3.1 J**	**3.1 J**	< 20.0 UJ	< 20.0 U	< 20.0 U	**3.6 J**	**3.9 J**	< 20.0 UJ	< 100 U	< 100 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13		< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042		< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 100 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21		< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 100 UJ	< 100 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	**0.55 J**	**1.5**	**1.4**	**2.1**	**1.7**	**1.6**	**1.5**	**1.5**	**1.6**	< 5.0 U	**4.0 J**	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75		< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 25.0 UJ	< 25.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81		**3.4 J**	< 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	< 25.0 U	< 25.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8		< 1.0 U	**16.2**	**23.7**	**15.7**	**15.2**	**37.2**	< 1.0 U	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830		< 2.0 UJ	< 2.0 U	**5.5 J+**	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 10.0 U	< 10.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300		< 20.0 U	< 20.0 U	**0.36 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3
					Sample Depth (ft BGS)	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136	221-231
					Sample Date	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021
					Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8		< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6		< 5.0 U	**0.42 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033		< 0.037 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.034 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6		< 5.0 U	**1.1 J**	**0.95 J**	< 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
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46		< 3.00 U	NA	**506**	NA	**16.6**	NA	**404**	NA	NA	**344**	NA	**89.6**	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46		NA	**459 J**	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**4.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800		< 20.0 UJ	**9.0 J**	< 20.0 UJ	< 20.0 U	< 20.0 UJ	**8.0 J**	**4.5 J**	**11.9 J**	**14.9 J**	**3.8 J**	< 20.0 U	**3.7 J**	**88.3**
Acetonitrile	SW8260C	ug/L	NE	13		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042		< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21		< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46		< 1.0 U	**684**	**485**	**16.0**	**10.5**	**225**	**276**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75		< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8		< 1.0 U	**61.0**	**52.7**	**1.3**	**1.3**	**27.3**	**36.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	**0.81 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6		< 1.0 U	< 1.0 U	< 1.0 U	**11.3**	**14.5**	**1.4**	**1.6**	**12.9**	**13.4**	**12.0**	< 1.0 U	**2.4**	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.45 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2
					Sample Depth (ft BGS)	221-231	221-231	25-35	25-35	80-90	80-90	80-90	110-120	110-120	110-120	20-30	20-30	55-65
					Sample Date	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021	05-12-2021
					Sample Type	N	FD	N	N	N	N	FD	N	N	FD	N	N	N
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.46 J**	< 1.0 U	< 1.0 U	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033		< 0.034 U	< 0.035 U	< 0.038 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.040 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48		< 1.0 U	< 1.0 U	**0.62 J**	**0.68 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46		**56.0**	**56.1**	NA	**127**	NA	**68.1**	**72.7**	NA	**79.1**	**84.4**	NA	**18.2 J**	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46		NA	NA	< 100 UJ	NA	**45.9 J**	NA	NA	**66.3 J**	NA	NA	< 100 UJ	NA	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560		**55.0**	**51.1**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**2.0 J**	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800		**50.6 J**	**45.9 J**	**12.8 J**	< 20.0 U	**5.3 J**	< 20.0 U	< 20.0 U	**12.8 J**	**3.9 J**	**4.3 J**	< 20.0 U	**6.2 J**	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042		< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21		< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	**1.6**	**1.6**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 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
Carbon disulfide	SW8260C	ug/L	NE	81		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8		< 1.0 U	< 1.0 U	**35.6**	**72.0**	**3.2**	< 1.0 U	< 1.0 U	**0.73 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**
Chlorobromomethane	SW8260C	ug/L	NE	8.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22		**0.55 J**	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19		< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6		**1.4**	**1.4**	**1.1**	< 1.0 U	**8.6**	**2.5**	**2.6**	**6.7**	**1.4**	**1.5**	**0.31 J**	**1.2**	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.18 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3	MW-401-P3
					Sample Depth (ft BGS)	55-65	90-100	90-100	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72	92-102	92-102
					Sample Date	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8		< 1.0 U	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.46 J**	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033		< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46		**39.6 J**	NA	**57.4 J**	NA	**25.6 J**	NA	**23.5 J**	NA	< 3.00 U	NA	< 3.00 U	NA	**5.37**
1,4-Dioxane	SW8260C	ug/L	NE	0.46		NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**12.3 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.6 J**	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800		**3.8 J**	< 20.0 U	< 20.0 UJ	**4.8 J**	< 20.0 UJ	**16.8 J**	**6.5 J**	**3.0 J**	< 20.0 UJ	< 20.0 U	< 20.0 UJ	**11.0 J**	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042		< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	NE	0.052		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75		< 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 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81		< 5.0 U	< 5.0 U	< 5.0 U	**0.83 J**	**0.93 J**	< 5.0 U	**0.70 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8		**2.2**	< 1.0 U	**0.65 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.3**	**0.75 J**	**0.75 J**	**1.1**
Chlorobromomethane	SW8260C	ug/L	NE	8.3		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830		< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19		< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2
				Sample Depth (ft BGS)	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6
				Sample Date	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021
				Sample Type	FD	N	N	N	N	N	N	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.52 J**	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.038 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	**5.44**	**113**	**108**	**163**	NA	**3.36**	NA	NA	**488**	NA	**218**	**64.6**	**297**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	NA	NA	NA	< 100 UJ	NA	**493 J**	**365 J**	NA	< 100 UJ	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	**4.4 J**	< 20.0 U	**4.9 J**	< 20.0 U	< 20.0 UJ	**7.4 J**	**6.0 J**	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.89 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	**1.4 J**	**7.8 J**
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.95 J**	**1.2**	**0.82 J**	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	**0.19 J**

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2	MW-505-P3	MW-505-P3
				Sample Depth (ft BGS)	103.6-113.6	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50	40-50	65-75	65-75
				Sample Date	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.039 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 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-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	**111**	NA	NA	**39.0**	NA	NA	< 3.00 U	NA	< 3.00 U	NA	< 3.00 U	NA	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 U	NA	< 100 UJ	NA	< 100 UJ	NA	< 100 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**177**	**16.1 J**
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	**3.0 J**	< 20.0 UJ	**108**	**22.4 J**
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	**0.71 J**	< 1.0 U	**0.40 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10
				Sample Depth (ft BGS)	39-48.8	39-48.8	39-48.8	17.1-26.9	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52
				Sample Date	03-01-2021	05-17-2021	08-18-2021	03-10-2021	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	**2.1 J**	**1.7 J**	**2.8 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.033 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	**1.4**	**1.8**	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.38 J**
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	**0.87 J**	< 1.0 U	**2.7**	**21.6**	**19.8**	**23.8**	**6.0**	**6.8**	**8.8**	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**1.4**
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**146**	NA	NA	**110**	NA	NA	**75.2**	NA	NA	**1.50 J**	NA	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 500 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 UJ	NA	**60.3 J**	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	**2.7 J**	< 20.0 U	< 20.0 U	< 100 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 500 U	< 100 U	< 100 UJ	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 100 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**4.0**	**8.2**	**8.4**	**8.1**	**8.4**	**9.7**	**4.3**	**3.5**	**4.3 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	**0.44 J**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 25.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**6.2**	**19.4**	**57.2**	**163**	**146**	**177**	**3.8**	**5.1**	**5.1**	< 1.0 U	< 1.0 U	< 1.0 U	**8.5**	**7.3**
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 U	**1.4 J**	< 2.0 U	< 10.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 10.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	**14.6**
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	**0.71 J**
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.59 J**

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS
				Sample Depth (ft BGS)	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6
				Sample Date	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.036 U	< 0.034 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	**1.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	**276**	NA	NA	**188**	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 UJ
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	**0.59 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**9.4**	**1.2**	**2.5**	**6.5**	< 1.0 U	< 1.0 U	< 1.0 U	**2.3**	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	**18.2 J**	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	**0.92 J**	**1.2**	**1.0**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	**0.48 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS	PZ-103-SS	PZ-103-SS
				Sample Depth (ft BGS)	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5	134.7-144.5	134.7-144.5
				Sample Date	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021	03-12-2021	03-12-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.040 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	**1.0**	< 1.0 U	**1.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.78 J**	**0.71 J**
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	< 3.00 U	NA	NA	**47.2**	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 U	NA	< 100 U	< 100 U	NA	**279**	**98.6 J**
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	**9.2 J**	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**51.4**	**51.5**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	**6.9**	**12.7**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.8**	**4.7**
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS
				Sample Depth (ft BGS)	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3
				Sample Date	05-20-2021	05-20-2021	08-24-2021	02-24-2021	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021
				Sample Type	N	FD	N	N	N	N	N	N	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**7.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.034 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 5.0 U	< 5.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 5.0 U	< 5.0 U	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	**0.65 J**	< 1.0 U	**0.59 J**	**0.61 J**	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**717**	NA	NA	< 3.00 U	NA	NA	**42.8**	**46.7**	NA	NA	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NE	0.46	**659 J**	**990 J**	NA	< 100 U	< 100 U	NA	< 100 UJ	< 100 UJ	NA	NA	< 100 U	< 100 U	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	**15.4 J**	**13.6 J**	**7.0 J**	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	**2.4 J**	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 100 UJ	< 100 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 100 UJ	< 100 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**48.4**	**52.4**	**70.5**	< 1.0 U	< 1.0 U	< 1.0 U	**23.3**	**42.3**	**26.1**	**29.2**	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**5.1**	**5.3**	**6.7**	< 1.0 U	< 1.0 U	< 1.0 U	**0.55 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 10.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 10.0 U	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS
				Sample Depth (ft BGS)	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1
				Sample Date	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1												
Volatile Organic Compounds, Total (#–C)																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	**3.0**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	**0.89 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	**0.19 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 UJ	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	**0.36 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**30.7**	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	**8.95**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 U	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	**1.5 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	**0.23 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	**5.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	**7.9 J+**	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	**2.0 J**	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	**0.22 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 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	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS
				Sample Depth (ft BGS)	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5
				Sample Date	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 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	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**151**	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	**182 J**	NA	< 100 U	< 100 U	NA	< 100 UJ	< 100 U	NA	< 100 UJ	< 100 U	NA	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	**2.5**	**3.0**	**4.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 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 UJ	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**0.74 J**	< 1.0 U	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS
				Sample Depth (ft BGS)	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7
				Sample Date	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021
				Sample Type	FD	N	FD	N	N	FD	N	FD	N	FD	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	NA	**119**	NA	NA	NA	NA	**33.3**	**39.9**	NA	NA	**9.18**	**10.4**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	**133 J**	< 100 UJ	NA	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	NA	NA	< 100 U	< 100 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	**3.6 J**	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.5**	**4.5**	**4.1**	**4.1**	< 1.0 UJ	**4.7 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS
				Sample Depth (ft BGS)	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161	9.62-97.64
				Sample Date	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021	02-23-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.034 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	**5.7**	**5.0**	**5.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	**21.2**	NA	NA	< 3.00 U	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 U	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 UJ	NA	< 100 U	< 100 UJ	NA	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 UJ	< 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	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	**51.5**	**31.9**	**39.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS
				Sample Depth (ft BGS)	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1
				Sample Date	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021	03-10-2021	05-19-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.038 U	< 0.034 U	< 0.036 U	< 0.037 UJ	< 0.036 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 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	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	**925 J**	NA	NA	**36.8**	NA	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 U	NA	< 100 UJ	< 100 U	NA	**581 J**	**780 J**	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	**606 J**
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**3.8 J**	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	**4.2 J**
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**277**	**169**	**178**	< 1.0 U	< 1.0 U	< 1.0 U	**2.1**	**2.3**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS
				Sample Depth (ft BGS)	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8
				Sample Date	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**13.3**	**10.9 J**	**12.8**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**3.3 J**	**2.7 J**	**3.1 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**10.5**	< 5.0 U	**12.0**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	**245**	NA	NA	< 3.00 U	NA	NA	**1,930 J-**	NA	NA	**11.4**	NA	NA	**25.3**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	< 100 R	< 100 UJ	NA	**1,150 J**	**2,050 J**	NA	< 100 U	< 100 U	NA	< 100 UJ	< 100 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	**23.6 J**	**5.5 J**	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 100 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**774**	**557**	**533**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**9.7**	**8.2**	**9.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-207-AS	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD
				Sample Depth (ft BGS)	34.9-39.7	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248	238-248
				Sample Date	03-09-2021	05-17-2021	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	**0.28 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.037 U	< 0.036 U	< 0.037 U	< 0.033 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	**0.52 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	**3.7**	**3.2**	**3.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	**59.8**	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA	< 3.00 U	NA	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	< 100 UJ	NA	< 100 U	< 100 UJ	NA	< 100 U	< 100 U	NA	< 100 U	< 100 UJ	NA	< 100 U	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 UJ	< 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 UJ	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**1.1**	**0.75 J**	**0.74 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	**15.4**	**13.2**	**14.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 U	**2.4**	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	**0.31 J**	< 20.0 U	**0.47 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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				Sample Location	PZ-210-SD	PZ-210-SS	PZ-210-SS	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS
				Sample Depth (ft BGS)	238-248	138-148	138-148	138-148	237-247	237-247	237-247	137-147	137-147	137-147	234-244	234-244	234-244	134-144
				Sample Date	08-12-2021	03-05-2021	05-12-2021	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Volatile Organic Compounds, Total (#–C)																		
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.039 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	**3.96**	NA	NA	**183**	NA	NA	**41.5**	NA	NA	< 3.00 U	NA	NA	< 3.00 UJ	NA
1,4-Dioxane	SW8260C	ug/L	NE	0.46	NA	< 100 U	< 100 UJ	NA	< 100 U	< 100 UJ	NA	< 100 U	< 100 U	NA	< 100 U	< 100 UJ	NA	< 100 U
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	**3.5**	**4.1**	**6.0**	**7.6**	**5.3**	**2.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location	PZ-212-SS	PZ-212-SS	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
				Sample Depth (ft BGS)	134-144	134-144	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8	16-25.8
				Sample Date	05-11-2021	08-10-2021	03-12-2021	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021	08-24-2021
				Sample Type	N	N	N	N	N	N	N	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Volatile Organic Compounds, Total (#–C)																	
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**6.4**	**6.6**	**5.0 J**	**4.3 J**	**5.6**
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.29 J**	< 5.0 U	< 5.0 U	**131**	**152**	**135**	**127**	**137**
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.038 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.4**	**2.5**	**2.1 J**	**2.1 J**	**2.1**
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 UJ
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**51.2**	**52.9**	**37.7**	**38.6**	**45.9**
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.7 J**	**2.4 J**	**2.6**
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**9.5**	< 1.0 U	**8.4**	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	**0.53 J**
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	< 3.00 UJ	NA	NA	**2.59 J**	NA	NA	**4.51**	NA	NA	NA	NA	**78.3**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	NA	< 100 UJ	< 100 UJ	< 500 UJ	< 500 UJ	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 UJ	< 5.0 UJ	< 1.0 U
2-Butanone	SW8260C	ug/L	NE	560	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.7**	**5.6**	**4.4 J**	**4.2 J**	**4.9**
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U
Acetone	SW8260C	ug/L	NE	1,800	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	**2.5 J**	< 20.0 UJ	< 20.0 U	< 20.0 U	**17.9 J**	< 100 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	NE	13	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 500 U	< 500 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 100 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 UJ	< 100 UJ	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	**13.7**	**35.5**	< 1.0 U	**179**	**73.9**	**37.7**	**50.2**	**51.5**	**37.6**	**37.2**	**40.6**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 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	< 25.0 U	< 25.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 1.0 U	< 1.0 U	**1.1**	**3.2**	**1.3**	**44.8**	**40.1**	**52.7**	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	< 1.0 U	< 5.0 U	< 5.0 U	**1.6**
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**12.4 J**	**14.1 J**	**7.8 J**	**7.6 J**	**10.2 J**

Notes and definitions are presented on Page 26

Table 12b-i: Validated Groundwater Data—Volatile Organic Compounds (#–C)
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				Sample Location
				Sample Depth (ft BGS)
				Sample Date
				Sample Type
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1
Volatile Organic Compounds, Total (#–C)				
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57
1,1,1-Trichloroethane	SW8260C	ug/L	200	800
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8
1,1-Dichloroethene	SW8260C	ug/L	7	28
1,1-Dichloropropene	SW8260C	ug/L	NE	NE
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033
1,2-Dichlorobenzene	SW8260C	ug/L	600	30
1,2-Dichloroethane	SW8260C	ug/L	5	0.17
1,2-Dichloropropane	SW8260C	ug/L	5	0.82
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE
1,3-Dichloropropane	SW8260C	ug/L	NE	37
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46
1,4-Dioxane	SW8260C	ug/L	NE	0.46
2,2-Dichloropropane	SW8260C	ug/L	NE	NE
2-Butanone	SW8260C	ug/L	NE	560
2-Hexanone	SW8260C	ug/L	NE	3.8
4-Chlorotoluene	SW8260C	ug/L	NE	25
4-Isopropyltoluene	SW8260C	ug/L	NE	NE
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630
Acetone	SW8260C	ug/L	NE	1,800
Acetonitrile	SW8260C	ug/L	NE	13
Acrolein	SW8260C	ug/L	NE	0.0042
Acrylonitrile	SW8260C	ug/L	NE	0.052
Allyl chloride	SW8260C	ug/L	NE	0.21
Benzene	SW8260C	ug/L	5	0.46
beta-Chloroprene	SW8260C	ug/L	NE	0.019
Bromobenzene	SW8260C	ug/L	NE	6.2
Bromodichloromethane	SW8260C	ug/L	80	0.13
Bromoform	SW8260C	ug/L	80	3.3
Bromomethane	SW8260C	ug/L	NE	0.75
Carbon disulfide	SW8260C	ug/L	NE	81
Carbon tetrachloride	SW8260C	ug/L	5	0.46
Chlorobenzene	SW8260C	ug/L	100	7.8
Chlorobromomethane	SW8260C	ug/L	NE	8.3
Chloroethane	SW8260C	ug/L	NE	830
Chloroform	SW8260C	ug/L	80	0.22
Chloromethane	SW8260C	ug/L	NE	19
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47
Cyclohexane	SW8260C	ug/L	NE	1,300

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Volatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 11b-i; chemical names starting with letter D through Z are shown on Table 11b-ii.
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 26

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13
					Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133
					Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
Ethyl ether	SW8260C	ug/L	NE	390		**14.8 J**	**13.2 J**	**17.2 J**	**5.7 J**	**5.5 J**	**4.8 J**	**5.0 J**	**5.5 J**	**5.1 J**	**5.3 J**	**5.0 J**	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.036 U	< 0.035 U	< 0.034 U	< 0.033 U	< 0.038 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 R	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**0.40 J**	**0.39 J**	**0.35 J**	**10**	**9.3**	**7.1**	**7.3**	**2.5 J**	**2.2 J**	**3.1 J**	**3.1 J**	**0.96 J**	**0.94 J**	**0.69 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 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	< 5.0 U	< 5.0 U	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		NA	**43.3**	**27.7**	NA	< 20.0 U	**5.6 J**	**5.8 J**	NA	**12.1 J**	**7.9 J**	**7.9 J**	NA	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	D-81 45-60 03-09-2021 N	D-81 45-60 05-05-2021 N	D-81 45-60 08-09-2021 N	D-83 77-97 03-02-2021 N	D-83 77-97 05-10-2021 N	D-83 77-97 08-10-2021 N	D-85 62-82 02-26-2021 N	D-85 62-82 05-19-2021 N	D-85 62-82 08-18-2021 N	D-85 62-82 08-18-2021 FD	D-87 91-111 03-10-2021 N	D-87 91-111 05-14-2021 N	D-87 91-111 08-13-2021 N	D-87 91-111 08-13-2021 FD
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	**1.4 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**9.1 J**	**8.5 J**	**11.3 J**	**11.0 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.033 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.038 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.18 J**	< 4.0 U	**0.26 J**	**0.25 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	< 20.0 U	NA	**28.0**	**23.1**	**22.6**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	D-89 33-48 03-10-2021 N	D-89 33-48 03-10-2021 FD	D-89 33-48 05-19-2021 N	D-89 33-48 05-19-2021 FD	D-89 33-48 08-24-2021 N	D-93 92-112 03-08-2021 N	D-93 92-112 03-08-2021 FD	D-93 92-112 05-13-2021 N	D-93 92-112 05-13-2021 FD	D-93 92-112 08-16-2021 N	I-9 43.1-53.1 03-08-2021 N	I-9 43.1-53.1 05-13-2021 N	I-9 43.1-53.1 08-16-2021 N	I-9 43.1-53.1 08-16-2021 FD
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	**11.1 J**	< 20.0 U	< 20.0 U	< 20.0 U	**12.6 J**	**29.0**	**30.2**	**26.3**	**25.2**	**26.8**	**91.4**	**84.1**	**119**	**114**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	**1.9**	**1.8**	**1.7**	**1.7**	**2.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.035 U	< 0.037 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	**1.3**	**1.3**	**1.2**	**1.2**	**1.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	**1.5 J**	**1.4 J**	**1.3 J**	**1.4 J**	**1.8 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	**2.7 J**	**2.8 J**	**2.4 J**	**2.4 J**	**2.6 J**	**0.24 J**	**0.32 J**	**0.33 J**	**0.32 J**	**0.33 J**	< 4.0 U	**0.31 J**	**0.28 J**	**0.28 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 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 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	**0.89 J**	**0.93 J**	**0.71 J**	**0.77 J**	**0.82 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	**6.8**	**6.0**	**6.4**	**6.6**	**6.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	NA	**518**	**535**	**496**	NA	NA	**27.8**	**27.3**	**27.1**	NA	**32.4**	**29.7**	**26.0**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.88 J**	**0.70 J**	**1.4**	**1.6**	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	**2.4 J**	**2.4 J**	**2.0 J**	**2.2 J**	**2.6 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-11	I-11	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67
					Sample Depth (ft BGS)	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4
					Sample Date	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**5.5 J**	< 20.0 U	**5.7 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.034 U	< 0.038 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**1.6 J**	**1.6 J**	**2.1 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.33 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 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 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		NA	**12.3 J**	**10 J**	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 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 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-67	I-68	I-68	I-68	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR
					Sample Depth (ft BGS)	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82
					Sample Date	08-04-2021	02-23-2021	05-04-2021	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021
					Sample Type	N	N	N	N	N	FD	N	FD	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**46.0**	**56.8**	**37.7 J**	**43.1 J**	**50.0**	**7.9 J**	< 20.0 U	**7.3 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**3.4**	**4.2**	**4.2 J**	**3.8 J**	**5.4**	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.034 U	< 0.034 U	< 0.038 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.033 U	< 0.040 U	< 0.036 U	< 0.036 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.8**	**2.3**	< 5.0 U	< 5.0 U	**2.2**	**18.7**	**18.0**	**17.6**	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**9.4**	**11.5**	**9.7 J**	**9.2 J**	**10.5**	**0.38 J**	**0.49 J**	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**5.2**	**5.4**	< 20.0 U	**4.7 J**	**4.6**	**0.13 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	**0.64 J**	**0.82 J**	**0.62 J**	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	**5.6**	**6.4**	**5.6**	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**5.2**	**6.3**	**5.2**	**5.4**	**5.8**	**0.30 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.54 J**	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 UJ	< 5.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**1.5**	< 5.0 U	< 5.0 U	**1.5**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	NA	**2,290**	**2,490**	**2,070**	NA	**24.0**	**14.4 J**	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 100 U	< 100 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	**14.6**	**17.8**	**14.9 J**	**14.6 J**	**16.3**	**0.68 J**	**0.49 J**	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113
					Sample Depth (ft BGS)	-	-	-	-	39-49	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100	170.2-180.2
					Sample Date	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**1.9 J**	**5.1 J**	**5.1 J**	**9.2 J**	**7.0 J**	**14.8 J**	**14.7 J**	**18.9 J+**	**22.1**	< 20.0 UJ
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.038 U	< 0.035 U	< 0.035 U	< 0.036 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**4.5**	**3.5 J**	< 4.0 U	< 4.0 U	**0.27 J**	**0.41 J**	**0.43 J**	**0.52 J**	**0.36 J**	< 4.0 U	**0.56 J**	**0.46 J**	**0.49 J**	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**8.4**	**3.4**	**12.7**	**3.2**	**75.3**	**7.5**	**13.4**	**21.4**	**55.8**	**1.6**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**5.1 J**	**18.3 J**	< 20.0 U	< 20.0 U	**9.1 J**	**108**	**16.5 J**	**77.2**	**1,330**	**104**	**10.1 J**	**18.4 J**	**90.6**	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2
					Sample Depth (ft BGS)	25-35	25-35	38-48	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85
					Sample Date	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021
					Sample Type	N	N	N	FD	N	N	FD	N	FD	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 10.0 U	< 10.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**4.0 J**	**4.4 J**	< 20.0 U	< 20.0 U	**9.7 J**	**1.3 J**	**1.1 J**	**1.3 J**	**1.2 J**	< 20.0 U	**4.1 J**	< 100 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	**4.7 J**	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.037 U	< 0.041 U	< 0.039 U	< 0.037 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.037 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 10.0 U	**18.7**	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**3.3 J**	**3.9 J**	< 4.0 U	< 4.0 U	< 4.0 U	**2.4 J**	**2.3 J**	**2.2 J**	**2.2 J**	**2.2 J**	< 20.0 U	< 20.0 U	**0.24 J**	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 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	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 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	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	**7.9**	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.43 J**	**0.40 J**	**0.42 J**	**0.43 J**	**0.39 J**	< 5.0 U	**4.6 J**	**0.76 J**	**1.5**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	< 20.0 U	**15.2 J**	**12.0 J**	**9.4 J**	NA	NA	**186**	**187**	**155**	**21.2 J**	< 100 U	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 10.0 U	< 10.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 UJ	< 15.0 U	**26.6**	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3
					Sample Depth (ft BGS)	68-78	68-78	68-78	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136	221-231	221-231	221-231
					Sample Date	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021
					Sample Type	N	N	N	N	N	N	N	FD	N	N	N	N	N	FD
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Ethyl ether	SW8260C	ug/L	NE	390		**27.2**	**30.3**	**9.8 J**	**11.7 J**	**39.8**	**44.9**	**17.4 J**	**17.5 J**	**21.6**	< 20.0 U	**7.0 J**	**5.3 J**	**3.7 J**	**3.7 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		**3.2**	**1.9**	< 1.0 U	< 1.0 U	**0.46 J**	**0.56 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		**6.3**	**5.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		**3.5**	**2.6 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**8.2**	**7.4**	**0.36 J**	< 4.0 U	**6.2**	**6.4**	**0.61 J**	**0.64 J**	**0.67 J**	< 4.0 U	< 4.0 U	**0.24 J**	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 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
n-Propylbenzene	SW8260C	ug/L	NE	66		**1.2**	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		**7.5**	**5.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		**19.8**	**13.7**	**14.8**	**0.53 J**	**18.4**	**15.9**	**7.4**	**7.9**	**4.3**	< 1.0 U	< 1.0 U	**41.3**	**7.3**	**7.2**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.43 J**	**0.38 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**1,300**	**655**	**14.7 J**	**7.0 J**	**109**	**53.8**	**45.8**	**47.2**	**42.8**	< 20.0 U	**21.1**	**372**	**1,030**	**995**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	**2.3**	**2.8**	< 1.0 U	< 1.0 U	**7.2**	**7.3**	**9.7**	< 1.0 U	**2.0**	**0.83 J**	**0.79 J**	**0.92 J**
Xylene, Total	SW8260C	ug/L	10,000	19		**11.0**	**7.9 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3
					Sample Depth (ft BGS)	25-35	25-35	80-90	80-90	80-90	110-120	110-120	110-120	20-30	20-30	55-65	55-65	90-100	90-100
					Sample Date	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021
					Sample Type	N	N	N	N	FD	N	N	FD	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**9.1 J**	**17.8 J**	**10.6 J**	**16.1 J**	**16.6 J**	**10 J**	**11.6 J**	**12.4 J**	**4.0 J**	**1.7 J**	**6.4 J**	**7.7 J**	**5.5 J**	**7.4 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.038 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.040 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**1.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**0.25 J**	**0.25 J**	**0.29 J**	**0.30 J**	**0.30 J**	< 4.0 U	**0.24 J**	< 4.0 U	**1.6 J**	**0.91 J**	**2.1 J**	**1.4 J**	**2.4 J**	**3.4 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		**27.7**	**10.1**	**13.3**	**0.59 J**	**0.64 J**	**20.6**	**15.0**	**14.6**	**127**	**31.5**	**32.7**	**9.1**	**39.2**	**7.0**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.61 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**38.0**	**30.8**	**33.7**	**24.9**	**24.3**	**84.3**	**86.2**	**88.5**	< 20.0 U	< 20.0 U	< 20.0 U	**7.6 J**	**11.2 J**	**8.9 J**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	**0.45 J**	**2.8**	**8.2**	**8.4**	< 1.0 U	**6.6**	**6.8**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3
					Sample Depth (ft BGS)	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72	92-102	92-102	92-102	48-58	73-83	103-113
					Sample Date	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**4.1 J**	**1.5 J**	**4.0 J**	**1.1 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**1.2 J**	< 20.0 U	< 20.0 U	**14.6 J**	**14.0 J**	**19.9 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.038 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		**2.9 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**2.0 J**	**1.1 J**	**1.8 J**	**1.0 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**1.1 J**	**0.76 J**	**0.70 J**	**0.23 J**	**0.22 J**	**0.33 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		**103**	**2.7**	**101**	**1.9**	**5.0**	< 1.0 U	**2.1**	< 1.0 U	**12.6**	**0.52 J**	**0.53 J**	**32.4**	**6.3**	**3.4**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**16.5 J**	**8.1 J**	**72.8**	**137**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**65.4**	< 20.0 U	< 20.0 U	**23.9**	**22.5**	**26.0**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.5**	**3.3**
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-405-P1 30-40 05-11-2021 N	MW-405-P1 30-40 08-11-2021 N	MW-405-P2 70-80 05-11-2021 N	MW-405-P2 70-80 05-11-2021 FD	MW-405-P2 70-80 08-11-2021 N	MW-405-P3 90-100 05-11-2021 N	MW-405-P3 90-100 08-11-2021 N	MW-407R-P1 53.6-63.6 08-12-2021 N	MW-407R-P2 73.6-83.6 08-12-2021 N	MW-407R-P3 103.6-113.6 08-12-2021 N	MW-408 109-119 03-15-2021 N	MW-408 109-119 05-12-2021 N	MW-408 109-119 08-06-2021 N
Volatile Organic Compounds, Total (D–Z)																	
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
Ethyl ether	SW8260C	ug/L	NE	390	**3.9 J**	< 20.0 U	**63.4**	**64.6**	**81.1**	**25.2**	**26.7**	**12.8 J**	**58.8**	**14.8 J**	**7.0 J**	**4.7 J**	**5.1 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.036 U	< 0.034 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.039 U	< 0.036 U	< 0.036 U	< 0.036 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 4.0 U	**0.72 J**	**0.73 J**	**1.5 J**	**2.8 J**	**3.5 J**	< 4.0 U	**3.0 J**	**5.6**	**9.2**	**6.7**	**8.3**
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	**1.3**	< 1.0 U	**2.2**	**2.2**	**2.3**	**0.67 J**	< 1.0 U	**2.3**	**3.9**	**2.7**	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	**8.6 J**	< 20.0 U	**33.3**	**31.6**	**21.9**	**20.5**	**13.7 J**	< 20.0 U	**13.0 J**	**10.2 J**	NA	**9.3 J**	**6.3 J**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-409 23-33 03-15-2021 N	MW-409 23-33 05-05-2021 N	MW-409 23-33 08-06-2021 N	MW-505-P1 15-25 05-25-2021 N	MW-505-P1 15-25 08-05-2021 N	MW-505-P2 40-50 05-25-2021 N	MW-505-P2 40-50 08-05-2021 N	MW-505-P3 65-75 05-25-2021 N	MW-505-P3 65-75 08-05-2021 N	PZ-304-AI 39-48.8 03-01-2021 N	PZ-304-AI 39-48.8 05-17-2021 N	PZ-304-AI 39-48.8 08-18-2021 N	PZ-304-AS 17.1-26.9 03-10-2021 N	PZ-304-AS 17.1-26.9 05-20-2021 N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U
Ethyl ether	SW8260C	ug/L	NE	390	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.4 J**	**11.3 J**	**15.6 J**	< 20.0 U	**14.8 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U
Ethylbenzene	SW8260C	ug/L	700	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.033 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 5.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	< 5.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.31 J**	**0.29 J**	**0.40 J**	< 20.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**9.0 J**
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
o-Xylene	SW8260C	ug/L	NE	19	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 500 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	< 5.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Toluene	SW8260C	ug/L	1,000	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**13.5**	**5.0**	< 1.0 U	< 1.0 U	< 1.0 U	**0.31 J**	< 5.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	< 20.0 U	< 20.0 U	**1.0 J**	< 20.0 U	< 20.0 U	< 20.0 U	**1,240**	**523**	NA	**36.0 J+**	**39.4**	NA	**81.7 J**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 10.0 U
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.55 J**	< 20.0 U	< 20.0 U	< 20.0 UJ	< 100 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 15.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10	S-10	S-82	S-82	S-82	PZ-100-KS
					Sample Depth (ft BGS)	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8
					Sample Date	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**13.0 J**	**15.5 J**	**14.8 J**	**21.2 J+**	< 20.0 U	< 20.0 U	< 20.0 U	**14.1 J**	**12.2 J**	**13.0 J**	**8.5 J**	**24.3**	**51.1**	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.037 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 UJ	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		**1.3**	**2.4**	**3.6**	**2.9 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 UJ	**2.9**	**1.9 J**	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**0.40 J**	**0.52 J**	**0.46 J**	< 20.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**1.3 J**	**1.3 J**	**1.1 J**	< 4.0 U	< 4.0 U	**0.25 J**	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 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
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 UJ	< 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 UJ	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	**1.4**	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	**1.3**	**1.1**	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		**1.6**	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	**0.50 J**	**0.60 J**	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.19 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**59.4**	NA	**21.9**	< 100 U	NA	< 20.0 U	< 20.0 U	NA	**20.5**	**12.2 J**	NA	**26.8**	**29.4**	NA
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 UJ	< 2.0 U	< 2.0 U	< 10.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 UJ	< 20.0 U	< 100 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.49 J**	**0.91 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 UJ	**4.2**	**3.0**	< 15.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS
					Sample Depth (ft BGS)	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7
					Sample Date	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	**0.29 J**	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**4.8 J**	**7.1 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.037 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.49 J**	**0.49 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**38.6**	**40.7**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS	PZ-104-KS
					Sample Depth (ft BGS)	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17	397.37-407.17
					Sample Date	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021	02-24-2021	05-05-2021
					Sample Type	N	N	N	N	N	N	N	FD	N	FD	N	N	N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**10.9 J**	**10.3 J**	**11.0 J**	**11.2 J**	**11.8 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.78 J**	**0.72 J**	< 5.0 U	< 5.0 U	**0.85 J**	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.036 U	< 0.040 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 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	**0.60 J**	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	**0.82 J**	**0.72 J**	< 10.0 U	< 10.0 U	**1.2 J**	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**3.9 J**	**3.6 J**	**3.1 J**	**3.6 J**	**3.5 J**	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 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	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 25.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 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	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 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	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.82 J**	**0.86 J**	< 5.0 U	< 5.0 U	**1.1**	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 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	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**1.2**	< 5.0 U	< 5.0 U	**1.7**	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 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	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 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	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 500 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	NA	**84.2 J**	**90.7 J**	**23.6**	NA	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 10.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 100 U	< 100 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 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	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	**1.6 J**	**1.6 J**	**2.0 J**	< 15.0 U	**2.3 J**	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS
					Sample Depth (ft BGS)	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57
					Sample Date	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021
					Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	**6.2 J**	**6.8 J**	**6.2 J**	**6.7 J**	< 20.0 U	< 20.0 U	< 20.0 U	**5.4 J**	**5.1 J**	**6.7 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	**0.47 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.036 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.034 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.034 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.70 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	**0.42 J**	**1.1 J**	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	**1.6 J**	**1.4 J**	**1.4 J**	**1.4 J**	< 4.0 U	< 4.0 U	< 4.0 U	**2.5 J**	**2.4 J**	**2.7 J**	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.34 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	NA	**300**	**139**	**160**	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	**0.63 J**	**1.5 J**	< 3.0 UJ	< 3.0 UJ	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS
					Sample Depth (ft BGS)	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5
					Sample Date	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**14.6**	**17.9**	**21.0**	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.69 J**	**0.51 J**	< 20.0 U	**20.9**	< 20.0 U	**21.4**	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.034 U	< 0.035 UJ	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 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	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 R	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.12 J**	< 4.0 U	< 4.0 U	**0.52 J**	**0.54 J**	**0.54 J**	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	**0.34 J**	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**5.7 J**	< 20.0 U	NA	**52.4**	**49.1**	NA	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 UJ	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD
					Sample Depth (ft BGS)	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4
					Sample Date	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021
					Sample Type	N	N	N	N	N	N	N	FD	N	FD	N	N	FD
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.1 J**	**8.3 J**	**8.4 J**	**8.3 J**	**7.4 J**	**12.0 J**	**11.9 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.035 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.037 U	< 0.035 U	< 0.034 U	< 0.034 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.39 J**	**0.36 J**	**0.35 J**	**0.36 J**	**0.25 J**	**0.39 J**	**0.35 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.48 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	NA	**32.4**	**30.8**	**21.3**	NA	NA
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS
					Sample Depth (ft BGS)	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7
					Sample Date	05-18-2021	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021
					Sample Type	N	FD	N	FD	N	N	N	FD	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	**10.9 J**	**8.3 J**	**6.4 J**	**7.8 J**	**7.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	**0.28 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**0.27 J**	**0.31 J**	< 4.0 U	< 4.0 U	**2.9 J**	**2.0 J**	**1.7 J**	**1.6 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**39.5**	**39.0**	< 20.0 U	**31.0**	NA	**5.4 J**	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS
					Sample Depth (ft BGS)	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1
					Sample Date	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**1.6 J**	**1.3 J**	**0.52 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**61.1**	**53.6**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**9.9**	**9.4**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 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	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**7.2**	**5.0**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		NA	**11.9 J**	**9.4 J**	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**680**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019		< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS
					Sample Depth (ft BGS)	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37
					Sample Date	08-24-2021	03-04-2021	05-12-2021	08-12-2021	03-10-2021	05-19-2021	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 10.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		**65.3**	< 20.0 U	< 20.0 U	**0.29 J**	**1.1 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**85.9**	**53.4 J**	**73.4**	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**21.4**	**15.8**	**20.9**	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.038 U	< 0.034 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.036 U	< 0.034 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 5.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.60 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**8.0**	**5.6**	**7.5**	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**35.3**	**26.9**	**33.9**	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 R	< 5.0 UJ	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		**8.7**	< 4.0 U	< 4.0 U	< 4.0 U	**0.20 J**	**0.24 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**13.1**	**9.9 J**	**10.2**	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.2**	< 5.0 U	**1.3**	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**21.6**	**16.1**	**19.9**	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		**4.9**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**21.0**	**17.1**	**19.7**	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 500 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		**587**	NA	< 20.0 U	< 20.0 U	NA	**15.1 J**	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**24,700**	**22,900**	NA
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 10.0 U	< 2.0 UJ	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 100 U	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	**56.9**	**43.0**	**53.8**	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD
Sample Depth (ft BGS)					88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250
Sample Date					05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021
Sample Type					N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	< 20.0 U	< 20.0 U	**0.78 J**	**0.64 J**	< 20.0 U	**18.7 J**	**16.3 J**	**22.5**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U	< 0.037 U	< 0.033 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.036 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**6.6**	**6.0**	**5.8**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.19 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.58 J**	**0.55 J**	**0.53 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.47 J**	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 U	< 5.0 UJ	< 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	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.67 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	**0.75 J**	**0.60 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.29 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**41.6**	**34.6**	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	**0.52 J**	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-209-SS 140-150 02-25-2021 N	PZ-209-SS 140-150 05-10-2021 N	PZ-209-SS 140-150 08-05-2021 N	PZ-210-SD 238-248 03-05-2021 N	PZ-210-SD 238-248 05-12-2021 N	PZ-210-SD 238-248 08-12-2021 N	PZ-210-SS 138-148 03-05-2021 N	PZ-210-SS 138-148 05-12-2021 N	PZ-210-SS 138-148 08-16-2021 N	PZ-211-SD 237-247 03-04-2021 N	PZ-211-SD 237-247 05-13-2021 N	PZ-211-SD 237-247 08-17-2021 N	PZ-211-SS 137-147 02-24-2021 N	PZ-211-SS 137-147 05-05-2021 N
Volatile Organic Compounds, Total (D–Z)																		
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**5.5 J**	**5.3 J**	**6.4 J**	**0.91 J**	**0.77 J**	< 20.0 UJ	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.036 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.039 U	< 0.034 U	< 0.034 U	< 0.034 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	NE	19	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.70 J**	**0.70 J**	**0.83 J**	**0.24 J**	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	NE	66	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**33.5**	**8.1 J**	NA	< 20.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS	PZ-212-SS	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS
					Sample Depth (ft BGS)	137-147	234-244	234-244	234-244	134-144	134-144	134-144	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8
					Sample Date	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021	05-11-2021	08-10-2021	03-12-2021	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Volatile Organic Compounds, Total (D–Z)																			
Dibromochloromethane	SW8260C	ug/L	80	0.87		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	**0.45 J**	**1.3 J**	< 2.0 UJ	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.5 J**	**7.1 J**	**8.2 J**	**8.2 J**	**5.9 J**	**5.8 J**	**28.8**
Ethyl methacrylate	SW8260C	ug/L	NE	63		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	**8.0**
Ethylene dibromide	SW8011	ug/L	0.05	0.0075		< 0.035 U	< 0.035 U	< 0.037 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ
Isobutyl alcohol	SW8260C	ug/L	NE	590		< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**4.0**	**2.8**	**2.8**	**3.2**
m,p-Xylenes	SW8260C	ug/L	NE	19		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	**0.22 J**	< 2.0 U	< 2.0 UJ	**156**
Methacrylonitrile	SW8260C	ug/L	NE	0.19		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 R	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	**0.13 J**	< 4.0 U	< 4.0 U	**0.61 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.87 J**
n-Propylbenzene	SW8260C	ug/L	NE	66		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.71 J**	**0.64 J**	< 1.0 U	**3.8**
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.93 J**	**0.39 J**	< 1.0 U	**31.1**
Propionitrile	SW8260C	ug/L	NE	NE		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.75 J**	**1.3**
Styrene	SW8260C	ug/L	100	120		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**
Tetrachloroethene	SW8260C	ug/L	5	4.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.36 J**	< 1.0 U	**0.45 J**	**8.5**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340		< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	NA	**2.5 J**	< 20.0 U	NA	**5.7 J**	< 20.0 U	NA
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U
Vinyl acetate	SW8260C	ug/L	NE	41		< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 UJ	**1.1 J**	**0.66 J**	< 3.0 UJ	**187**

Notes and definitions are presented on Page 25

Table 12b-ii: Validated Groundwater Data—Volatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-303-AS 16-25.8 03-15-2021 FD	PZ-303-AS 16-25.8 05-20-2021 N	PZ-303-AS 16-25.8 05-20-2021 FD	PZ-303-AS 16-25.8 08-24-2021 N
Volatile Organic Compounds, Total (D–Z)								
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	**31.9**	**27.2 J**	**21.9 J**	**25.8**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U	< 100 U	< 100 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	**8.7**	**3.6 J**	**3.7 J**	**4.5**
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.036 U	< 0.035 U	< 0.036 U	< 0.038 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 UJ	< 5.0 U	< 5.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U	< 500 U	< 500 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	**3.5**	**3.8 J**	**3.5 J**	**3.7**
m,p-Xylenes	SW8260C	ug/L	NE	19	**168**	**91.5**	**93.3**	**109**
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U	< 500 U	< 500 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U	< 100 U	< 100 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ	< 25.0 UJ	< 25.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	**2.9 J**	< 100 U	< 100 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	< 4.0 U	< 20.0 U	< 20.0 U	**0.41 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE	**6.7 J+**	< 100 U	< 100 U	**4.9 J**
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U	**8.2 J**	< 25.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	**1.2 J**	< 25.0 U	< 25.0 U	**1.0 J**
n-Propylbenzene	SW8260C	ug/L	NE	66	**4.3**	**6.9**	**5.7**	**5.8**
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	**31.3**	**12.0**	**12.9**	**15.8**
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U	< 500 U	< 500 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	**1.6**	**2.0 J**	< 5.0 U	**1.9**
Styrene	SW8260C	ug/L	100	120	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	**1.2**	< 5.0 U	< 5.0 U	**0.88 J**
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	**8.7**	**3.4 J**	**3.7 J**	**4.3**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U	< 500 U	< 500 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U	< 5.0 U	< 5.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	**50.8 J**	**47.0 J**	**40.1**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 U	< 10.0 U	< 10.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 UJ	< 100 U	< 100 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	2	0.019	**0.79 J**	< 5.0 U	< 5.0 U	**1.1**
Xylene, Total	SW8260C	ug/L	10,000	19	**199**	**103**	**106**	**125**

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Volatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 11b-i; chemical names starting with letter D through Z are shown on Table 11b-ii.
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13
					Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133
					Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 50.0 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 UJ
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 50.0 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 50.0 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990	**5.1 J**	< 9.1 U	**6.6 J**	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	**3.7 J**	< 9.1 UJ
Carbazole	SW8270C	ug/L	NE	NE	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 UJ	< 9.1 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89
					Sample Depth (ft BGS)	45-60	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48
					Sample Date	03-09-2021	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021
					Sample Type	N	N	N	N	N	N	N	N	N	FD	N	N	N	FD	N
Semivolatile Organic Compounds, Total (#–C)																				
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 20.0 U	< 20.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 UJ	< 20.4 UJ	< 18.2 U	< 20.0 U	< 18.2 UJ	< 17.4 UJ	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 20.0 U	< 20.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 20.4 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.4 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	**5.7 J**
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 50.0 U	< 50.0 U	< 50.0 UJ	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 51.0 U	< 45.5 U	< 50.0 U	< 45.5 UJ	< 43.5 UJ	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 20.0 U	< 20.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 20.4 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.4 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 UJ	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 50.0 U	< 50.0 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 51.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 43.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 20.0 U	< 20.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 20.4 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.4 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 50.0 U	< 50.0 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 51.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 43.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 UJ	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.7 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		**5.3 J**	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 10.0 U	< 10.0 U	< 10.0 UJ	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 UJ	< 10.2 UJ	< 9.1 U	< 10.0 U	< 9.1 UJ	< 8.7 UJ	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 10.0 U	< 10.0 U	**4.3 J**	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	**4.4 J**	**4.2 J**	**88.1**
Carbazole	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 10.0 U	< 10.0 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-89	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11
					Sample Depth (ft BGS)	33-48	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5
					Sample Date	03-10-2021	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021
					Sample Type	FD	N	FD	N	N	FD	N	FD	N	N	N	N	FD	N	N
Semivolatile Organic Compounds, Total (#–C)																				
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 19.0 U	< 18.2 UJ	< 20.0 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	**7.7 J**	**6.5 J**	**7.2 J**	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Caprolactam	SW8270C	ug/L	NE	990	**98.6**	**86.4**	**89.4**	**96.5**	**4.5 J**	< 9.1 UJ	< 9.1 U	< 9.1 U	**4.6 J**	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Carbazole	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-11	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68
					Sample Depth (ft BGS)	80.5-90.5	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2
					Sample Date	08-12-2021	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																				
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 19.0 U	< 18.2 U	< 17.7 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 UJ	< 19.0 U	< 18.2 U	< 19.0 UJ	< 20.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 19.0 U	< 18.2 U	< 17.7 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 UJ	< 9.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 47.6 U	< 45.5 U	< 44.2 U	< 45.5 U	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 19.0 U	< 18.2 U	< 17.7 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 UJ	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 10.0 UJ	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 47.6 U	< 45.5 U	< 44.2 U	< 45.5 U	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 19.0 U	< 18.2 U	< 17.7 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 47.6 U	< 45.5 U	< 44.2 U	< 45.5 U	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.5 UJ	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990		**4.2 J**	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	**4.4 J**	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 UJ	< 9.5 U	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 UJ	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-68	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS
					Sample Depth (ft BGS)	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-	-	-
					Sample Date	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021	08-12-2021	05-28-2021
					Sample Type	N	N	FD	N	FD	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 90.9 U	< 90.9 U	< 90.9 U	< 95.2 U	< 95.2 UJ	< 18.2 U	< 17.9 U	< 19.0 U	< 19.0 UJ	< 20.0 U	< 17.9 UJ	< 21.1 U	< 20.0 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 90.9 U	< 90.9 U	< 90.9 U	< 95.2 U	< 95.2 U	< 18.2 U	< 17.9 U	< 19.0 U	< 19.0 UJ	< 20.0 U	< 17.9 U	< 21.1 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 47.6 UJ	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 UJ	< 47.6 UJ	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 227 U	< 227 U	< 227 U	< 238 U	< 238 U	< 45.5 U	< 44.6 U	< 47.6 U	< 47.6 UJ	< 50.0 U	< 44.6 U	< 52.6 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 90.9 U	< 90.9 U	< 90.9 U	< 95.2 U	< 95.2 U	< 18.2 U	< 17.9 U	< 19.0 U	< 19.0 UJ	< 20.0 U	< 17.9 U	< 21.1 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 UJ	< 47.6 UJ	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 227 U	< 227 U	< 227 U	< 238 U	< 238 U	< 45.5 U	< 44.6 U	< 47.6 U	< 47.6 UJ	< 50.0 U	< 44.6 U	< 52.6 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 90.9 U	< 90.9 U	< 90.9 U	< 95.2 U	< 95.2 U	< 18.2 U	< 17.9 U	< 19.0 U	< 19.0 UJ	< 20.0 U	< 17.9 U	< 21.1 U	< 20.0 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 227 U	< 227 U	< 227 U	< 238 U	< 238 U	< 45.5 U	< 44.6 U	< 47.6 U	< 47.6 UJ	< 50.0 U	< 44.6 U	< 52.6 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 47.6 UJ	< 47.6 U	< 9.1 U	< 8.9 UJ	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 UJ	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	**5.4 J**	**3.9 J**	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.1 UJ	**394**	**457**	**392**	**380 J+**	**367**	**8.6 J**	**6.1 J**	**7.8 J**	< 9.5 UJ	< 10.0 U	< 8.9 U	**7.8 J**	< 10.0 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118
Sample Location					MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118
Sample Depth (ft BGS)					-	39-49	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100	170.2-180.2	25-35	25-35	38-48
Sample Date					08-05-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021
Sample Type					N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 19.0 UJ	< 20.0 U	< 18.2 UJ	< 20.0 U	< 20.0 UJ	< 17.7 U	< 16.7 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 17.7 U	< 16.7 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 47.6 U	< 50.0 U	< 45.5 UJ	< 50.0 U	< 50.0 UJ	< 44.2 U	< 41.7 UJ	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 17.7 U	< 16.7 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 50.0 U	< 44.2 U	< 41.7 U	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 17.7 U	< 16.7 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 50.0 U	< 44.2 U	< 41.7 U	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 UJ	< 9.1 UJ	< 9.5 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.5 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 UJ	< 8.8 U	< 8.3 UJ	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990	< 9.5 U	**8.3 J**	**4.1 J**	**14.4**	< 10.0 U	**15.1**	**4.2 J**	< 9.5 UJ	**5.1 J**	**4.5 J**	< 9.5 U	< 9.1 U	< 9.1 UJ	**3.9 J**
Carbazole	SW8270C	ug/L	NE	NE	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1
					Sample Depth (ft BGS)	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85	68-78	68-78	68-78
					Sample Date	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021
					Sample Type	FD	N	N	FD	N	FD	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 17.9 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 20.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 8.9 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Atrazine	SW8270C	ug/L	3	0.3	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 8.9 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.1 UJ	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	**3.7 J**	< 9.1 U	< 9.1 U	< 10.0 U
Caprolactam	SW8270C	ug/L	NE	990	< 8.9 U	**4.1 J**	**21.5**	**22.2**	**33.2**	**28.4**	**29.5**	< 10.0 U	**4.4 J**	< 9.1 U	< 9.1 U	**183**	**130**	**8.5 J**
Carbazole	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2
					Sample Depth (ft BGS)	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136	221-231	221-231	221-231	25-35	25-35	80-90
					Sample Date	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021
					Sample Type	N	N	N	N	FD	N	N	N	N	N	FD	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 17.4 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 17.4 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 43.5 UJ	< 44.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 17.4 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 43.5 U	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 17.4 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 43.5 U	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 8.7 U	< 8.9 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 8.7 UJ	< 8.9 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 8.7 U	< 8.9 U	**10.5**	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 8.7 UJ	**14.3**	**11.4 J**	**4.8 J**	**5.4 J**	< 9.1 UJ	**8.0 J**	< 9.1 UJ	**17.4**	**5.2 J**	**7.6 J**	**8.3 J**	< 9.1 U	**6.1 J**
Carbazole	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5
					Sample Depth (ft BGS)	80-90	80-90	110-120	110-120	110-120	20-30	20-30	55-65	55-65	90-100	90-100	145-155	145-155	195-205
					Sample Date	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021
					Sample Type	N	FD	N	N	FD	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.1 U	< 9.1 U	**6.8 J**	< 9.1 U	< 9.1 U	**17.5**	< 9.1 U	< 9.1 U	< 9.5 U	**4.4 J**	< 9.1 U	**35.2**	**6.7 J**	**33.1**
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.5 UJ	< 10.0 U	< 9.1 UJ	< 9.5 U	< 9.5 UJ	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2
					Sample Depth (ft BGS)	195-205	32-42	32-42	62-72	62-72	92-102	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80
					Sample Date	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021
					Sample Type	N	N	N	N	N	N	N	FD	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 UJ	< 18.2 UJ	< 17.4 UJ	< 17.7 U	< 19.0 UJ	< 17.7 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 17.4 U	< 17.7 U	< 19.0 U	< 17.7 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 47.6 UJ	< 47.6 U	< 47.6 UJ	< 47.6 UJ	< 47.6 U	< 45.5 U	< 43.5 U	< 44.2 U	< 47.6 U	< 44.2 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 17.4 U	< 17.7 U	< 19.0 U	< 17.7 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 43.5 U	< 44.2 U	< 47.6 U	< 44.2 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 17.4 U	< 17.7 U	< 19.0 U	< 17.7 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 43.5 U	< 44.2 U	< 47.6 U	< 44.2 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 UJ	< 9.1 UJ	< 8.7 UJ	< 8.8 U	< 9.5 U	< 8.8 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Caprolactam	SW8270C	ug/L	NE	990		**17.2**	**5.8 J**	< 9.5 UJ	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.5 UJ	**4.4 J**	**6.7 J**	< 9.1 U	**4.1 J**	< 8.8 U	< 9.5 U	< 8.8 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 UJ	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1
					Sample Depth (ft BGS)	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6	103.6-113.6	109-119	109-119	109-119	23-33	23-33	23-33	15-25
					Sample Date	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021
					Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 17.7 U	< 18.2 U	< 20.0 U	< 18.2 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 17.7 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 R	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 44.2 U	< 45.5 U	< 50.0 U	< 45.5 U	< 50.0 U	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 U	< 47.6 UJ	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 17.7 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 44.2 U	< 45.5 U	< 50.0 U	< 45.5 U	< 50.0 U	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 47.6 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 17.7 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 44.2 U	< 45.5 U	< 50.0 U	< 45.5 R	< 50.0 U	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 47.6 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 UJ	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.5 UJ	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE		< 8.8 U	< 9.1 UJ	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	Sample Depth (ft BGS)	Sample Date	Sample Type
					MW-505-P1	15-25	08-05-2021	N
					MW-505-P2	40-50	05-25-2021	N
					MW-505-P2	40-50	08-05-2021	N
					MW-505-P3	65-75	05-25-2021	N
					MW-505-P3	65-75	08-05-2021	N
					PZ-304-AI	39-48.8	03-01-2021	N
					PZ-304-AI	39-48.8	05-17-2021	N
					PZ-304-AI	39-48.8	08-18-2021	N
					PZ-304-AS	17.1-26.9	03-10-2021	N
					PZ-304-AS	17.1-26.9	05-20-2021	N
					PZ-304-AS	17.1-26.9	08-23-2021	N
					S-5	30-40	03-08-2021	N
					S-5	30-40	05-12-2021	N
					S-5	30-40	08-17-2021	N
Semivolatile Organic Compounds, Total (#–C)								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 19.0 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 19.0 UJ	< 18.2 U	< 17.9 U	< 20.0 UJ	< 19.0 U	< 17.9 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 17.9 U	< 20.0 U	< 19.0 U	< 17.9 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 18.2 UJ
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 44.6 U	< 50.0 U	< 47.6 U	< 44.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 45.5 UJ
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 17.9 U	< 20.0 U	< 19.0 U	< 17.9 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 18.2 UJ
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 44.6 U	< 50.0 U	< 47.6 U	< 44.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 45.5 UJ
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 17.9 U	< 20.0 U	< 19.0 U	< 17.9 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 18.2 UJ
Acetophenone	SW8270C	ug/L	NE	190	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Atrazine	SW8270C	ug/L	3	0.3	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Benzaldehyde	SW8270C	ug/L	NE	19	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 44.6 U	< 50.0 U	< 47.6 U	< 44.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 45.5 UJ
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 UJ	< 10.0 U	< 9.5 U	< 8.9 UJ	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Caprolactam	SW8270C	ug/L	NE	990	< 9.5 UJ	**7.8 J**	< 9.5 U	**12.3**	**7.9 J**	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	**7.6 J**	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Carbazole	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	S-8	S-8	S-8	S-10	S-10	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84
					Sample Depth (ft BGS)	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9
					Sample Date	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																				
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 22.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 22.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 UJ	< 50.0 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 U	< 55.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 22.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.5 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 UJ	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 UJ	< 50.0 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 U	< 55.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 22.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 UJ	< 50.0 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 U	< 55.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 UJ	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	**5.8 J**	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.5 U	< 10.0 U	< 9.1 UJ	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS
					Sample Depth (ft BGS)	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5
					Sample Date	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 22.2 U	< 19.0 U	< 18.2 UJ	< 20.0 U	< 19.0 UJ	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 22.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 55.6 U	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 22.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 UJ	< 10.0 U	< 9.5 U	< 9.5 UJ	< 10.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 55.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 22.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	**10.1**	< 10.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 55.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 11.1 U	< 9.5 UJ	**4.9 J**	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.5 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-102-SS 79.7-89.5 08-04-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 FD	PZ-103-SS 134.7-144.5 05-20-2021 N	PZ-103-SS 134.7-144.5 05-20-2021 FD	PZ-103-SS 134.7-144.5 08-24-2021 N	PZ-104-KS 397.37-407.17 02-24-2021 N	PZ-104-KS 397.37-407.17 05-05-2021 N	PZ-104-KS 397.37-407.17 08-04-2021 N	PZ-104-SD 235.2-245 03-03-2021 N	PZ-104-SD 235.2-245 05-13-2021 N	PZ-104-SD 235.2-245 08-23-2021 N	PZ-104-SD 235.2-245 08-23-2021 FD	PZ-104-SS 134.5-144.3 02-24-2021 N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 21.1 U	< 19.0 UJ	< 18.2 UJ	< 20.0 U	< 17.9 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 21.1 U	< 19.0 U	< 18.2 U	< 20.0 U	< 17.9 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 10.5 UJ	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 52.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 44.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 21.1 U	< 19.0 U	< 18.2 U	< 20.0 U	< 17.9 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 UJ
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 52.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 44.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 21.1 U	< 19.0 U	< 18.2 U	< 20.0 U	< 17.9 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 52.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 44.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 47.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 UJ	< 10.0 U	< 9.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990	< 10.5 UJ	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	**20.9**	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.1 U	**4.3 J**	**5.9 J**	**5.0 J**	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS
					Sample Depth (ft BGS)	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1
					Sample Date	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 UJ	< 19.0 U	< 18.2 U	< 21.1 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ	< 19.0 U	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 21.1 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.5 U	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 52.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 21.1 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 52.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 21.1 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 52.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990		**4.9 J**	< 9.5 UJ	< 9.1 U	< 10.0 U	**4.8 J**	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	**3.9 J**	< 9.1 U	< 9.5 U	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD
					Sample Depth (ft BGS)	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2
					Sample Date	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 UJ	< 19.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 19.0 U	< 19.0 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	**14.3 J+**	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990		< 10.0 U	< 9.5 U	**7.8 J**	**9.9**	< 9.5 U	**3.9 J**	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS
					Sample Depth (ft BGS)	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7
					Sample Date	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021
					Sample Type	N	FD	N	FD	N	N	FD	N	FD	N	FD	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 18.2 U	< 19.0 U	< 20.0 U	< 17.9 U	< 20.4 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.4 UJ	< 20.4 UJ	< 18.2 U	< 21.1 U	< 22.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 18.2 U	< 19.0 U	< 20.0 U	< 17.9 U	< 20.4 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.4 U	< 20.4 U	< 18.2 U	< 21.1 U	< 22.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 45.5 U	< 47.6 U	< 50.0 U	< 44.6 U	< 51.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 51.0 U	< 51.0 U	< 45.5 U	< 52.6 U	< 55.6 UJ
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 18.2 U	< 19.0 U	< 20.0 U	< 17.9 U	< 20.4 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.4 U	< 20.4 U	< 18.2 U	< 21.1 U	< 22.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 45.5 U	< 47.6 U	< 50.0 U	< 44.6 U	< 51.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 51.0 U	< 51.0 U	< 45.5 U	< 52.6 U	< 55.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 18.2 U	< 19.0 U	< 20.0 U	< 17.9 U	< 20.4 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.4 U	< 20.4 U	< 18.2 U	< 21.1 U	< 22.2 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 45.5 U	< 47.6 U	< 50.0 U	< 44.6 U	< 51.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 51.0 U	< 51.0 U	< 45.5 U	< 52.6 U	< 55.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.1 U	< 9.5 U	< 10.0 UJ	< 8.9 UJ	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 UJ	< 11.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 UJ	< 10.2 UJ	< 9.1 U	< 10.5 U	< 11.1 UJ
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Caprolactam	SW8270C	ug/L	NE	990	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	**4.5 J**	**7.0 J**	< 9.1 U	< 10.5 U	< 11.1 U
Carbazole	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS
Sample Location					PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS
Sample Depth (ft BGS)					28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161	9.62-97.64
Sample Date					08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021	02-23-2021
Sample Type					FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 21.1 UJ	< 20.0 U	< 21.1 U	< 22.2 UJ	< 19.0 U	< 18.2 U	< 16.7 UJ	< 19.0 U	< 17.9 U	< 16.7 UJ	< 20.0 U	< 20.0 U	< 21.1 UJ	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 21.1 U	< 20.0 U	< 21.1 U	< 22.2 U	< 19.0 U	< 18.2 U	< 16.7 U	< 19.0 U	< 17.9 U	< 16.7 U	< 20.0 U	< 20.0 U	< 21.1 U	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 52.6 UJ	< 50.0 U	< 52.6 U	< 55.6 UJ	< 47.6 U	< 45.5 U	< 41.7 U	< 47.6 U	< 44.6 U	< 41.7 UJ	< 50.0 U	< 50.0 U	< 52.6 U	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 21.1 U	< 20.0 U	< 21.1 U	< 22.2 U	< 19.0 U	< 18.2 U	< 16.7 U	< 19.0 U	< 17.9 U	< 16.7 U	< 20.0 U	< 20.0 U	< 21.1 U	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 10.5 U	< 10.0 UJ	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 UJ	< 8.9 U	< 8.3 U	< 10.0 UJ	< 10.0 U	< 10.5 U	< 9.5 UJ
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 52.6 U	< 50.0 U	< 52.6 U	< 55.6 U	< 47.6 U	< 45.5 U	< 41.7 U	< 47.6 U	< 44.6 U	< 41.7 U	< 50.0 U	< 50.0 U	< 52.6 U	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 21.1 U	< 20.0 U	< 21.1 U	< 22.2 U	< 19.0 U	< 18.2 U	< 16.7 U	< 19.0 U	< 17.9 U	< 16.7 U	< 20.0 U	< 20.0 U	< 21.1 U	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 52.6 U	< 50.0 U	< 52.6 U	< 55.6 U	< 47.6 U	< 45.5 U	< 41.7 U	< 47.6 U	< 44.6 U	< 41.7 U	< 50.0 U	< 50.0 U	< 52.6 U	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 UJ	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 10.5 UJ	< 10.0 U	< 10.5 U	< 11.1 UJ	< 9.5 U	< 9.1 U	< 8.3 UJ	< 9.5 U	< 8.9 U	< 8.3 UJ	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990	**5.2 J**	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	**3.7 J**	< 9.5 U	< 8.9 U	**3.8 J**	< 10.0 U	< 10.0 U	**6.2 J**	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U	< 10.0 U	< 10.5 U	< 9.5 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-200-SS 9.62-97.64 05-05-2021 N	PZ-200-SS 9.62-97.64 08-05-2021 N	PZ-201A-SS 80-89.8 03-04-2021 N	PZ-201A-SS 80-89.8 05-05-2021 N	PZ-201A-SS 80-89.8 08-13-2021 N	PZ-202-SS 40.2-89.1 03-10-2021 N	PZ-202-SS 40.2-89.1 05-19-2021 N	PZ-202-SS 40.2-89.1 08-24-2021 N	PZ-203-SS 99.6-109.4 03-04-2021 N	PZ-203-SS 99.6-109.4 05-12-2021 N	PZ-203-SS 99.6-109.4 08-12-2021 N	PZ-204A-SS 79.5-89.1 03-10-2021 N	PZ-204A-SS 79.5-89.1 05-19-2021 N	PZ-204A-SS 79.5-89.1 08-19-2021 N
Semivolatile Organic Compounds, Total (#–C)																		
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 18.2 U	< 18.2 UJ	< 18.2 U	< 19.0 U	< 18.2 UJ	< 19.0 U	< 17.9 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 18.2 U	< 17.9 U	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 17.9 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.9 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 UJ	< 47.6 U	< 44.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 44.6 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 17.9 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.9 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 UJ
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 44.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 44.6 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 17.9 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.9 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 44.6 U	< 45.5 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 44.6 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 UJ	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 UJ	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	**332**	**128**	**143**	< 10.0 U	< 9.1 U	**4.7 J**	< 9.1 U	< 8.9 U	**6.1 J**
Carbazole	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS
					Sample Depth (ft BGS)	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7
					Sample Date	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 17.9 U	< 18.2 UJ	< 95.2 U	< 20.0 U	< 95.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 21.1 U	< 20.0 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 17.9 U	< 18.2 U	< 95.2 U	< 20.0 U	< 95.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 21.1 U	< 20.0 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 44.6 U	< 45.5 U	< 238 U	< 50.0 U	< 238 U	< 45.5 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 52.6 U	< 50.0 UJ	< 45.5 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 17.9 U	< 18.2 U	< 95.2 U	< 20.0 U	< 95.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 21.1 U	< 20.0 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 8.9 U	< 9.1 UJ	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 44.6 U	< 45.5 U	< 238 U	< 50.0 U	< 238 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 52.6 U	< 50.0 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 17.9 U	< 18.2 U	< 95.2 U	< 20.0 U	< 95.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 21.1 U	< 20.0 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 44.6 U	< 45.5 U	< 238 U	< 50.0 U	< 238 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 U	< 52.6 U	< 50.0 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 U	< 8.9 UJ	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 UJ	< 10.0 U	< 9.1 U	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.1 U	< 8.9 U	**4.1 J**	**309**	**348**	**583**	< 9.1 U	**4.2 J**	< 9.1 UJ	< 9.1 U	< 10.5 U	< 10.0 UJ	**7.0 J**	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS
Sample Location					PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS
Sample Depth (ft BGS)					34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248	238-248	238-248	138-148	138-148
Sample Date					08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021	08-12-2021	03-05-2021	05-12-2021
Sample Type					N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (#–C)																			
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 20.4 UJ	< 19.0 U	< 20.0 U	< 18.2 UJ	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 UJ	< 18.2 U	< 20.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 20.4 U	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 UJ	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 51.0 U	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 20.4 U	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 10.2 U	< 9.5 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 10.0 UJ	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 51.0 U	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 20.4 U	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Atrazine	SW8270C	ug/L	3	0.3	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 51.0 U	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 10.2 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Caprolactam	SW8270C	ug/L	NE	990	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 UJ	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 9.5 U	**5.0 J**	< 9.1 U	< 10.0 U
Carbazole	SW8270C	ug/L	NE	NE	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 10.2 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	Sample Depth (ft BGS)	Sample Date	Sample Type
					PZ-210-SS	138-148	08-16-2021	N
					PZ-211-SD	237-247	03-04-2021	N
					PZ-211-SD	237-247	05-13-2021	N
					PZ-211-SD	237-247	08-17-2021	N
					PZ-211-SS	137-147	02-24-2021	N
					PZ-211-SS	137-147	05-05-2021	N
					PZ-211-SS	137-147	08-04-2021	N
					PZ-212-SD	234-244	02-25-2021	N
					PZ-212-SD	234-244	05-11-2021	N
					PZ-212-SD	234-244	08-10-2021	N
					PZ-212-SS	134-144	02-26-2021	N
					PZ-212-SS	134-144	05-11-2021	N
					PZ-212-SS	134-144	08-10-2021	N
					PZ-302-AI	32.6-42.4	03-12-2021	N
					PZ-302-AI	32.6-42.4	05-18-2021	N
Semivolatile Organic Compounds, Total (#–C)								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 UJ	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 47.6 U	< 47.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 UJ	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.5 U	< 9.5 UJ	< 10.0 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 47.6 U	< 47.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 47.6 U	< 47.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.5 U	< 9.5 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990	**4.5 J**	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 UJ	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
					Sample Depth (ft BGS)	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8
					Sample Date	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021
					Sample Type	N	N	N	N	N	FD	N	FD
Semivolatile Organic Compounds, Total (#–C)													
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59		< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE		< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	**30.9**	**29.4**	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9		< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13		< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE		< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001		< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19		< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16		< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	NE	0.039		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31		< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 25

Table 12c-i: Validated Groundwater Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
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			Sample Location	PZ-303-AS
			Sample Depth (ft BGS)	16-25.8
			Sample Date	08-24-2021
			Sample Type	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	
Semivolatile Organic Compounds, Total (#–C)					
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 19.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.5 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 19.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.5 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.5 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	**11.0**
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 47.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.5 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.5 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.5 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.5 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.5 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.5 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 19.0 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.5 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.5 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.5 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 47.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 19.0 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.5 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.5 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.5 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 47.6 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.5 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.5 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.5 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.5 U
Caprolactam	SW8270C	ug/L	NE	990	< 9.5 U
Carbazole	SW8270C	ug/L	NE	NE	< 9.5 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.5 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Semivolatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 11c-i ; chemical names starting with letter D through Z are shown on Table 11c-ii.
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 25

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13	D-81	D-81	D-81
					Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133	45-60	45-60	45-60
					Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021	03-09-2021	05-05-2021	08-09-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	**2.8 J**	< 10.0 U	< 10.0 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 U	< 20.0 U	< 19.0 UJ	< 19.0 UJ	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U	< 20.0 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE		< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 R
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 R	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 R	< 10.0 R
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035		< 200 UJ	< 182 UJ	< 182 UJ	< 182 U	< 200 UJ	< 190 UJ	< 190 UJ	< 182 U	< 200 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 U	< 200 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 UJ	< 9.1 U	< 9.1 U	< 9.1 UJ	< 10.0 U	< 10.0 U	< 10.0 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 50.0 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 50.0 U	< 50.0 U	< 50.0 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 20.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 U	< 18.2 UJ	< 18.2 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 50.0 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 50.0 U	< 50.0 U	< 50.0 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 20.0 UJ	< 18.2 UJ	< 90.9 UJ	< 18.2 UJ	< 20.0 UJ	< 95.2 U	< 95.2 U	< 18.2 UJ	< 20.0 UJ	< 95.2 U	< 95.2 U	< 18.2 UJ	< 18.2 UJ	< 90.9 U	< 20.0 UJ	< 20.0 UJ	< 100 U
Propyzamide	SW8270C	ug/L	NE	120		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 10.0 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 10.0 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89	D-89	D-89	D-89	D-89	D-93
					Sample Depth (ft BGS)	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48	33-48	33-48	33-48	33-48	92-112
					Sample Date	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021	05-19-2021	05-19-2021	08-24-2021	03-08-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	FD	N	FD	N	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 20.4 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.4 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 UJ
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 204 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 174 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 R	< 10.2 R	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 R	< 10.2 R	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 204 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 174 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Kepone	SW8270C	ug/L	NE	0.0035		< 182 U	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 204 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 174 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.1 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 50.0 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 47.6 U	< 51.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 43.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 UJ	< 45.5 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 U	< 20.0 UJ	< 18.2 UJ	< 19.0 U	< 20.0 UJ	< 19.0 UJ	< 20.4 UJ	< 18.2 UJ	< 20.0 UJ	< 18.2 UJ	< 17.4 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 20.0 UJ	< 19.0 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 50.0 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 47.6 UJ	< 51.0 UJ	< 45.5 U	< 50.0 U	< 45.5 UJ	< 43.5 UJ	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 20.0 UJ	< 90.9 U	< 19.0 UJ	< 20.0 UJ	< 95.2 UJ	< 102 UJ	< 18.2 UJ	< 20.0 UJ	< 90.9 UJ	< 87.0 UJ	< 18.2 UJ	< 19.0 UJ	< 90.9 UJ	< 100 UJ	< 95.2 U	< 18.2 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 10.2 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.7 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 UJ

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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				Sample Location	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11	I-11	I-62	I-62	I-62	I-65	I-65	I-65
				Sample Depth (ft BGS)	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44	26-36	26-36	26-36
				Sample Date	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021
				Sample Type	FD	N	FD	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1																	
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 UJ	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 UJ	< 18.2 U	< 17.7 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 177 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 177 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 U	< 200 UJ	< 190 UJ	< 182 U	< 177 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 UJ	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.1 U	< 8.8 U	< 9.1 UJ	< 9.5 U	< 9.5 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 UJ	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 45.5 U	< 44.2 U	< 45.5 UJ	< 47.6 U	< 47.6 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 18.2 U	< 17.7 UJ	< 18.2 UJ	< 19.0 U	< 19.0 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 UJ	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 45.5 U	< 44.2 U	< 45.5 UJ	< 47.6 U	< 47.6 U	< 45.5 UJ
Phenacetin	SW8270C	ug/L	NE	34	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 95.2 U	< 18.2 UJ	< 18.2 UJ	< 90.9 U	< 90.9 U	< 18.2 UJ	< 20.0 UJ	< 95.2 U	< 18.2 UJ	< 17.7 UJ	< 90.9 U	< 19.0 UJ	< 19.0 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 8.8 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68	I-68	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100
					Sample Depth (ft BGS)	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5
					Sample Date	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 19.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U	< 90.9 U	< 90.9 U	< 90.9 U	< 95.2 U	< 95.2 U	< 18.2 U	< 17.9 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE		< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 909 UJ	< 909 UJ	< 909 UJ	< 952 UJ	< 952 UJ	< 182 UJ	< 179 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 909 UJ	< 909 UJ	< 909 UJ	< 952 UJ	< 952 UJ	< 182 UJ	< 179 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035		< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 909 UJ	< 909 UJ	< 909 UJ	< 952 UJ	< 952 UJ	< 182 U	< 179 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 UJ	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 47.6 U	< 45.5 U	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 47.6 U	< 45.5 UJ	< 227 U	< 227 U	< 227 U	< 238 U	< 238 U	< 45.5 U	< 44.6 U	< 47.6 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 19.0 U	< 18.2 UJ	< 19.0 UJ	< 20.0 U	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 19.0 UJ	< 18.2 UJ	< 90.9 UJ	< 90.9 UJ	< 90.9 UJ	< 95.2 UJ	< 95.2 UJ	< 18.2 U	< 17.9 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 47.6 U	< 45.5 U	< 47.6 UJ	< 50.0 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 47.6 U	< 45.5 UJ	< 227 U	< 227 U	< 227 U	< 238 U	< 238 UJ	< 45.5 U	< 44.6 U	< 47.6 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 19.0 UJ	< 18.2 UJ	< 95.2 UJ	< 20.0 UJ	< 18.2 UJ	< 90.9 U	< 19.0 UJ	< 19.0 UJ	< 90.9 U	< 90.9 UJ	< 90.9 UJ	< 455 UJ	< 476 UJ	< 476 UJ	< 18.2 UJ	< 17.9 UJ	< 95.2 U
Propyzamide	SW8270C	ug/L	NE	120		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 9.1 U	< 8.9 U	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MO-1-SDR 234.82-254.82 05-17-2021 N	MO-1-SDR 234.82-254.82 08-16-2021 N	MO-3-SDR - 05-28-2021 N	MO-3-SDR - 08-12-2021 N	MO-3-SS - 05-28-2021 N	MO-3-SS - 08-05-2021 N	MW-111-P1 39-49 05-06-2021 N	MW-111-P1 39-49 08-13-2021 N	MW-111-P2 54-64 05-06-2021 N	MW-111-P2 54-64 08-13-2021 N	MW-111-P3 79-89 05-06-2021 N	MW-111-P3 79-89 08-13-2021 N	MW-112-P1 45-55 08-17-2021 N	MW-112-P2 70-80 08-17-2021 N	MW-112-P3 90-100 08-17-2021 N	MW-113 170.2-180.2 08-24-2021 N
Semivolatile Organic Compounds, Total (D–Z)																				
Diallate	SW8270C	ug/L	NE	0.54	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 19.0 UJ	< 20.0 U	< 17.9 U	< 21.1 UJ	< 20.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 U	< 20.0 U	< 17.7 U	< 16.7 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE	< 190 UJ	< 200 UJ	< 179 UJ	< 211 UJ	< 200 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 177 UJ	< 167 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.5 UJ	< 10.0 UJ	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 R	< 9.1 U	< 10.0 R	< 10.0 U	< 8.8 R	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 190 UJ	< 200 UJ	< 179 UJ	< 211 UJ	< 200 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 177 UJ	< 167 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035	< 190 UJ	< 200 UJ	< 179 UJ	< 211 UJ	< 200 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 177 UJ	< 167 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	**3.6 J**	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 UJ	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.5 UJ	< 10.0 UJ	< 8.9 U	< 10.5 UJ	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 47.6 UJ	< 50.0 UJ	< 44.6 U	< 52.6 UJ	< 50.0 U	< 47.6 U	< 50.0 U	< 45.5 U	< 50.0 U	< 50.0 U	< 44.2 U	< 41.7 U	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 47.6 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 19.0 UJ	< 20.0 UJ	< 17.9 UJ	< 21.1 UJ	< 20.0 UJ	< 19.0 UJ	< 20.0 UJ	< 18.2 UJ	< 20.0 UJ	< 20.0 UJ	< 17.7 UJ	< 16.7 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 47.6 UJ	< 50.0 UJ	< 44.6 U	< 52.6 UJ	< 50.0 U	< 47.6 UJ	< 50.0 U	< 45.5 UJ	< 50.0 U	< 50.0 UJ	< 44.2 U	< 41.7 UJ	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 47.6 UJ
Phenacetin	SW8270C	ug/L	NE	34	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Phenol	SW8270C	ug/L	NE	580	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	**2.8 J**	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 95.2 UJ	< 100 U	< 89.3 UJ	< 105 U	< 100 UJ	< 95.2 UJ	< 20.0 UJ	< 90.9 UJ	< 20.0 UJ	< 100 UJ	< 17.7 UJ	< 83.3 UJ	< 95.2 UJ	< 90.9 UJ	< 90.9 UJ	< 95.2 U
Propyzamide	SW8270C	ug/L	NE	120	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.5 UJ	< 10.0 U	< 8.9 U	< 10.5 U	< 10.0 U	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U	< 8.8 U	< 8.3 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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				Sample Location	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1
				Sample Depth (ft BGS)	25-35	25-35	38-48	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85	68-78	68-78	68-78
				Sample Date	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021
				Sample Type	N	N	N	FD	N	N	FD	N	FD	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1																	
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 18.2 U	< 18.2 UJ	< 19.0 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE	< 182 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 182 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035	< 182 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 182 U	< 182 U	< 190 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 UJ	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 10.0 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 45.5 U	< 45.5 UJ	< 47.6 U	< 44.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 UJ	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 45.5 UJ	< 50.0 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 17.9 UJ	< 18.2 UJ	< 18.2 U	< 18.2 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 20.0 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 45.5 U	< 45.5 UJ	< 47.6 U	< 44.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 45.5 UJ	< 50.0 U	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 50.0 U
Phenacetin	SW8270C	ug/L	NE	34	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	**3.8 J**	< 9.1 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 18.2 UJ	< 90.9 UJ	< 19.0 UJ	< 17.9 UJ	< 90.9 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 90.9 U	< 20.0 UJ	< 95.2 UJ	< 90.9 UJ	< 90.9 UJ	< 18.2 UJ	< 90.9 U	< 20.0 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.1 UJ	< 9.5 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2
					Sample Depth (ft BGS)	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136	221-231	221-231	221-231	25-35	25-35	80-90	80-90	80-90
					Sample Date	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021
					Sample Type	N	N	N	N	FD	N	N	N	N	N	FD	N	N	N	N	FD
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 17.4 U	< 17.9 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE		< 174 UJ	< 179 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 8.7 R	< 8.9 U	< 9.1 R	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 8.7 R	< 8.9 U	< 9.1 R	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 174 UJ	< 179 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035		< 174 UJ	< 179 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	**5.1 J**	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 8.7 UJ	< 8.9 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 U	< 9.1 UJ	< 9.1 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 43.5 UJ	< 44.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 17.4 UJ	< 17.9 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 43.5 UJ	< 44.6 U	< 45.5 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 U	< 45.5 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580		< 8.7 U	**3.7 J**	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	**7.9 J**	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 87.0 U	< 17.9 UJ	< 90.9 U	< 90.9 UJ	< 90.9 UJ	< 90.9 U	< 90.9 UJ	< 90.9 U	< 90.9 UJ	< 90.9 U	< 90.9 U	< 18.2 UJ	< 90.9 U	< 18.2 UJ	< 90.9 U	< 90.9 U
Propyzamide	SW8270C	ug/L	NE	120		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 8.7 U	< 8.9 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2
					Sample Depth (ft BGS)	110-120	110-120	110-120	20-30	20-30	55-65	55-65	90-100	90-100	145-155	145-155	195-205	195-205	32-42	32-42	62-72
					Sample Date	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021
					Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	**2.8 J**	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 R
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 R	< 9.5 U	< 9.5 R
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 9.1 UJ	< 9.1 UJ	< 9.5 U	< 9.1 UJ	< 9.1 U	< 9.5 UJ	< 10.0 U	< 9.1 UJ	< 9.5 U	< 9.5 UJ	< 9.5 U	< 9.1 UJ	< 10.0 U	< 9.5 UJ	< 9.5 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 UJ
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 47.6 U	< 45.5 UJ	< 45.5 U	< 47.6 UJ	< 50.0 U	< 45.5 UJ	< 47.6 U	< 47.6 UJ	< 47.6 U	< 45.5 UJ	< 50.0 U	< 47.6 UJ	< 47.6 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 9.1 U	< 9.1 U	**4.6 J**	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 20.0 UJ	< 18.2 UJ	< 19.0 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 UJ	< 20.0 UJ	< 19.0 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 45.5 UJ	< 45.5 UJ	< 47.6 U	< 45.5 UJ	< 45.5 U	< 47.6 UJ	< 50.0 U	< 45.5 UJ	< 47.6 U	< 47.6 UJ	< 47.6 U	< 45.5 UJ	< 50.0 U	< 47.6 UJ	< 47.6 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 9.1 U	< 9.1 U	**6.4 J**	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 90.9 U	< 90.9 U	< 19.0 UJ	< 90.9 U	< 18.2 UJ	< 95.2 U	< 20.0 UJ	< 90.9 U	< 19.0 UJ	< 95.2 U	< 19.0 UJ	< 90.9 U	< 20.0 UJ	< 95.2 U	< 19.0 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2
					Sample Depth (ft BGS)	62-72	92-102	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6
					Sample Date	08-06-2021	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021
					Sample Type	N	N	N	FD	N	N	N	N	N	N	FD	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 R	< 10.0 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.5 U	< 9.5 U	**3.0 J**	**3.2 J**	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 17.4 U	< 17.7 U	< 19.0 U	< 17.7 U	< 17.7 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 UJ
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE		< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 174 UJ	< 177 UJ	< 190 UJ	< 177 UJ	< 177 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 R	< 9.1 R	< 8.7 R	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.5 U	< 9.5 R	< 9.5 U	< 9.5 U	< 9.5 R	< 9.1 R	< 8.7 R	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 R	< 10.0 U	< 10.0 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 174 UJ	< 177 UJ	< 190 UJ	< 177 UJ	< 177 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035		< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 174 UJ	< 177 UJ	< 190 UJ	< 177 UJ	< 177 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.5 UJ	< 9.5 U	< 9.5 UJ	< 9.5 UJ	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 UJ	< 10.0 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 R	< 10.0 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 47.6 UJ	< 47.6 U	< 47.6 UJ	< 47.6 UJ	< 47.6 U	< 45.5 U	< 43.5 U	< 44.2 U	< 47.6 U	< 44.2 U	< 44.2 U	< 45.5 UJ	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 50.0 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 19.0 UJ	< 19.0 UJ	< 19.0 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 UJ	< 17.4 UJ	< 17.7 UJ	< 19.0 UJ	< 17.7 UJ	< 17.7 UJ	< 18.2 UJ	< 20.0 UJ	< 18.2 UJ	< 20.0 UJ	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 47.6 UJ	< 47.6 U	< 47.6 UJ	< 47.6 UJ	< 47.6 UJ	< 45.5 UJ	< 43.5 UJ	< 44.2 U	< 47.6 UJ	< 44.2 U	< 44.2 U	< 45.5 UJ	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 50.0 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 95.2 U	< 19.0 UJ	< 95.2 U	< 95.2 U	< 95.2 UJ	< 90.9 UJ	< 87.0 UJ	< 17.7 UJ	< 95.2 UJ	< 17.7 UJ	< 17.7 UJ	< 90.9 U	< 20.0 UJ	< 90.9 UJ	< 100 U	< 100 U
Propyzamide	SW8270C	ug/L	NE	120		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 8.7 U	< 8.8 U	< 9.5 U	< 8.8 U	< 8.8 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2	MW-505-P3	MW-505-P3	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS
					Sample Depth (ft BGS)	103.6-113.6	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50	40-50	65-75	65-75	39-48.8	39-48.8	39-48.8	17.1-26.9
					Sample Date	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	03-01-2021	05-17-2021	08-18-2021	03-10-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 10.0 U	< 9.5 U	< 9.1 U	**2.8 J**	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 20.0 UJ	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 17.9 U	< 20.0 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE		< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 179 UJ	< 200 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 R	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 R	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 179 UJ	< 200 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035		< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 U	< 179 UJ	< 200 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	**6.0 J**	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.5 UJ	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 50.0 UJ	< 47.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 U	< 47.6 UJ	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 44.6 U	< 50.0 U	< 47.6 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 20.0 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 U	< 17.9 UJ	< 20.0 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 50.0 UJ	< 47.6 U	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 U	< 47.6 UJ	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 UJ	< 45.5 U	< 47.6 UJ	< 45.5 U	< 44.6 U	< 50.0 UJ	< 47.6 U
Phenacetin	SW8270C	ug/L	NE	34		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	**5.0 J**	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 100 U	< 19.0 UJ	< 18.2 UJ	< 95.2 U	< 18.2 UJ	< 19.0 UJ	< 95.2 U	< 90.9 UJ	< 95.2 U	< 90.9 UJ	< 95.2 UJ	< 90.9 UJ	< 95.2 UJ	< 18.2 UJ	< 17.9 UJ	< 100 UJ	< 19.0 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 8.9 U	< 10.0 U	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS
					Sample Depth (ft BGS)	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8
					Sample Date	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 17.9 U	< 18.2 U	< 19.0 UJ	< 18.2 U	< 18.2 UJ	< 19.0 U	< 20.0 U	< 18.2 U	< 20.0 UJ	< 20.0 U	< 18.2 U	< 20.0 UJ	< 19.0 U	< 18.2 U	< 18.2 U	< 22.2 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE	< 179 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 222 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 UJ	< 9.1 U	< 11.1 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 R	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 R	< 10.0 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 179 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 222 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035	< 179 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 U	< 222 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 UJ	< 10.0 UJ	< 9.5 U	< 9.1 UJ	< 9.1 U	< 11.1 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 8.9 U	< 9.1 UJ	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 UJ	< 10.0 UJ	< 10.0 U	< 9.1 UJ	< 10.0 UJ	< 9.5 U	< 9.1 UJ	< 9.1 U	< 11.1 U	< 10.0 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 UJ	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 44.6 U	< 45.5 UJ	< 47.6 UJ	< 45.5 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 47.6 U	< 45.5 UJ	< 45.5 U	< 55.6 U	< 50.0 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 17.9 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 20.0 UJ	< 18.2 UJ	< 20.0 UJ	< 20.0 UJ	< 18.2 UJ	< 20.0 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 U	< 22.2 UJ	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	**4.5 J**	< 9.1 U	< 9.5 UJ	**8.6 J**	**5.9 J**	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 44.6 U	< 45.5 UJ	< 47.6 UJ	< 45.5 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 50.0 U	< 45.5 UJ	< 50.0 UJ	< 47.6 U	< 45.5 UJ	< 45.5 U	< 55.6 U	< 50.0 UJ
Phenacetin	SW8270C	ug/L	NE	34	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 17.9 UJ	< 90.9 U	< 19.0 UJ	< 18.2 UJ	< 90.9 UJ	< 19.0 UJ	< 20.0 UJ	< 90.9 U	< 20.0 UJ	< 20.0 UJ	< 90.9 U	< 20.0 UJ	< 19.0 UJ	< 90.9 U	< 18.2 UJ	< 22.2 UJ	< 100 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 8.9 U	< 9.1 U	< 9.5 UJ	< 9.1 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 U	< 11.1 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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				Sample Location	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS
				Sample Depth (ft BGS)	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5
				Sample Date	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1																	
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	**2.6 J**	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 22.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Famphur	SW8270C	ug/L	NE	NE	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 222 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 10.0 U	< 9.5 U	< 9.5 UJ	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 R	< 9.5 U	< 9.5 U	< 11.1 R	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 222 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isophorone	SW8270C	ug/L	NE	78	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Kepone	SW8270C	ug/L	NE	0.0035	< 190 UJ	< 182 UJ	< 182 UJ	< 182 U	< 200 UJ	< 190 UJ	< 190 U	< 222 UJ	< 190 UJ	< 182 U	< 200 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 11.1 U	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.5 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 47.6 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 55.6 U	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 U	< 50.0 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 52.6 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 19.0 U	< 22.2 UJ	< 19.0 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 20.0 U	< 20.0 UJ	< 19.0 UJ	< 19.0 U	< 21.1 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 47.6 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 55.6 U	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 50.0 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 52.6 U
Phenacetin	SW8270C	ug/L	NE	34	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Phenol	SW8270C	ug/L	NE	580	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	**170**	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 19.0 UJ	< 18.2 UJ	< 90.9 U	< 18.2 UJ	< 20.0 UJ	< 95.2 U	< 19.0 UJ	< 22.2 UJ	< 95.2 U	< 18.2 UJ	< 20.0 UJ	< 95.2 UJ	< 20.0 UJ	< 20.0 UJ	< 95.2 U	< 19.0 UJ	< 21.1 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-102-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS
					Sample Depth (ft BGS)	79.7-89.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3
					Sample Date	08-04-2021	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021	02-24-2021	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021
					Sample Type	N	N	FD	N	FD	N	N	N	N	N	N	N	FD	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 21.1 U	< 19.0 U	< 18.2 U	< 20.0 U	< 17.9 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE		< 211 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 179 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 211 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 179 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035		< 211 UJ	< 190 U	< 182 U	< 200 UJ	< 179 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 182 U	< 190 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 10.5 UJ	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 UJ	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 10.0 UJ	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 52.6 UJ	< 47.6 U	< 45.5 U	< 50.0 U	< 44.6 U	< 47.6 UJ	< 47.6 U	< 45.5 U	< 50.0 UJ	< 45.5 U	< 47.6 U	< 50.0 UJ	< 47.6 UJ	< 47.6 U	< 47.6 U	< 47.6 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 21.1 UJ	< 19.0 U	< 18.2 U	< 20.0 UJ	< 17.9 UJ	< 19.0 UJ	< 19.0 U	< 18.2 UJ	< 20.0 UJ	< 18.2 U	< 19.0 UJ	< 20.0 UJ	< 19.0 UJ	< 19.0 U	< 19.0 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 52.6 UJ	< 47.6 U	< 45.5 U	< 50.0 U	< 44.6 U	< 47.6 UJ	< 47.6 U	< 45.5 U	< 50.0 UJ	< 45.5 U	< 47.6 U	< 50.0 UJ	< 47.6 UJ	< 47.6 U	< 47.6 U	< 47.6 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580		< 10.5 U	**186**	**168**	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 105 U	< 19.0 UJ	< 18.2 UJ	< 100 UJ	< 89.3 UJ	< 95.2 U	< 19.0 UJ	< 18.2 UJ	< 100 U	< 18.2 UJ	< 19.0 UJ	< 100 U	< 95.2 U	< 19.0 UJ	< 19.0 UJ	< 95.2 U
Propyzamide	SW8270C	ug/L	NE	120		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 10.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 8.9 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS
					Sample Depth (ft BGS)	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5
					Sample Date	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	**34.9 J+**	< 9.5 U	< 9.1 U	**24.6 J+**	< 9.5 U	< 9.5 U	**31.5 J+**	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 21.1 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 211 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 10.0 U	< 9.1 R	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 10.0 U	< 9.1 R	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 211 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 U	< 200 UJ	< 182 UJ	< 190 U	< 182 UJ	< 211 UJ	< 190 U	< 182 UJ	< 182 UJ	< 190 U	< 190 UJ	< 200 UJ	< 190 U	< 182 UJ	< 182 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 U	< 45.5 U	< 52.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 47.6 U	< 47.6 U	< 50.0 U	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 U	< 20.0 UJ	< 18.2 UJ	< 19.0 U	< 18.2 UJ	< 21.1 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 19.0 UJ	< 20.0 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 19.0 U
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 50.0 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 52.6 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 47.6 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 20.0 UJ	< 90.9 UJ	< 19.0 UJ	< 18.2 UJ	< 105 UJ	< 19.0 UJ	< 18.2 UJ	< 90.9 UJ	< 19.0 UJ	< 19.0 UJ	< 100 UJ	< 19.0 UJ	< 18.2 UJ	< 90.9 U	< 19.0 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD
					Sample Depth (ft BGS)	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4
					Sample Date	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021
					Sample Type	N	N	N	N	N	N	N	N	N	FD	N	FD	N	N	FD	N
Semivolatile Organic Compounds, Total (D–Z)																					
Diallate	SW8270C	ug/L	NE	0.54	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 17.9 U	< 20.4 U	< 19.0 U	< 18.2 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 179 UJ	< 204 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 R	< 9.5 U	< 9.1 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 R	< 9.5 U	< 9.1 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 179 UJ	< 204 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 U	< 190 U	< 200 UJ	< 179 UJ	< 204 UJ	< 190 U	< 182 U	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 50.0 U	< 44.6 U	< 51.0 U	< 47.6 U	< 45.5 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 19.0 UJ	< 19.0 UJ	< 19.0 U	< 18.2 UJ	< 20.0 UJ	< 19.0 U	< 19.0 UJ	< 19.0 UJ	< 18.2 U	< 19.0 U	< 20.0 UJ	< 17.9 UJ	< 20.4 UJ	< 19.0 U	< 18.2 U	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 47.6 U	< 47.6 UJ	< 47.6 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 47.6 U	< 47.6 UJ	< 45.5 U	< 47.6 U	< 50.0 U	< 44.6 U	< 51.0 UJ	< 47.6 U	< 45.5 U	< 45.5 U
Phenacetin	SW8270C	ug/L	NE	34	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 19.0 UJ	< 95.2 UJ	< 19.0 UJ	< 18.2 UJ	< 100 UJ	< 19.0 UJ	< 19.0 UJ	< 95.2 UJ	< 18.2 UJ	< 19.0 UJ	< 20.0 UJ	< 17.9 UJ	< 102 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 10.0 U	< 8.9 U	< 10.2 U	< 9.5 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS
					Sample Depth (ft BGS)	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161
					Sample Date	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021
					Sample Type	FD	N	FD	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 20.4 U	< 20.4 U	< 18.2 U	< 21.1 U	< 22.2 U	< 21.1 U	< 20.0 U	< 21.1 U	< 22.2 U	< 19.0 U	< 18.2 U	< 16.7 U	< 19.0 U	< 17.9 U	< 16.7 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 204 UJ	< 204 UJ	< 182 UJ	< 211 UJ	< 222 UJ	< 211 UJ	< 200 UJ	< 211 UJ	< 222 UJ	< 190 UJ	< 182 UJ	< 167 UJ	< 190 UJ	< 179 UJ	< 167 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 10.2 R	< 10.2 R	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 R	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 10.2 R	< 10.2 R	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 R	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 204 UJ	< 204 UJ	< 182 UJ	< 211 UJ	< 222 UJ	< 211 UJ	< 200 UJ	< 211 UJ	< 222 UJ	< 190 UJ	< 182 UJ	< 167 UJ	< 190 UJ	< 179 UJ	< 167 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 UJ	< 204 UJ	< 204 UJ	< 182 U	< 211 UJ	< 222 UJ	< 211 UJ	< 200 UJ	< 211 UJ	< 222 UJ	< 190 U	< 182 UJ	< 167 UJ	< 190 UJ	< 179 UJ	< 167 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 51.0 U	< 51.0 U	< 45.5 U	< 52.6 U	< 55.6 U	< 52.6 U	< 50.0 U	< 52.6 U	< 55.6 U	< 47.6 U	< 45.5 U	< 41.7 U	< 47.6 U	< 44.6 U	< 41.7 U	< 50.0 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 UJ	< 20.4 UJ	< 20.4 UJ	< 18.2 U	< 21.1 UJ	< 22.2 UJ	< 21.1 UJ	< 20.0 U	< 21.1 UJ	< 22.2 UJ	< 19.0 U	< 18.2 UJ	< 16.7 UJ	< 19.0 U	< 17.9 UJ	< 16.7 UJ	< 20.0 U
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 51.0 UJ	< 51.0 UJ	< 45.5 U	< 52.6 U	< 55.6 UJ	< 52.6 UJ	< 50.0 U	< 52.6 U	< 55.6 UJ	< 47.6 U	< 45.5 U	< 41.7 UJ	< 47.6 U	< 44.6 U	< 41.7 UJ	< 50.0 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 102 UJ	< 102 UJ	< 18.2 UJ	< 21.1 UJ	< 111 UJ	< 105 UJ	< 20.0 UJ	< 21.1 UJ	< 111 UJ	< 19.0 UJ	< 18.2 UJ	< 83.3 UJ	< 19.0 UJ	< 17.9 UJ	< 83.3 UJ	< 20.0 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.2 U	< 10.2 U	< 9.1 U	< 10.5 U	< 11.1 U	< 10.5 U	< 10.0 U	< 10.5 U	< 11.1 U	< 9.5 U	< 9.1 U	< 8.3 U	< 9.5 U	< 8.9 U	< 8.3 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS
					Sample Depth (ft BGS)	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1	79.5-89.1
					Sample Date	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021	03-10-2021	05-19-2021	08-19-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	**50.8 J**	< 9.1 U	< 8.9 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 20.0 U	< 21.1 U	< 19.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 19.0 U	< 17.9 U	< 18.2 U	< 20.0 U	< 18.2 U	< 20.0 U	< 18.2 U	< 17.9 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE		< 200 UJ	< 211 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 179 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 200 UJ	< 211 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 179 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035		< 200 UJ	< 211 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 182 U	< 190 UJ	< 182 UJ	< 190 UJ	< 179 UJ	< 182 UJ	< 200 U	< 182 UJ	< 200 UJ	< 182 UJ	< 179 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 UJ	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 UJ	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 50.0 U	< 52.6 U	< 47.6 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 45.5 U	< 47.6 U	< 44.6 U	< 45.5 UJ	< 50.0 U	< 45.5 U	< 50.0 U	< 45.5 U	< 44.6 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 20.0 UJ	< 21.1 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 17.9 UJ	< 18.2 UJ	< 20.0 U	< 18.2 UJ	< 20.0 UJ	< 18.2 UJ	< 17.9 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 50.0 U	< 52.6 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 47.6 U	< 45.5 UJ	< 47.6 U	< 44.6 U	< 45.5 UJ	< 50.0 U	< 45.5 U	< 50.0 UJ	< 45.5 U	< 44.6 U	< 45.5 UJ
Phenacetin	SW8270C	ug/L	NE	34		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 20.0 UJ	< 105 UJ	< 19.0 UJ	< 18.2 UJ	< 90.9 UJ	< 18.2 UJ	< 19.0 UJ	< 90.9 UJ	< 19.0 UJ	< 17.9 UJ	< 90.9 U	< 20.0 UJ	< 18.2 UJ	< 100 UJ	< 18.2 UJ	< 17.9 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 10.0 U	< 10.5 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.5 U	< 8.9 U	< 9.1 U	< 10.0 U	< 9.1 U	< 10.0 U	< 9.1 U	< 8.9 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS
					Sample Depth (ft BGS)	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5
					Sample Date	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021	08-20-2021	02-24-2021	05-07-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 17.9 U	< 18.2 U	< 95.2 U	< 20.0 U	< 95.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 18.2 U	< 21.1 U	< 20.0 U	< 18.2 U	< 18.2 U	< 20.4 U	< 19.0 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 179 UJ	< 182 UJ	< 952 UJ	< 200 UJ	< 952 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 211 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 204 UJ	< 190 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 R	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 R	< 9.5 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 R	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 R	< 9.5 U	< 10.0 R
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 179 UJ	< 182 UJ	< 952 UJ	< 200 UJ	< 952 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 211 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 204 UJ	< 190 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 UJ	< 179 UJ	< 182 UJ	< 952 UJ	< 200 UJ	< 952 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 182 U	< 211 UJ	< 200 UJ	< 182 U	< 182 UJ	< 204 UJ	< 190 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 UJ	< 9.1 U	< 10.5 U	< 10.0 UJ	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 44.6 U	< 45.5 U	< 238 U	< 50.0 U	< 238 U	< 45.5 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 52.6 U	< 50.0 UJ	< 45.5 U	< 45.5 U	< 51.0 U	< 47.6 U	< 50.0 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 UJ	< 17.9 UJ	< 18.2 UJ	< 95.2 UJ	< 20.0 UJ	< 95.2 UJ	< 18.2 U	< 18.2 UJ	< 18.2 UJ	< 18.2 U	< 21.1 UJ	< 20.0 UJ	< 18.2 U	< 18.2 UJ	< 20.4 UJ	< 19.0 U	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 44.6 U	< 45.5 UJ	< 238 U	< 50.0 U	< 238 UJ	< 45.5 U	< 45.5 U	< 45.5 UJ	< 45.5 U	< 52.6 U	< 50.0 UJ	< 45.5 U	< 45.5 U	< 51.0 UJ	< 47.6 U	< 50.0 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 17.9 UJ	< 90.9 UJ	< 95.2 UJ	< 100 UJ	< 476 UJ	< 18.2 UJ	< 18.2 UJ	< 90.9 U	< 18.2 UJ	< 21.1 UJ	< 100 U	< 18.2 UJ	< 18.2 UJ	< 102 UJ	< 19.0 UJ	< 20.0 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 8.9 U	< 9.1 U	< 47.6 U	< 10.0 U	< 47.6 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.1 U	< 10.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 10.2 U	< 9.5 U	< 10.0 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS
					Sample Depth (ft BGS)	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248	238-248	238-248	138-148	138-148	138-148	237-247	237-247	237-247	137-147
					Sample Date	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021	08-12-2021	03-05-2021	05-12-2021	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	**44.1 J+**	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 20.0 U	< 18.2 U	< 19.0 U	< 20.0 U	< 20.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 20.0 U	< 19.0 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 190 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 200 UJ	< 190 UJ	< 190 U	< 190 UJ	< 190 UJ	< 182 U	< 200 UJ	< 190 UJ	< 190 U	< 200 UJ	< 190 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.5 UJ	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 UJ	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.5 UJ	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 50.0 U	< 45.5 U	< 47.6 UJ	< 50.0 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 50.0 U	< 47.6 UJ	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 UJ	< 20.0 U	< 18.2 UJ	< 19.0 UJ	< 20.0 U	< 20.0 UJ	< 19.0 UJ	< 19.0 U	< 19.0 UJ	< 19.0 UJ	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 19.0 U	< 20.0 UJ	< 19.0 UJ	< 18.2 U
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 UJ	< 50.0 U	< 45.5 U	< 47.6 UJ	< 50.0 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 47.6 U	< 47.6 UJ	< 45.5 U	< 50.0 U	< 47.6 UJ	< 47.6 U	< 50.0 U	< 47.6 UJ	< 45.5 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 90.9 UJ	< 20.0 UJ	< 18.2 UJ	< 95.2 U	< 20.0 UJ	< 20.0 UJ	< 95.2 U	< 19.0 UJ	< 19.0 UJ	< 95.2 UJ	< 18.2 UJ	< 20.0 UJ	< 95.2 U	< 19.0 UJ	< 20.0 UJ	< 95.2 U	< 18.2 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 10.0 U	< 9.1 U	< 9.5 U	< 10.0 U	< 10.0 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS	PZ-212-SS	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
					Sample Depth (ft BGS)	137-147	137-147	234-244	234-244	234-244	134-144	134-144	134-144	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8
					Sample Date	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021	05-11-2021	08-10-2021	03-12-2021	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N
Semivolatile Organic Compounds, Total (D–Z)																						
Diallate	SW8270C	ug/L	NE	0.54		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	**6.3 J**	**6.8 J**	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15		< 18.2 U	< 19.0 U	< 19.0 U	< 20.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 UJ	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U	< 19.0 U	< 18.2 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE		< 182 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	NE	0.33		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 R	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	NE	0.6		< 182 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035		< 182 UJ	< 190 UJ	< 190 UJ	< 200 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 U	< 182 UJ	< 182 UJ	< 190 U	< 182 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79		< 9.1 U	< 9.5 UJ	< 9.5 U	< 10.0 U	< 9.1 UJ	< 9.5 U	< 9.1 U	< 10.0 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 UJ	< 9.5 U	< 9.1 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 UJ	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011		< 45.5 U	< 47.6 UJ	< 47.6 U	< 50.0 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065		< 18.2 UJ	< 19.0 UJ	< 19.0 U	< 20.0 UJ	< 18.2 UJ	< 19.0 U	< 18.2 UJ	< 20.0 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Parathion	SW8270C	ug/L	NE	8.6		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041		< 45.5 U	< 47.6 UJ	< 47.6 U	< 50.0 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 50.0 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 UJ	< 47.6 U	< 45.5 U	< 45.5 U
Phenacetin	SW8270C	ug/L	NE	34		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	**11.9**	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2		< 18.2 UJ	< 95.2 U	< 19.0 UJ	< 20.0 UJ	< 90.9 U	< 19.0 UJ	< 18.2 UJ	< 100 U	< 19.0 UJ	< 18.2 UJ	< 90.9 U	< 19.0 UJ	< 18.2 UJ	< 90.9 U	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ
Propyzamide	SW8270C	ug/L	NE	120		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE		< 9.1 U	< 9.5 U	< 9.5 U	< 10.0 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U	< 9.5 U	< 9.1 U	< 9.1 U

Notes and definitions are presented on Page 21

Table 12c-ii: Validated Groundwater Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location: PZ-303-AS Sample Depth (ft BGS): 16-25.8 Sample Date: 05-20-2021 Sample Type: FD	Sample Location: PZ-303-AS Sample Depth (ft BGS): 16-25.8 Sample Date: 08-24-2021 Sample Type: N
Semivolatile Organic Compounds, Total (D–Z)						
Diallate	SW8270C	ug/L	NE	0.54	< 9.1 U	< 9.5 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 9.1 U	< 9.5 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 9.1 U	**6.1 J**
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 9.1 U	< 9.5 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 9.1 U	< 9.5 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 9.1 U	< 9.5 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 18.2 U	< 19.0 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 9.1 U	< 9.5 U
Diphenylamine	SW8270C	ug/L	NE	130	< 9.1 U	< 9.5 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 9.1 U	< 9.5 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Famphur	SW8270C	ug/L	NE	NE	< 182 UJ	< 190 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 9.1 U	< 9.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 9.1 U	< 9.5 U
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 9.1 U	< 9.5 U
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 182 UJ	< 190 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Isodrin	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Isophorone	SW8270C	ug/L	NE	78	< 9.1 U	< 9.5 U
Isosafrole	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Kepone	SW8270C	ug/L	NE	0.0035	< 182 UJ	< 190 UJ
m,p-cresol	SW8270C	ug/L	NE	93	< 9.1 U	< 9.5 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 9.1 U	< 9.5 UJ
Methyl parathion	SW8270C	ug/L	NE	0.45	< 9.1 U	< 9.5 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 9.1 U	< 9.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 9.1 U	< 9.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 9.1 U	< 9.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 9.1 U	< 9.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 45.5 U	< 47.6 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 9.1 U	< 9.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 9.1 U	< 9.5 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 9.1 U	< 9.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 9.1 U	< 9.5 U
o-Cresol	SW8270C	ug/L	NE	93	< 9.1 U	< 9.5 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 18.2 UJ	< 19.0 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 9.1 U	< 9.5 U
Parathion	SW8270C	ug/L	NE	8.6	< 9.1 U	< 9.5 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 9.1 U	< 9.5 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 9.1 U	< 9.5 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 9.1 U	< 9.5 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 45.5 U	< 47.6 UJ
Phenacetin	SW8270C	ug/L	NE	34	< 9.1 U	< 9.5 U
Phenol	SW8270C	ug/L	NE	580	< 9.1 U	< 9.5 U
Phorate	SW8270C	ug/L	NE	0.3	< 9.1 U	< 9.5 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 9.1 U	< 9.5 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 18.2 UJ	< 95.2 U
Propyzamide	SW8270C	ug/L	NE	120	< 9.1 U	< 9.5 U
Safrole	SW8270C	ug/L	NE	0.096	< 9.1 U	< 9.5 U
Thionazin	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 9.1 U	< 9.5 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Semivolatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 11c-i; chemical names starting with letter D through Z are shown on Table 11c-ii.
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 21

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
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				Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13	D-81
				Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133	45-60
				Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021	03-09-2021
				Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	**0.11 J**	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89	D-89
					Sample Depth (ft BGS)	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48	33-48
					Sample Date	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021
					Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	FD	N	FD
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 UJ
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.6 J-**	**1.6 J-**
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

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Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11	I-11
				Sample Depth (ft BGS)	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5	80.5-90.5
				Sample Date	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021	08-12-2021
				Sample Type	N	FD	N	N	FD	N	FD	N	N	N	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	**0.22 J**	**0.24 J**	< 10.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 5.0 U	< 5.0 U	< 0.50 U	< 0.50 U	< 5.0 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	**2.3**	**2.3**	**2.0 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68	I-68
					Sample Depth (ft BGS)	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2
					Sample Date	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1
				Sample Depth (ft BGS)	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-	-	-	-	39-49
				Sample Date	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021
				Sample Type	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	**1.0 J-**	**0.91 J**	< 10.0 U	**1.7**	**2.0**	**1.7**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	**0.68 J-**	< 1.0 UJ	< 10.0 U	**2.1**	**2.3**	**2.0**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	**0.45 J-**	**0.45 J**	< 10.0 U	**0.35 J**	**0.47 J**	**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	**0.76 J-**	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	**0.072 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	**0.14 J-**	**0.15 J**	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 UJ	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	**0.078 J**	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	**0.078 J**	**0.094 J**	**0.073 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	**0.33 J**	**0.40 J**	**0.34 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	**7.6**	**7.3**	**9.1 J-**	**8.3 J**	**8.6 J**	**0.52 J**	**0.69 J**	**0.50 J**	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	**0.54 J**	**0.46 J**	< 1.0 UJ	< 1.0 UJ	**1.1 J**	**0.45 J**	**0.53 J**	**0.45 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

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Qualifier Definition

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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204
					Sample Depth (ft BGS)	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5
					Sample Date	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**
Anthracene	SW8270C-SIM	ug/L	NE	180		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.13**	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.51 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1
					Sample Depth (ft BGS)	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116
					Sample Date	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021
					Sample Type	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		**0.18 J**	**0.17 J**	**0.19 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	**0.58 J**	< 1.0 U	**0.13 J**	**0.15 J**	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		**0.18 J**	**0.054 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3
				Sample Depth (ft BGS)	106-116	106-116	126-136	126-136	221-231	221-231	221-231	25-35	25-35	80-90	80-90	80-90	110-120	110-120
				Sample Date	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021
				Sample Type	FD	N	N	N	N	N	FD	N	N	N	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Semivolatile Organic Compounds – PAHs, Total																		
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.19**	**0.37**	**0.37**	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2
					Sample Depth (ft BGS)	110-120	20-30	20-30	55-65	55-65	90-100	90-100	145-155	145-155	195-205	195-205	32-42	32-42	62-72
					Sample Date	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021
					Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	**0.091 J**	< 0.10 U	**0.23**	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.059 J**
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.075 J**
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.062 J**
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
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Qualifier Definition
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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3
					Sample Depth (ft BGS)	62-72	92-102	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100
					Sample Date	08-06-2021	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021
					Sample Type	N	N	N	FD	N	N	N	N	N	N	FD	N	N	N
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 UJ
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	**0.089 J**	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	**0.080 J**	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	**0.078 J**	< 1.0 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 UJ	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 UJ	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 UJ	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-407R-P1	MW-407R-P2	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2	MW-505-P3
				Sample Depth (ft BGS)	53.6-63.6	73.6-83.6	103.6-113.6	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50	40-50	65-75
				Sample Date	08-12-2021	08-12-2021	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	05-25-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Semivolatile Organic Compounds – PAHs, Total																		
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Anthracene	SW8270C-SIM	ug/L	NE	180	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 UJ	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 5.0 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Fluorene	SW8270C-SIM	ug/L	NE	29	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Pyrene	SW8270C-SIM	ug/L	NE	12	< 10.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 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

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-505-P3	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10
					Sample Depth (ft BGS)	65-75	39-48.8	39-48.8	39-48.8	17.1-26.9	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52
					Sample Date	08-05-2021	03-01-2021	05-17-2021	08-18-2021	03-10-2021	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.52 J**	**0.97 J**	**0.63 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	**0.29 J**	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.66 J**	**0.89 J**	**0.59 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	**0.18 J**	**0.19 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	**0.30 J**
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 UJ	**0.14 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 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
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	**0.080 J**	**0.085 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.099 J**	**0.098 J**
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**2.5**	**2.8**	**3.8 J**	**3.7**	**2.4**	**2.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.094 J**	**0.12 J**	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 10.0 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

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS
					Sample Depth (ft BGS)	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6
					Sample Date	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 10.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 5.0 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.13 J**	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 1.0 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 10.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS
					Sample Depth (ft BGS)	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5
					Sample Date	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.41 J**	**0.45 J**	< 10.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	**1.0**	**1.0 J**	**0.83 J**	**0.85 J**	**1.5 J**
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.089 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.070 J**	< 0.10 U	**0.067 J**	**0.079 J**	< 1.0 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.094 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.082 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.077 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.048 J**	< 5.0 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.071 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.061 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.078 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	**0.45 J**	**0.48 J**	**0.65 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.7**	**1.6**	**2.0 J**
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**11.6**	**12.1**	**13.4**	**13.7**	< 10.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

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Qualifier Definition

J = Estimated concentration.

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U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-104-KS	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS
				Sample Depth (ft BGS)	397.37-407.17	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57
				Sample Date	02-24-2021	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021
				Sample Type	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Semivolatile Organic Compounds – PAHs, Total																		
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 UJ	< 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	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	**0.22 J**	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.078 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS
					Sample Depth (ft BGS)	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5
					Sample Date	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 10.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD
				Sample Depth (ft BGS)	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4
				Sample Date	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021
				Sample Type	N	N	N	N	N	N	N	FD	N	FD	N	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Semivolatile Organic Compounds – PAHs, Total																		
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS
				Sample Depth (ft BGS)	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48
				Sample Date	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021
				Sample Type	FD	N	FD	N	N	N	FD	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Semivolatile Organic Compounds – PAHs, Total																		
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 10.0 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	< 1.0 U	< 1.0 U	< 1.0 UJ
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS
					Sample Depth (ft BGS)	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4
					Sample Date	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.24 J**	< 1.0 U	< 10.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
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Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS
					Sample Depth (ft BGS)	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37
					Sample Date	05-12-2021	08-12-2021	03-10-2021	05-19-2021	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.61 J-**	**0.55 J-**	**1.2 J**	< 1.0 U	< 1.0 U	< 1.0 UJ
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.97 J-**	**0.65 J-**	**1.5 J**	< 1.0 U	< 1.0 U	< 1.0 UJ
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.59 J-**	**0.63 J-**	**1.1 J**	< 1.0 UJ	< 1.0 U	< 1.0 UJ
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 UJ	< 5.0 U	< 0.50 U	< 0.50 U	< 0.50 UJ
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**14.5 J-**	**15.9 J-**	**28.2**	< 1.0 U	< 1.0 U	< 1.0 UJ
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.9 J-**	**1.2 J-**	**2.3 J**	< 1.0 U	< 1.0 U	< 1.0 UJ
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 10.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS
					Sample Depth (ft BGS)	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150
					Sample Date	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Semivolatile Organic Compounds – PAHs, Total																				
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**1.2**	**1.1**	< 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
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	**1.8**	**1.0**	**1.4**	< 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
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	**0.38 J**	**0.48 J**	**0.48 J**	< 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
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.062 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.062 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.091 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	**0.25 J**	**0.20 J**	< 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
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.071 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	**0.24 J**	**0.18 J**	< 1.0 U	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**	**0.13 J**	< 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
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

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Bold *= Detected*

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Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
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				Sample Location	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD
				Sample Depth (ft BGS)	238-248	238-248	238-248	138-148	138-148	138-148	237-247	237-247	237-247	137-147	137-147	137-147	234-244	234-244	234-244
				Sample Date	03-05-2021	05-12-2021	08-12-2021	03-05-2021	05-12-2021	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	NE	53	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.072 J**	**0.077 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	NE	25	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	NE	12	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12d: Validated Groundwater Data—Semivolatile Organic Compounds – PAHs
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-212-SS	PZ-212-SS	PZ-212-SS	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
					Sample Depth (ft BGS)	134-144	134-144	134-144	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8	16-25.8
					Sample Date	02-26-2021	05-11-2021	08-10-2021	03-12-2021	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021	08-24-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N
Semivolatile Organic Compounds – PAHs, Total																			
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**32.5**	**32.6**	**42.2**	**63.4**	**24.3**
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**36.2**	**36.7**	**44.5**	**67.9**	**25.5**
Acenaphthene	SW8270C-SIM	ug/L	NE	53		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 5.0 U	< 5.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 5.0 U	< 5.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Chrysene	SW8270C-SIM	ug/L	NE	25		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 5.0 U	< 2.5 U	< 2.5 U	< 5.0 U	< 5.0 U	< 5.0 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 5.0 U	< 5.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.62 J**	**0.59 J**	**0.80 J**	**1.3 J**	< 10.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	< 10.0 U	**13.6**	**11.8**	**11.3**	**17.4**	**9.1 J**
Phenanthrene	SW8270C-SIM	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	**0.79 J**	**0.84 J**	**1.1 J**	**1.6 J**	**0.94 J**
Pyrene	SW8270C-SIM	ug/L	NE	12		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10.0 U	< 5.0 U	< 5.0 U	< 10.0 U	< 10.0 U	< 10.0 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13	D-81
					Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133	45-60
					Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021	03-09-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**143 J**	**136 J**	**133 J**	**132 J**	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**2,560**	**2,350**	**2,580**	**1,120**	**1,150**	**1,230**	**1,250**	**718**	**913**	**820**	**834**	**530**	**532**	**530**	**385**
Boron	SW6010B	ug/L	NE	400		**1,220**	**1,250**	**1,250**	**786**	**737**	**690**	**696**	**798**	**830**	**772**	**782**	**134**	**140**	**138**	**135**
Calcium	SW6010B	ug/L	NE	NE		**176,000**	**180,000**	**180,000**	**173,000**	**170,000**	**176,000**	**178,000**	**301,000**	**318,000**	**292,000**	**295,000**	**115,000**	**114,000**	**116,000**	**192,000**
Cobalt	SW6010B	ug/L	NE	0.6		**2.2 J**	**2.6 J**	**2.9 J**	**1.3 J**	**1.6 J**	**1.7 J**	**1.3 J**	**1.2 J**	**1.7 J**	**1.8 J**	**1.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	**6.7**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**677,000**	**706,000**	**695,000**	**616,000**	**612,000**	**617,000**	**621,000**	**937,000**	**991,000**	**916,000**	**925,000**	**394,000**	**391,000**	**390,000**	**659,000**
Iron	SW6010B	ug/L	NE	1,400		**33,400**	**31,000**	**35,900**	**12,000**	**12,500**	**12,900**	**13,000**	**10,300**	**12,600**	**11,000**	**11,100**	**9,850**	**9,740**	**9,580**	**16,200**
Lithium	SW6010B	ug/L	NE	4		**30.1**	**33.5**	**32.4**	**33.2**	**28.2**	**33.2**	**34.3**	**27.2**	**33.0**	**29.6**	**31.1**	**18.4 J**	**15.5 J**	**19.9 J**	**25.1**
Magnesium	SW6010B	ug/L	NE	NE		**57,400**	**62,700**	**59,500**	**45,000**	**45,700**	**43,200**	**43,100**	**45,200**	**47,800**	**45,500**	**46,000**	**25,700**	**25,600**	**24,400**	**43,700**
Manganese	SW6010B	ug/L	NE	43		**394**	**313**	**389**	**413**	**418**	**413**	**413**	**439**	**493**	**466**	**471**	**297**	**293**	**286**	**1,370**
Molybdenum	SW6010B	ug/L	NE	10		**0.68 J**	**0.90 J**	**0.80 J**	< 10.0 U	**0.64 J**	< 10.0 U	**0.97 J**	< 10.0 U	**1.1 J**	**0.86 J**	**0.51 J**	**0.57 J**	**0.95 J**	**0.78 J**	**3.0 J**
Nickel	SW6010B	ug/L	NE	39		**11.5**	**11.3**	**10.7**	**6.1 J**	**7.6 J**	**5.6 J**	**5.8 J**	< 10.0 U	**3.9 J**	**4.6 J**	**5.4 J**	< 10.0 U	**7.7 J**	**11.7 J+**	**12.2**
Potassium	SW6010B	ug/L	NE	NE		**32,000**	**28,100**	**33,200**	**13,400**	**14,000**	**13,000**	**13,100**	**9,470**	**10,200**	**9,660**	**9,770**	**5,440**	**6,000**	**5,850**	**4,310**
Silicon	SW6010B	ug/L	NE	NE		**18,000**	**17,600**	**16,900**	**13,500**	**11,900**	**12,200**	**12,600**	**13,600**	**14,100**	**13,100**	**13,300**	**11,600**	**11,400**	**11,900**	**13,900**
Sodium	SW6010B	ug/L	NE	20,000		**246,000**	**237,000**	**223,000**	**99,800**	**104,000**	**90,800**	**91,900**	**106,000**	**116,000**	**106,000**	**107,000**	**69,200**	**78,800**	**82,600**	**11,900**
Strontium	SW6010B	ug/L	NE	1,200		**890**	**803**	**837**	**576**	**576**	**597**	**602**	**782**	**844**	**784**	**792**	**279**	**291**	**284**	**659**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.3 J**	**1.8 J**	**1.9 J**	**2.0 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.16 J**	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.058 J**	< 1.0 U	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**7.4**	**6.1**	**8.5**	**0.27 J**	**0.28 J**	**0.24 J**	**0.25 J**	**0.45 J**	**0.39 J**	**0.40 J**	**0.44 J**	**0.23 J**	< 1.0 U	**0.23 J**	**8.8**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	**0.025 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.19 J**	**0.18 J**	**0.17 J**	**0.18 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.65 J**	**0.73 J**	< 2.0 U	< 2.0 U	**0.12 J**	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		**0.0438 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		< 1.0 U	**0.39 J**	**0.44 J**	**0.57 J**	**0.58 J**	**0.40 J**	**0.50 J**	< 1.0 U	**0.69 J**	**0.59 J**	**0.71 J**	< 1.0 U	**0.24 J**	**0.31 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	< 1.0 U	**0.039 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.036 J**	< 1.0 U	< 1.0 U	**0.039 J**
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	**0.034 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**	**0.15 J**	**0.084 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.14 J**	**0.12 J**	**0.11 J**	**0.22 J**	**0.21 J**	**0.21 J**	**0.20 J**	**0.28 J**	**0.24 J**	**0.26 J**	**0.26 J**	**0.068 J**	**0.065 J**	**0.066 J**	**3.7**
Vanadium	SW6020	ug/L	NE	8.6		**0.53 J**	**0.40 J**	**0.54 J**	**0.22 J**	**0.24 J**	**0.19 J**	**0.19 J**	**0.39 J**	**0.39 J**	**0.43 J**	**0.49 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89	D-89
				Sample Depth (ft BGS)	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48	33-48
				Sample Date	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021
				Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**816**	**595**	**664**	**864**	< 200 U	< 200 U	< 200 U	< 200 U	**46.8 J**	< 200 U
Barium	SW6010B	ug/L	2,000	380	**357**	**348**	**971**	**937**	**730**	**1,620**	**1,620**	**1,600**	**1,600**	**1,300**	**1,410**	**1,420**	**1,420**	**1,900**	**1,930**
Boron	SW6010B	ug/L	NE	400	**126**	**124**	**394**	**317**	**174**	**180**	**185**	**188**	**188**	**1,020**	**1,110**	**1,060**	**1,060**	**2,240**	**2,270**
Calcium	SW6010B	ug/L	NE	NE	**174,000**	**165,000**	**67,000**	**69,600**	**66,100**	**224,000**	**230,000**	**221,000**	**225,000**	**189,000**	**187,000**	**193,000**	**191,000**	**481,000**	**484,000**
Cobalt	SW6010B	ug/L	NE	0.6	**7.1**	**6.1**	< 5.0 U	< 5.0 U	< 5.0 U	**2.8 J**	**2.6 J**	**3.6 J**	**3.0 J**	**2.0 J**	**1.5 J**	**2.5 J**	**2.1 J**	**19.7**	**20.0**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**607,000**	**565,000**	**259,000**	**284,000**	**287,000**	**791,000**	**804,000**	**775,000**	**793,000**	**688,000**	**685,000**	**688,000**	**680,000**	**1,950,000**	**1,970,000**
Iron	SW6010B	ug/L	NE	1,400	**16,200**	**15,500**	**10,300**	**10,300**	**8,820**	**43,900**	**41,600**	**41,600**	**43,200**	**23,000**	**24,800**	**24,000**	**23,900**	**72,300**	**74,000**
Lithium	SW6010B	ug/L	NE	4	**23.7**	**22.3**	**19.8 J**	**21.2**	**16.2 J**	**24.6**	**32.2**	**26.6**	**26.6**	**28.6**	**30.4**	**31.3**	**32.7**	**47.0**	**47.5**
Magnesium	SW6010B	ug/L	NE	NE	**42,000**	**37,300**	**22,300**	**26,800**	**29,600**	**56,100**	**55,900**	**54,200**	**56,000**	**52,400**	**53,000**	**49,900**	**49,500**	**182,000**	**184,000**
Manganese	SW6010B	ug/L	NE	43	**1,420**	**1,150**	**251**	**278**	**264**	**729**	**729**	**680**	**707**	**322**	**328**	**329**	**328**	**2,560**	**2,610**
Molybdenum	SW6010B	ug/L	NE	10	**2.6 J**	**2.8 J**	**0.74 J**	**1.3 J**	**0.58 J**	**1.2 J**	**1.5 J**	**3.2 J**	**1.4 J**	**0.82 J**	**0.63 J**	< 10.0 U	< 10.0 U	**3.6 J**	**3.5 J**
Nickel	SW6010B	ug/L	NE	39	**13.6**	**11.0**	< 10.0 U	< 10.0 U	< 10.0 U	**7.1 J**	**6.8 J**	**8.3 J**	**7.6 J**	**4.9 J**	**5.0 J**	< 10.0 U	< 10.0 U	**136**	**138**
Potassium	SW6010B	ug/L	NE	NE	**4,000**	**3,690**	**32,600**	**32,100**	**28,800**	**7,640**	**7,810**	**7,670**	**7,770**	**17,300**	**18,400**	**18,400**	**18,400**	**29,600**	**30,000**
Silicon	SW6010B	ug/L	NE	NE	**12,900**	**13,200**	**15,300**	**14,900**	**12,900**	**19,200**	**21,300**	**22,000**	**22,800**	**17,500**	**17,200**	**15,300**	**15,300**	**19,700**	**20,600**
Sodium	SW6010B	ug/L	NE	20,000	**10,400**	**9,630**	**51,800**	**47,900**	**42,600**	**176,000**	**180,000**	**183,000**	**185,000**	**158,000**	**169,000**	**174,000**	**174,000**	**434,000**	**436,000**
Strontium	SW6010B	ug/L	NE	1,200	**565**	**538**	**402**	**427**	**391**	**570**	**613**	**592**	**594**	**560**	**575**	**561**	**565**	**2,060**	**2,090**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.3 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**22.7**	**16.4**	**16.0**	**22.8**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**5.4 J**	**5.6 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	**11.1 J**	< 20.0 U	< 20.0 U	**29.2**	**15.9 J**	**15.4 J**	**16.6 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**7.9 J**
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	**0.081 J**	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.43 J**	**0.43 J**
Arsenic	SW6020	ug/L	10	0.052	**9.2**	**8.5**	**0.76 J**	**0.52 J**	**0.24 J**	**32.1**	**30.8**	**30.5**	**29.9**	**1.5**	**1.8**	**1.6**	**1.6**	**45.3**	**46.5**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.049 J**	**0.033 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	**0.24 J**	< 2.0 U	< 2.0 U	**0.85 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**9.3**	**9.4**
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0420 J**	**0.0594 J**
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**9.3 J**	**9.3 J**
Copper	SW6020	ug/L	1,300	80	**0.36 J**	**0.30 J**	< 1.0 U	**0.25 J**	**0.32 J**	**2.0**	**1.2 J+**	**1.4**	**1.6**	< 1.0 UJ	**0.40 J**	**0.35 J**	**0.37 J**	< 1.0 U	**1.6 J+**
Lead	SW6020	ug/L	15	15	< 1.0 U	**0.036 J**	**0.062 J**	< 1.0 U	< 1.0 U	**2.7**	**1.3**	**1.1**	**1.6**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.46 J**	**0.54 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	**0.56 J**	**0.51 J**	**0.35 J**	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**3.2**	**2.9**	**0.021 J**	**0.025 J**	**0.028 J**	**0.22 J**	**0.20 J**	**0.16 J**	**0.19 J**	**0.21 J**	**0.20 J**	**0.21 J**	**0.21 J**	**0.13 J**	**0.14 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	**0.28 J**	**0.20 J**	**0.17 J**	**1.6**	**1.3**	**1.1**	**1.4**	**0.25 J**	**0.29 J**	**0.31 J**	**0.35 J**	**6.1**	**6.3**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	**2.4 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 10 U	< 10 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11	I-11
				Sample Depth (ft BGS)	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5	80.5-90.5
				Sample Date	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021	08-12-2021
				Sample Type	N	FD	N	N	FD	N	FD	N	N	N	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**2,060**	**2,100**	**2,060**	**1,710**	**1,680**	**1,770**	**1,800**	**1,950**	**2,170**	**2,140**	**2,020**	**2,030**	**886**	**920**	**961**
Boron	SW6010B	ug/L	NE	400	**2,470**	**2,500**	**2,380**	**1,430**	**1,410**	**1,450**	**1,460**	**1,450**	**2,020**	**2,200**	**2,040**	**2,060**	**879**	**925**	**864**
Calcium	SW6010B	ug/L	NE	NE	**443,000**	**463,000**	**424,000**	**256,000**	**259,000**	**254,000**	**249,000**	**259,000**	**275,000**	**269,000**	**285,000**	**288,000**	**156,000**	**164,000**	**172,000**
Cobalt	SW6010B	ug/L	NE	0.6	**20.1**	**20.5**	**21.4**	**3.0 J**	**2.7 J**	**3.0 J**	**3.7 J**	**3.5 J**	**2.2 J**	**2.9 J**	**2.9 J**	**2.7 J**	**1.5 J**	**1.9 J**	**1.7 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**1,810,000**	**1,860,000**	**1,730,000**	**897,000**	**902,000**	**903,000**	**895,000**	**915,000**	**1,000,000**	**1,010,000**	**1,040,000**	**1,050,000**	**614,000**	**640,000**	**652,000**
Iron	SW6010B	ug/L	NE	1,400	**76,000**	**76,400**	**81,600**	**17,900**	**17,600**	**18,100**	**18,300**	**17,800**	**42,400**	**44,900**	**42,300**	**42,600**	**15,400**	**16,600**	**17,100**
Lithium	SW6010B	ug/L	NE	4	**56.7**	**63.0**	**47.8**	**41.3**	**41.1**	**48.5**	**44.9**	**42.7**	**50.4**	**54.8**	**49.2**	**49.4**	**29.8**	**30.5**	**33.9**
Magnesium	SW6010B	ug/L	NE	NE	**170,000**	**171,000**	**163,000**	**62,800**	**61,800**	**65,400**	**66,500**	**65,000**	**76,800**	**81,000**	**79,800**	**80,000**	**54,400**	**55,900**	**53,900**
Manganese	SW6010B	ug/L	NE	43	**2,710**	**2,720**	**2,580**	**426**	**419**	**406**	**411**	**381**	**456**	**459**	**438**	**444**	**485**	**544**	**543**
Molybdenum	SW6010B	ug/L	NE	10	**4.1 J**	**4.3 J**	**3.8 J**	< 10.0 U	< 10.0 U	**0.52 J**	< 10.0 U	**0.55 J**	**2.4 J**	**2.1 J**	**2.7 J**	**2.7 J**	**1.7 J**	**1.9 J**	**2.1 J**
Nickel	SW6010B	ug/L	NE	39	**162**	**166**	**166**	**9.9 J**	**9.7 J**	**10 J**	**10.1**	**9.8 J**	**11.7**	**12.9**	**11.5**	**12.1**	< 10.0 U	**8.1 J**	**6.9 J**
Potassium	SW6010B	ug/L	NE	NE	**33,400**	**34,300**	**35,700**	**15,500**	**15,300**	**15,000**	**15,100**	**15,300**	**27,200**	**26,900**	**25,400**	**25,800**	**15,100**	**15,400**	**15,100**
Silicon	SW6010B	ug/L	NE	NE	**27,900**	**27,600**	**2,140**	**15,700**	**15,300**	**15,600**	**15,800**	**15,300**	**19,700**	**20,100**	**17,800**	**17,600**	**13,100**	**13,400**	**12,800**
Sodium	SW6010B	ug/L	NE	20,000	**444,000**	**472,000**	**447,000**	**221,000**	**222,000**	**217,000**	**215,000**	**236,000**	**228,000**	**226,000**	**233,000**	**235,000**	**99,800**	**106,000**	**108,000**
Strontium	SW6010B	ug/L	NE	1,200	**2,140**	**2,180**	**2,050**	**910**	**892**	**876**	**889**	**887**	**1,100**	**1,110**	**1,080**	**1,100**	**1,020**	**1,090**	**1,140**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**7.9 J**	**8.1 J**	**7.9 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	**0.45 J**	**0.43 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.25 J**	**0.23 J**	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**	**0.064 J**
Arsenic	SW6020	ug/L	10	0.052	**56.3**	**54.8**	**56.3**	**0.73 J**	**0.77 J**	**0.56 J**	**0.54 J**	**0.58 J**	**27.1**	**33.3**	**29.8**	**29.8**	**10.6**	**10.6**	**12.3**
Beryllium	SW6020	ug/L	4	2.5	**0.028 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**10.4**	**10.5**	**11.4**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.43 J**	**0.52 J**	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	**10**	**10**	**11**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	< 1.0 U	**1.4**	**0.60 J**	**0.56 J**	**0.50 J**	**0.52 J**	**0.40 J**	**0.66 J**	**0.56 J**	**0.43 J**	**0.43 J**	< 1.0 U	**0.37 J**	**0.35 J**
Lead	SW6020	ug/L	15	15	**0.10 J**	**0.090 J**	< 1.0 U	**0.034 J**	**0.034 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.56 J**	**0.70 J**	**0.82 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.11 J**	**0.11 J**	**0.10 J**	**0.30 J**	**0.31 J**	**0.28 J**	**0.26 J**	**0.24 J**	**0.15 J**	**0.15 J**	**0.19 J**	**0.19 J**	**1.1**	**1.1**	**1.1**
Vanadium	SW6020	ug/L	NE	8.6	**7.6**	**7.5**	**8.0**	**0.28 J**	**0.30 J**	**0.35 J**	**0.38 J**	**0.27 J**	**0.44 J**	**0.40 J**	**0.33 J**	**0.38 J**	**0.24 J**	**0.22 J**	**0.19 J**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.8 J**	**1.8 J**	**2.1 J**	**2.1 J**	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
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				Sample Location	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68	I-68
				Sample Depth (ft BGS)	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2
				Sample Date	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**304**	**707**	**173 J**	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**333**	**390**	**351**	**288**	**292**	**268**	**160**	**151**	**151**	**302**	**299**	**325**	**303**	**313**	**355**
Boron	SW6010B	ug/L	NE	400	**114 J+**	**112**	**104**	**147**	**132**	**137**	**449**	**424**	**443**	**226**	**208**	**208**	**60.6 J**	**51.8 J**	**54.9 J**
Calcium	SW6010B	ug/L	NE	NE	**96,400**	**110,000**	**99,000**	**158,000**	**162,000**	**155,000**	**186,000**	**176,000**	**175,000**	**206,000**	**207,000**	**222,000**	**229,000**	**238,000**	**268,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	**1.6 J**	**1.5 J**	**1.4 J**	**3.6 J**	**3.0 J**	**4.1 J**	< 5.0 U	< 5.0 U	**0.64 J**	**8.8**	**7.5**	**7.5**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**316,000**	**361,000**	**326,000**	**467,000**	**486,000**	**460,000**	**528,000**	**501,000**	**498,000**	**657,000**	**663,000**	**706,000**	**742,000**	**791,000**	**884,000**
Iron	SW6010B	ug/L	NE	1,400	**7,260**	**8,140**	**6,300**	< 50.0 U	< 50.0 U	< 50.0 U	**805**	**724**	**1,010**	**11,000**	**11,600**	**12,800**	< 50.0 U	**57.4**	< 50.0 U
Lithium	SW6010B	ug/L	NE	4	**17.5 J**	**20.5**	**16.4 J**	**16.2 J**	**13.7 J**	**16.9 J**	**29.8**	**30.1**	**29.6**	**25.6**	**26.7**	**26.2**	**18.0 J**	**17.1 J**	**17.4 J**
Magnesium	SW6010B	ug/L	NE	NE	**18,300**	**21,200**	**19,100**	**17,800**	**19,900**	**17,700**	**15,700**	**15,200**	**14,600**	**34,400**	**35,500**	**36,500**	**41,400**	**47,900**	**52,200**
Manganese	SW6010B	ug/L	NE	43	**548**	**611**	**456**	**183**	**87.3**	**194**	**1,760**	**1,860**	**2,160**	**1,530**	**1,580**	**1,520**	**2,690**	**1,900**	**2,170**
Molybdenum	SW6010B	ug/L	NE	10	**4.1 J**	**3.6 J**	**3.4 J**	**3.5 J**	**3.7 J**	**3.7 J**	**3.6 J**	**3.4 J**	**2.8 J**	**2.7 J**	**2.9 J**	**1.7 J**	**1.2 J**	**1.3 J**	**1.1 J**
Nickel	SW6010B	ug/L	NE	39	< 10.0 U	< 10.0 U	**1.7 J**	< 10.0 U	**5.7 J**	**6.5 J**	< 10.0 U	**7.8 J**	**8.1 J**	< 10.0 U	**1.7 J**	**1.4 J**	**20.1**	**15.1**	**18.8**
Potassium	SW6010B	ug/L	NE	NE	**7,400**	**8,160**	**7,780**	**9,130**	**9,090**	**8,910**	**6,220**	**5,730**	**5,810**	**6,970**	**6,680**	**6,870**	**3,870**	**3,530**	**3,680**
Silicon	SW6010B	ug/L	NE	NE	**13,700**	**14,600**	**13,000**	**8,610**	**8,150**	**7,720**	**11,600**	**11,100**	**10,300**	**15,400**	**15,700**	**14,400**	**12,000**	**12,100**	**11,400**
Sodium	SW6010B	ug/L	NE	20,000	**26,800**	**29,600**	**26,400**	**97,000**	**84,600**	**116,000**	**103,000**	**104,000**	**103,000**	**65,600**	**60,200**	**59,500**	**90,700**	**93,600**	**99,600**
Strontium	SW6010B	ug/L	NE	1,200	**354**	**408**	**381**	**642**	**643**	**587**	**908**	**813**	**749**	**776**	**759**	**735**	**610**	**617**	**670**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**6.2 J**	**14.3**	**3.3 J**	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.4 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	**0.12 J**	< 1.0 U	**0.14 J**	**0.13 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	**0.33 J**	**0.36 J**
Arsenic	SW6020	ug/L	10	0.052	**12.6**	**11.2**	**10.6**	**0.97 J**	**0.84 J**	**0.76 J**	**1.8**	**1.5**	**2.1**	**2.2**	**1.9**	**2.9**	**0.76 J**	**0.76 J**	**0.85 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.022 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	**0.16 J**	**0.099 J**	**0.15 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.78**	**0.66**	**0.83**
Chromium	SW6020	ug/L	100	NE	**0.17 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0671 J**	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.29 J**	**0.36 J**	< 1.0 U	**0.79 J**	**0.51 J**	< 1.0 U	**0.44 J**	**0.28 J**	**1.1**	**1.9**	**0.67 J**	< 1.0 U	**0.79 J**	**0.69 J**
Lead	SW6020	ug/L	15	15	**0.11 J**	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.040 J**	< 1.0 U	< 1.0 U	**0.036 J**	< 1.0 U	**0.79 J**	**0.22 J**	< 1.0 U	**0.12 J**	**0.071 J**
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**1.3**	**2.1**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	**0.039 J**	**0.034 J**	**0.038 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.28 J**	**0.32 J**	**0.27 J**	**1.9**	**2.1**	**2.2**	**4.5**	**4.7**	**4.1**	**1.9**	**1.9**	**1.7**	**2.7**	**3.0**	**3.0**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	**1.7**	**0.73 J**	**1.6**	**1.6**	**1.7**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1
					Sample Depth (ft BGS)	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-	-	-	-	39-49
					Sample Date	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021
					Sample Type	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	**50.6 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**564**	**69.6 J**	**53.5 J**	**57.3 J**	**176 J**
Barium	SW6010B	ug/L	2,000	380		**3,630**	**3,640**	**3,730**	**3,720**	**3,580**	**434**	**444**	**418**	**217**	**204**	**512**	**586**	**154**	**150**	**471**
Boron	SW6010B	ug/L	NE	400		**1,980**	**1,990**	**1,820**	**1,850**	**1,660**	**1,590**	**1,630**	**1,520**	**246**	**248**	**174**	**559**	**122**	**109**	**190**
Calcium	SW6010B	ug/L	NE	NE		**54,600**	**54,600**	**52,500**	**52,100**	**51,200**	**129,000**	**130,000**	**127,000**	**93,800**	**94,300**	**82,500**	**127,000**	**80,200**	**81,800**	**181,000**
Cobalt	SW6010B	ug/L	NE	0.6		**25.9**	**26.4**	**33.3**	**33.4**	**35.3**	**1.1 J**	**1.8 J**	**1.3 J**	**0.68 J**	< 5.0 U	**0.68 J**	**1.0 J**	**0.49 J**	< 5.0 U	**4.7 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**389,000**	**388,000**	**435,000**	**432,000**	**501,000**	**559,000**	**581,000**	**551,000**	**365,000**	**361,000**	**368,000**	**578,000**	**402,000**	**406,000**	**660,000**
Iron	SW6010B	ug/L	NE	1,400		**55,700**	**55,300**	**62,400**	**62,000**	**64,800**	**18,700**	**20,000**	**20,000**	< 50.0 U	**93.5**	**2,640**	**4,800**	**706**	**870**	**16,200**
Lithium	SW6010B	ug/L	NE	4		**158**	**163**	**155**	**154**	**137**	**18.1 J**	**24.2**	**13.4 J**	**41.4**	**38.6**	**29.3 J+**	**33.4**	**29.4 J+**	**30.6**	**38.6**
Magnesium	SW6010B	ug/L	NE	NE		**61,300**	**61,200**	**73,900**	**73,200**	**90,600**	**57,200**	**62,200**	**57,000**	**31,700**	**30,400**	**39,400**	**63,400**	**48,900**	**48,900**	**50,300**
Manganese	SW6010B	ug/L	NE	43		**263**	**262**	**289**	**287**	**280**	**198**	**206**	**208**	**602**	**568**	**399**	**477**	**112**	**86.6**	**2,240**
Molybdenum	SW6010B	ug/L	NE	10		**6.7 J**	**6.9 J**	**6.7 J**	**6.7 J**	**5.2 J**	< 10.0 U	**0.56 J**	< 10.0 U	**6.4 J**	**7.1 J**	**11.8**	**11.8**	**61.1**	**38.5**	**7.3 J**
Nickel	SW6010B	ug/L	NE	39		**499**	**499**	**558**	**558**	**539**	**15.4**	**16.2**	**14.4**	**4.7 J**	**2.7 J**	**4.0 J**	**17.1**	**4.7 J**	< 10.0 U	**7.3 J**
Potassium	SW6010B	ug/L	NE	NE		**231,000**	**231,000**	**245,000**	**251,000**	**221,000**	**64,700**	**66,300**	**58,900**	**3,260**	**3,450**	**3,910**	**8,300**	**3,010**	**2,610**	**7,140**
Silicon	SW6010B	ug/L	NE	NE		**27,000**	**27,200**	**5,180**	**5,300**	**30,600**	**10,900**	**10,900**	**9,470**	**7,320**	**6,710**	**11,300**	**13,000**	**6,240**	**5,830**	**14,300**
Sodium	SW6010B	ug/L	NE	20,000		**219,000**	**221,000**	**211,000**	**217,000**	**172,000**	**130,000**	**146,000**	**120,000**	**14,700**	**17,400**	**108,000**	**234,000**	**25,900**	**23,300**	**116,000**
Strontium	SW6010B	ug/L	NE	1,200		**1,370**	**1,380**	**1,460**	**1,450**	**1,530**	**541**	**543**	**511**	**486**	**494**	**1,100**	**1,420**	**2,680**	**2,820**	**1,920**
Tin	SW6010B	ug/L	NE	1,200		**22.1**	**20.4**	**9.0 J**	**9.2 J**	**11.7**	**3.0 J**	**3.0 J**	**3.2 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		**9.5 J**	**10.2**	**9.8 J**	**9.9 J**	**7.6 J**	< 10.0 U	**1.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	**4.0 J**	**0.82 J**	**1.2 J**	< 10.0 U	**1.3 J**
Zinc	SW6010B	ug/L	NE	600		**231**	**216**	**130**	**128**	**141**	< 20.0 U	**25.4**	**7.6 J**	< 20.0 U	< 20.0 U	**11.2 J**	< 20.0 U	**39.8**	**31.7**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.34 J**	**0.32 J**	**0.32 J**	**0.32 J**	< 1.0 U	**0.16 J**	**0.21 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	**0.20 J**	**0.41 J**	**0.25 J**	**0.55 J**
Arsenic	SW6020	ug/L	10	0.052		**282**	**286**	**306**	**308**	**334**	**1.5**	**1.6**	**1.4**	**0.49 J**	**0.59 J**	**3.9**	**4.3**	**3.0**	**1.5**	**4.1**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 UJ	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.052 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		**0.29**	**0.24**	**0.12 J**	**0.12 J**	**0.13 J**	**0.035 J**	**0.045 J**	**0.033 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		**18.7**	**18.6**	**19.0**	**19.4**	**19.3**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**3.1**	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		**1.65**	**1.09 J**	**0.351 J**	**1.29 J**	**0.725**	**0.0456 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.137**	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		**17**	**18**	**19**	**18**	**19**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.95 J**	**0.94 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.61 J**	**1.7**	**0.72 J**	**0.43 J**	**0.29 J**	**0.51 J**	**0.52 J**	**0.36 J**	**0.46 J**	**0.73 J**
Lead	SW6020	ug/L	15	15		**7.8**	**7.2**	**5.1**	**5.4**	**4.7**	**1.1**	**1.5**	**0.86 J**	< 1.0 U	< 1.0 U	**0.38 J**	**0.17 J**	**0.057 J**	**0.068 J**	**3.2**
Selenium	SW6020	ug/L	50	10		**0.57 J**	**0.43 J**	**0.56 J**	**0.49 J**	**1.1**	< 1.0 U	< 1.0 U	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	**0.62 J**	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.032 J**	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**5.9**	**5.2**	**1.9**	**1.4**	**3.9**	**2.2**	**2.6**
Vanadium	SW6020	ug/L	NE	8.6		**15.8**	**15.7**	**15.7**	**15.9**	**14.1**	**0.61 J**	**0.59 J**	**0.56 J**	**0.91 J**	**0.59 J**	**0.89 J**	**3.1**	**0.42 J**	**0.21 J**	**0.65 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		**2.6 J**	**2.6 J**	< 10 U	< 10 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.4 J**	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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				Sample Location	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204
				Sample Depth (ft BGS)	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5
				Sample Date	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	**345**	< 200 U	**80.3 J**	< 200 U	< 200 U	< 200 U	< 200 U	**81.2 J**	**164 J**	< 200 U	< 200 U	< 200 U	< 200 U	**48.0 J**
Barium	SW6010B	ug/L	2,000	380	**763**	**955**	**963**	**836**	**1,540**	**1,580**	**1,920**	**2,640**	**220**	**1,300**	**1,240**	**999**	**982**	**1,170**	**8,050**
Boron	SW6010B	ug/L	NE	400	**360**	**407**	**526**	**758**	**1,280**	**537**	**1,000**	**2,020**	**98.3 J**	**260**	**250**	**446**	**436**	**447**	**1,040**
Calcium	SW6010B	ug/L	NE	NE	**188,000**	**223,000**	**224,000**	**143,000**	**198,000**	**187,000**	**210,000**	**212,000**	**86,000**	**190,000**	**209,000**	**246,000**	**243,000**	**280,000**	**232,000**
Cobalt	SW6010B	ug/L	NE	0.6	**2.5 J**	**1.1 J**	**2.3 J**	**2.5 J**	**6.2**	**1.2 J**	**1.7 J**	**4.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	**1.0 J**	**0.84 J**	**0.94 J**	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**680,000**	**809,000**	**807,000**	**544,000**	**783,000**	**686,000**	**763,000**	**780,000**	**381,000**	**752,000**	**799,000**	**861,000**	**852,000**	**986,000**	**947,000**
Iron	SW6010B	ug/L	NE	1,400	**23,900**	**33,400**	**32,800**	**15,900**	**22,700**	**34,300**	**43,700**	**46,800**	**5,290**	**65,100**	**64,000**	**30,500**	**30,200**	**26,400**	**10,800**
Lithium	SW6010B	ug/L	NE	4	**36.2**	**44.5**	**41.5**	**45.8**	**47.2**	**35.2**	**42.6**	**42.5**	**27.1**	**25.8**	**19.8 J**	**41.5**	**37.0**	**28.3**	**50.7**
Magnesium	SW6010B	ug/L	NE	NE	**51,100**	**60,900**	**60,300**	**45,300**	**69,800**	**53,100**	**58,000**	**60,600**	**40,400**	**67,500**	**67,600**	**60,000**	**59,600**	**69,700**	**89,100**
Manganese	SW6010B	ug/L	NE	43	**1,360**	**1,730**	**1,370**	**814**	**442**	**684**	**567**	**338**	**87.1**	**1,290**	**1,350**	**1,360**	**1,350**	**1,780**	**365**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**5.2 J**	< 10.0 U	**6.2 J**	< 10.0 U	**0.71 J**	**0.97 J**	**2.3 J**	**1.4 J**	**9.9 J**	**8.7 J**	**7.9 J**	**8.4 J**	**1.7 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	< 10.0 U	**6.6 J**	**10.2**	**14.0**	**25.5**	**7.7 J**	**9.0 J**	**19.4**	**1.5 J**	**2.4 J**	**1.6 J**	**6.4 J**	**6.6 J**	< 10.0 U	**8.6 J**
Potassium	SW6010B	ug/L	NE	NE	**7,580**	**8,670**	**8,730**	**12,900**	**16,200**	**19,600**	**21,700**	**35,300**	**3,750**	**12,900**	**11,600**	**7,980**	**7,840**	**7,940**	**29,200**
Silicon	SW6010B	ug/L	NE	NE	**13,700**	**15,000**	**14,100**	**10,800**	**15,100**	**15,700**	**19,200**	**18,500**	**6,530**	**22,700**	**19,300**	**16,800**	**16,500**	**18,700**	**10,400**
Sodium	SW6010B	ug/L	NE	20,000	**139,000**	**108,000**	**151,000**	**293,000**	**428,000**	**110,000**	**184,000**	**369,000**	**43,000**	**91,400**	**92,500**	**104,000**	**104,000**	**65,000**	**253,000**
Strontium	SW6010B	ug/L	NE	1,200	**2,530**	**1,870**	**2,540**	**2,690**	**4,870**	**850**	**867**	**1,010**	**1,560**	**962**	**939**	**733**	**724**	**816**	**2,560**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	**4.6 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.1 J**	< 10.0 U	**4.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	**25.5**	**18.8 J**	< 20.0 U	< 20.0 U	**13.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**11.0 J**
Antimony	SW6020	ug/L	6	0.78	**0.18 J**	**0.26 J**	< 1.0 U	**1.1**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**
Arsenic	SW6020	ug/L	10	0.052	**5.8**	**4.2**	**4.9**	**3.3**	**3.4**	**1.4**	**2.4**	**2.6**	**1.9**	**180**	**241**	**4.6**	**4.5**	**12.0**	**2.9**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	**0.024 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.075 J**
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**7.9**
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.527**
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**7.4 J**
Copper	SW6020	ug/L	1,300	80	**1.1 J+**	**0.90 J**	< 1.0 U	**0.65 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.34 J**	**0.35 J**	**0.44 J**	**0.42 J**	**0.77 J**	**1.4**
Lead	SW6020	ug/L	15	15	**2.7**	**1.4**	**1.5**	**0.24 J**	**0.15 J**	**0.64 J**	**0.34 J**	**0.41 J**	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.040 J**
Selenium	SW6020	ug/L	50	10	**0.32 J**	< 1.0 U	< 1.0 U	**0.42 J**	**0.26 J**	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U	**0.38 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	**0.42 J**	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**1.2**	**0.88 J**	**0.58 J**	**1.1**	**0.53 J**	**0.30 J**	**0.098 J**	**0.062 J**	**0.069 J**	**0.097 J**	**0.062 J**	**1.6**	**1.6**	**2.1**	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	**0.95 J**	**1.2**	**1.4**	**1.5**	**1.9**	**1.5**	**1.9**	**2.5**	< 1.0 U	**1.3**	**0.81 J**	**0.93 J**	**0.95 J**	**1.2**	**3.3**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1
Sample Location					MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1
Sample Depth (ft BGS)					213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116
Sample Date					03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021
Sample Type					FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	**1,930**	**378**	< 200 U	< 200 U	**52.9 J**	< 200 U	**87.4 J**	< 200 U	**152 J**	< 200 U	**51.0 J**
Barium	SW6010B	ug/L	2,000	380	**7,920**	**7,380**	**7,750**	**7,940**	**76.4**	**85.6**	**499**	**545**	**1,970**	**1,890**	**1,230**	**1,020**	**2,870**	**2,390**	**1,990**
Boron	SW6010B	ug/L	NE	400	**1,020**	**1,050**	**1,110**	**1,090**	**122**	**136**	**91.5 J**	**82.8 J**	**1,450**	**1,220**	**352**	**326**	**982**	**983**	**694**
Calcium	SW6010B	ug/L	NE	NE	**224,000**	**242,000**	**226,000**	**222,000**	**107,000**	**99,200**	**171,000**	**149,000**	**428,000**	**411,000**	**216,000**	**217,000**	**382,000**	**388,000**	**337,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.57 J**	< 5.0 U	< 5.0 U	< 5.0 U	**4.3 J**	**3.8 J**	< 5.0 U	< 5.0 U	**2.9 J**	**3.1 J**	**2.2 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**924,000**	**973,000**	**950,000**	**934,000**	**449,000**	**418,000**	**594,000**	**528,000**	**1,620,000**	**1,530,000**	**825,000**	**808,000**	**1,440,000**	**1,410,000**	**1,210,000**
Iron	SW6010B	ug/L	NE	1,400	**10,700**	**11,600**	**12,100**	**12,500**	**7,640**	**4,400**	**20,200**	**15,300**	**105,000**	**91,400**	**42,100**	**43,900**	**60,600**	**49,000**	**31,900**
Lithium	SW6010B	ug/L	NE	4	**50.3**	**52.1**	**55.5**	**44.8**	**33.4**	**32.4**	**22.6**	**31.9**	**42.7**	**26.1**	**42.2**	**33.7**	**47.2**	**43.2**	**49.6**
Magnesium	SW6010B	ug/L	NE	NE	**88,400**	**89,500**	**93,800**	**92,500**	**44,200**	**41,500**	**40,500**	**37,800**	**134,000**	**124,000**	**69,700**	**64,400**	**117,000**	**106,000**	**89,700**
Manganese	SW6010B	ug/L	NE	43	**357**	**328**	**346**	**336**	**141**	**114**	**702**	**426**	**2,580**	**2,480**	**729**	**770**	**836**	**989**	**370**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**11.2**	**4.9 J**	**1.4 J**	**1.6 J**	**1.7 J**	**0.85 J**	**3.2 J**	**3.0 J**	**0.89 J**	< 10.0 U	**1.4 J**
Nickel	SW6010B	ug/L	NE	39	**8.3 J**	**10.0**	**9.5 J**	**9.5 J**	**3.2 J**	**2.3 J**	< 10.0 U	**1.3 J**	**83.3**	**91.2**	**8.6 J**	**8.4 J**	**79.5**	**73.7**	**35.1**
Potassium	SW6010B	ug/L	NE	NE	**28,800**	**28,700**	**30,200**	**30,000**	**3,090**	**4,440**	**5,870**	**5,940**	**12,000**	**10,900**	**11,300**	**6,830**	**18,200**	**13,600**	**12,900**
Silicon	SW6010B	ug/L	NE	NE	**9,780**	**9,690**	**10,500**	**9,190**	**12,600**	**10,300**	**13,900**	**13,200**	**13,000**	**3,240**	**18,000**	**17,100**	**21,000**	**18,000**	**19,800**
Sodium	SW6010B	ug/L	NE	20,000	**247,000**	**287,000**	**262,000**	**258,000**	**85,300**	**89,700**	**16,500**	**27,400**	**412,000**	**376,000**	**63,100**	**51,500**	**309,000**	**281,000**	**185,000**
Strontium	SW6010B	ug/L	NE	1,200	**2,510**	**2,420**	**2,540**	**2,450**	**788**	**692**	**350**	**391**	**2,000**	**1,800**	**814**	**768**	**1,700**	**1,590**	**1,260**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**20.3**	**3.4 J**	< 10.0 U	< 10.0 U	**1.4 J**	< 10.0 U	**1.6 J**	< 10.0 U	**2.1 J**	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**7.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**5.9 J**	**9.0 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	**0.16 J**	< 1.0 U	**0.26 J**	< 1.0 U	**0.13 J**	**0.061 J**	**0.088 J**	**0.060 J**	**0.29 J**	< 1.0 U	**0.27 J**	**0.13 J**	**0.34 J**	**0.20 J**	**0.27 J**
Arsenic	SW6020	ug/L	10	0.052	**2.8**	**3.0**	**3.2**	**3.1**	**2.3**	**1.3**	**1.7**	**0.41 J**	**4.8**	**5.1**	**11.9**	**16.5**	**1.8**	**1.8**	**0.90 J**
Beryllium	SW6020	ug/L	4	2.5	**0.073 J**	**0.062 J**	**0.065 J**	**0.087 J**	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**7.7**	**8.4**	**9.1**	**9.0**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**4.7**	**4.3**	< 2.0 U	< 2.0 U	**3.0**	**2.4**	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	**0.401**	**0.541**	**0.751**	**0.356**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	**7.3 J**	**7.9 J**	**8.3 J**	**8.6 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	**1.4**	**0.99 J**	**1.0**	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.78 J**	**1.1**	**1.2**	**0.67 J**	**0.98 J**	**0.71 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	**0.036 J**	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**0.30 J**	**2.7**	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	**0.23 J**	**0.28 J**	**0.13 J**	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	**0.29 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	**0.61 J**	< 1.0 U	< 1.0 U	**0.34 J**	**0.68 J**	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	**0.024 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.5**	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**3.9**	**0.95 J**	**0.32 J**	**0.098 J**	**0.070 J**	**0.041 J**	**0.070 J**	**0.058 J**	**0.057 J**	**0.023 J**	**0.11 J**
Vanadium	SW6020	ug/L	NE	8.6	**3.3**	**3.3**	**3.2**	**3.6**	**1.4**	< 1.0 U	**0.21 J**	**0.15 J**	**7.9**	**5.8**	**0.59 J**	**0.35 J**	**2.1**	**1.7**	**1.1**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.5 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-304-P1	MW-304-P2	MW-304-P2	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3
					Sample Depth (ft BGS)	106-116	106-116	126-136	126-136	221-231	221-231	221-231	25-35	25-35	80-90	80-90	80-90	110-120	110-120	110-120
					Sample Date	05-24-2021	08-04-2021	05-24-2021	08-04-2021	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021
					Sample Type	FD	N	N	N	N	N	FD	N	N	N	N	FD	N	N	FD
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		**166 J**	**48.4 J**	**79.0 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**2,010**	**2,450**	**1,310**	**704**	**869**	**402**	**386**	**812**	**1,010**	**1,790**	**2,000**	**2,000**	**3,680**	**4,680**	**4,720**
Boron	SW6010B	ug/L	NE	400		**698**	**774**	**506**	**449**	**547**	**501**	**499**	**1,340**	**1,550**	**932**	**1,480**	**1,490**	**509**	**353**	**367**
Calcium	SW6010B	ug/L	NE	NE		**347,000**	**375,000**	**232,000**	**205,000**	**147,000**	**90,800**	**89,100**	**171,000**	**228,000**	**265,000**	**285,000**	**284,000**	**260,000**	**293,000**	**290,000**
Cobalt	SW6010B	ug/L	NE	0.6		**1.9 J**	**2.9 J**	**1.2 J**	**1.4 J**	**0.74 J**	**1.1 J**	**1.1 J**	**1.8 J**	**2.4 J**	**2.2 J**	**2.7 J**	**2.8 J**	**2.1 J**	**2.8 J**	**2.9 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**1,240,000**	**1,320,000**	**866,000**	**767,000**	**581,000**	**370,000**	**364,000**	**705,000**	**905,000**	**976,000**	**1,010,000**	**1,010,000**	**993,000**	**1,090,000**	**1,080,000**
Iron	SW6010B	ug/L	NE	1,400		**32,800**	**31,600**	**21,800**	**12,100**	**14,400**	**2,590**	**2,400**	**22,200**	**26,500**	**18,700**	**20,000**	**20,100**	**20,800**	**20,500**	**20,300**
Lithium	SW6010B	ug/L	NE	4		**49.7**	**53.0**	**45.2**	**41.4**	**112**	**84.2**	**80.9**	**119**	**56.2**	**67.0**	**46.1**	**44.6**	**66.1**	**54.2**	**56.6**
Magnesium	SW6010B	ug/L	NE	NE		**91,400**	**94,200**	**69,700**	**61,700**	**51,900**	**34,900**	**34,400**	**67,400**	**81,500**	**76,000**	**72,300**	**72,600**	**83,700**	**87,000**	**86,400**
Manganese	SW6010B	ug/L	NE	43		**382**	**366**	**278**	**275**	**182**	**137**	**128**	**1,440**	**1,430**	**433**	**270**	**265**	**171**	**132**	**129**
Molybdenum	SW6010B	ug/L	NE	10		**1.4 J**	< 10.0 U	**0.71 J**	< 10.0 U	**5.9 J**	**1.7 J**	**1.9 J**	**11.4**	**1.3 J**	**0.86 J**	**1.1 J**	**1.1 J**	**2.0 J**	**1.9 J**	**1.6 J**
Nickel	SW6010B	ug/L	NE	39		**35.6**	**41.4**	**20.5**	**15.5**	**18.6**	**10.3**	**10.4**	**12.4**	**19.7**	**10.3**	**9.4 J**	**9.1 J**	**10.6**	**11.0**	**10.2**
Potassium	SW6010B	ug/L	NE	NE		**13,100**	**14,200**	**9,450**	**8,060**	**10,800**	**9,130**	**9,000**	**35,300**	**43,800**	**16,600**	**12,300**	**12,400**	**12,100**	**10,500**	**10,500**
Silicon	SW6010B	ug/L	NE	NE		**20,100**	**18,700**	**15,400**	**11,900**	**9,820**	**9,420**	**9,200**	**14,100**	**15,700**	**17,900**	**17,300**	**17,200**	**17,200**	**17,700**	**17,600**
Sodium	SW6010B	ug/L	NE	20,000		**190,000**	**225,000**	**126,000**	**127,000**	**211,000**	**238,000**	**237,000**	**263,000**	**214,000**	**327,000**	**246,000**	**246,000**	**262,000**	**289,000**	**288,000**
Strontium	SW6010B	ug/L	NE	1,200		**1,280**	**1,360**	**1,190**	**1,180**	**3,820**	**4,430**	**4,350**	**1,050**	**1,240**	**1,100**	**928**	**928**	**1,100**	**1,170**	**1,180**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		**1.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.87 J**	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		**9.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**16.6 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.38 J**	**0.26 J**	< 1.0 U	**0.14 J**	**0.18 J**	**0.19 J**	**0.19 J**	**0.92 J**	**0.15 J**	**0.69 J**	**0.14 J**	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**1.1**	**0.97 J**	**0.54 J**	**0.46 J**	**0.45 J**	**0.71 J**	**0.62 J**	**7.2**	**8.7**	**2.8**	**2.2**	**2.2**	**1.1**	**1.5**	**1.5**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		**2.8**	**2.0 J+**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0631 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**1.2 J+**	**0.82 J**	< 1.0 U	**0.62 J**	< 1.0 U	**1.1**	**1.1**	**0.61 J**	< 1.0 U	**0.87 J**	**1.7**	< 1.0 U	**0.73 J**	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	15	15		**1.2**	**0.34 J**	< 1.0 U	**0.22 J**	< 1.0 U	**0.49 J**	**0.54 J**	**0.66 J**	**0.27 J**	**0.59 J**	**0.37 J**	**0.31 J**	**0.17 J**	**1.6**	**0.47 J**
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.24 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**
Uranium	SW6020	ug/L	30	0.4		**0.14 J**	**0.069 J**	**0.14 J**	**0.13 J**	**0.37 J**	**0.068 J**	**0.067 J**	**0.39 J**	**0.28 J**	**0.23 J**	**0.62 J**	**0.62 J**	**0.12 J**	**0.11 J**	**0.11 J**
Vanadium	SW6020	ug/L	NE	8.6		**1.4**	**1.2**	**0.96 J**	**0.76 J**	**0.40 J**	**0.27 J**	**0.25 J**	**1.8**	**2.2**	**1.6**	**1.4**	**1.3**	**1.6**	**1.8**	**2.0**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.8 J**	**2.1 J**	**1.9 J**

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2
					Sample Depth (ft BGS)	20-30	20-30	55-65	55-65	90-100	90-100	145-155	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72
					Sample Date	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	05-14-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	NA	< 200 U	**63.1 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**1,240**	**891**	**2,000**	**1,920**	**2,020**	**2,120**	**1,800**	NA	**512**	**1,030**	**216**	**529**	**393**	**375**	**411**
Boron	SW6010B	ug/L	NE	400		**630**	**400**	**865**	**837**	**901**	**908**	**774**	NA	**416**	**822**	**767**	**140**	**90.0 J**	**193**	**144**
Calcium	SW6010B	ug/L	NE	NE		**118,000**	**101,000**	**142,000**	**118,000**	**160,000**	**167,000**	**125,000**	NA	**62,500**	**106,000**	**50,500**	**77,800**	**94,500**	**82,100**	**104,000**
Cobalt	SW6010B	ug/L	NE	0.6		**1.0 J**	**0.93 J**	**1.1 J**	**1.5 J**	**1.6 J**	**1.6 J**	**0.74 J**	NA	< 5.0 U	**0.67 J**	**1.0 J**	**0.45 J**	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**465,000**	**402,000**	**534,000**	**454,000**	**591,000**	**613,000**	**488,000**	NA	**274,000**	**432,000**	**229,000**	**285,000**	**329,000**	**295,000**	**359,000**
Iron	SW6010B	ug/L	NE	1,400		**18,000**	**14,100**	**23,100**	**18,600**	**23,700**	**20,700**	**15,800**	NA	**3,460**	**12,400**	**2,340**	**3,310**	**7,460**	**11,100**	**7,810**
Lithium	SW6010B	ug/L	NE	4		**77.6**	**66.0**	**39.8**	**40.1**	**38.0**	**35.0**	**44.2**	NA	**39.8**	**67.5**	**94.0**	**31.4**	**21.0**	**21.0**	**23.4**
Magnesium	SW6010B	ug/L	NE	NE		**41,500**	**36,200**	**43,800**	**38,900**	**46,600**	**47,500**	**42,600**	NA	**28,600**	**40,400**	**24,900**	**21,900**	**22,700**	**21,800**	**23,800**
Manganese	SW6010B	ug/L	NE	43		**359**	**316**	**417**	**400**	**443**	**416**	**257**	NA	**142**	**179**	**93.7**	**347**	**653**	**400**	**351**
Molybdenum	SW6010B	ug/L	NE	10		**10.4**	**12.9**	< 10.0 U	< 10.0 U	**0.65 J**	**0.54 J**	**3.2 J**	NA	**1.9 J**	**6.4 J**	**1.6 J**	**9.6 J**	**5.3 J**	**2.4 J**	**1.4 J**
Nickel	SW6010B	ug/L	NE	39		**4.3 J**	**3.6 J**	**4.4 J**	**4.9 J**	**5.1 J**	**6.2 J**	**5.0 J**	NA	**2.0 J**	**4.5 J**	**3.4 J**	**2.2 J**	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE		**23,100**	**18,600**	**31,800**	**42,600**	**27,600**	**27,200**	**22,600**	NA	**11,900**	**20,900**	**11,600**	**23,700**	**13,800**	**7,900**	**5,750**
Silicon	SW6010B	ug/L	NE	NE		**12,100**	**12,100**	**14,000**	**13,000**	**14,300**	**12,900**	**11,300**	NA	**7,010**	**10,800**	**7,530**	**8,470**	**10,200**	**12,500**	**12,000**
Sodium	SW6010B	ug/L	NE	20,000		**96,600**	**78,400**	**103,000**	**117,000**	**97,500**	**107,000**	**109,000**	NA	**128,000**	**147,000**	**322,000**	**156,000**	**62,100**	**39,300**	**50,000**
Strontium	SW6010B	ug/L	NE	1,200		**739**	**710**	**740**	**779**	**742**	**768**	**1,300**	NA	**1,560**	**2,440**	**3,360**	**492**	**469**	**321**	**430**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	NA	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**18.3**	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	NA	< 10.0 U	**1.2 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		**42.0**	< 20.0 U	**17.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**1.2**	**0.10 J**	**0.36 J**	**0.075 J**	**0.34 J**	**0.064 J**	**0.22 J**	NA	**0.092 J**	**0.15 J**	**0.23 J**	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**3.0**	**2.4**	**0.30 J**	**0.26 J**	**0.68 J**	**0.63 J**	**1.3**	NA	**1.1**	**1.7**	**1.2**	**1.2**	**1.3**	< 1.0 U	**0.12 J**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	NA	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	NA	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	NA	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	NA	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.50 J**	**0.35 J**	**0.34 J**	**0.60 J**	**0.42 J**	**0.48 J**	**0.40 J**	NA	**0.32 J**	**0.73 J**	**0.52 J**	**0.26 J**	**0.22 J**	**0.20 J**	**0.24 J**
Lead	SW6020	ug/L	15	15		**0.20 J**	< 1.0 U	**0.64 J**	**0.20 J**	**0.18 J**	**0.29 J**	**0.54 J**	NA	< 1.0 U	**0.53 J**	**0.73 J**	**0.22 J**	**0.23 J**	**0.12 J**	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	**0.31 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	NA	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 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
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.20 J**	< 1.0 U	NA	< 1.0 U	< 1.0 U	**0.075 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.068 J**
Uranium	SW6020	ug/L	30	0.4		**0.68 J**	**0.13 J**	**0.022 J**	**0.016 J**	**0.036 J**	**0.031 J**	**0.30 J**	NA	**0.37 J**	**0.31 J**	**0.54 J**	**0.24 J**	**0.23 J**	**0.021 J**	**0.057 J**
Vanadium	SW6020	ug/L	NE	8.6		**0.85 J**	**0.57 J**	**0.35 J**	**0.38 J**	**0.85 J**	**0.99 J**	**1.1**	NA	**0.37 J**	**0.91 J**	**0.63 J**	**0.21 J**	< 1.0 U	< 1.0 U	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	NA	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1
					Sample Depth (ft BGS)	92-102	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100	53.6-63.6
					Sample Date	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021
					Sample Type	N	N	FD	N	N	N	N	N	N	FD	N	N	N	N
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**1,150**	**1,320**	**1,340**	**1,520**	**1,690**	**2,470**	**234**	**136**	**2,960**	**2,920**	**2,800**	**1,680**	**1,670**	**498**
Boron	SW6010B	ug/L	NE	400		**606**	**742**	**759**	**1,370**	**1,560**	**1,640**	**2,470**	**2,410**	**1,700**	**1,680**	**1,530**	**1,230**	**1,090**	**342**
Calcium	SW6010B	ug/L	NE	NE		**104,000**	**103,000**	**105,000**	**156,000**	**249,000**	**256,000**	**305,000**	**343,000**	**229,000**	**225,000**	**220,000**	**176,000**	**189,000**	**197,000**
Cobalt	SW6010B	ug/L	NE	0.6		**0.51 J**	**0.63 J**	**0.63 J**	**1.3 J**	**2.2 J**	**2.9 J**	**3.8 J**	**4.1 J**	**3.1 J**	**3.3 J**	**2.8 J**	**1.7 J**	**1.8 J**	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**393,000**	**376,000**	**384,000**	**687,000**	**883,000**	**939,000**	**1,170,000**	**1,260,000**	**844,000**	**828,000**	**792,000**	**643,000**	**683,000**	**738,000**
Iron	SW6010B	ug/L	NE	1,400		**20,000**	**16,500**	**16,900**	**25,000**	**25,000**	**17,200**	**29,200**	**20,300**	**19,800**	**19,400**	**17,300**	**13,600**	**13,600**	**35,800**
Lithium	SW6010B	ug/L	NE	4		**27.9**	**26.5**	**27.9**	**183**	**46.3**	**39.4**	**49.7**	**47.7**	**52.9**	**53.1**	**54.2**	**42.2**	**43.2**	**46.8**
Magnesium	SW6010B	ug/L	NE	NE		**32,200**	**29,100**	**29,700**	**72,100**	**63,600**	**72,900**	**98,200**	**98,000**	**66,000**	**65,000**	**58,700**	**49,300**	**51,400**	**59,600**
Manganese	SW6010B	ug/L	NE	43		**490**	**370**	**377**	**327**	**464**	**166**	**2,150**	**3,030**	**294**	**290**	**294**	**742**	**772**	**1,280**
Molybdenum	SW6010B	ug/L	NE	10		**0.97 J**	< 10.0 U	< 10.0 U	**3.3 J**	**1.1 J**	**1.4 J**	**2.7 J**	**2.1 J**	**1.3 J**	**1.3 J**	**1.5 J**	**0.84 J**	**0.76 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39		**3.0 J**	< 10.0 U	< 10.0 U	**5.9 J**	**9.0 J**	**9.6 J**	**12.4**	**10.9**	**11.1**	**10.2**	**10.2**	**7.9 J**	**7.7 J**	**2.2 J**
Potassium	SW6010B	ug/L	NE	NE		**30,000**	**32,100**	**32,800**	**20,400**	**16,100**	**13,000**	**22,700**	**13,900**	**25,700**	**25,200**	**24,400**	**33,500**	**33,100**	**14,600**
Silicon	SW6010B	ug/L	NE	NE		**14,800**	**15,100**	**15,400**	**15,500**	**20,600**	**17,700**	**16,000**	**14,100**	**17,600**	**17,200**	**15,200**	**14,900**	**13,200**	**15,000**
Sodium	SW6010B	ug/L	NE	20,000		**64,600**	**59,900**	**61,000**	**251,000**	**213,000**	**273,000**	**112,000**	**92,300**	**244,000**	**236,000**	**223,000**	**148,000**	**144,000**	**38,400**
Strontium	SW6010B	ug/L	NE	1,200		**562**	**528**	**538**	**1,960**	**904**	**958**	**1,660**	**1,810**	**893**	**883**	**827**	**706**	**740**	**1,240**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**4.0 J**	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		**11.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.37 J**	**0.14 J**	**0.20 J**	**0.19 J**	**0.10 J**	**0.31 J**	**0.081 J**	**0.099 J**
Arsenic	SW6020	ug/L	10	0.052		**0.58 J**	**2.8**	**2.9**	**2.0**	**1.3**	**1.1**	**3.7**	**6.8**	**1.2**	**1.2**	**0.91 J**	**1.1**	**0.69 J**	**0.73 J**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.043 J**	**0.049 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.66 J**	< 2.0 U	**1.1 J**	**0.88 J**	< 2.0 U	**0.82 J**	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.40 J**	**1.0**	**0.35 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.78 J**	**0.78 J**	**0.62 J**	**0.67 J**	**0.66 J**	**0.76 J**	**0.53 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		**0.25 J**	**0.46 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.69 J**	< 1.0 U	**0.46 J**	**0.43 J**	< 1.0 U	**1.2**	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.28 J**
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	**0.13 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.022 J**	**0.026 J**	**0.027 J**	**0.058 J**	**0.11 J**	**0.040 J**	**3.5**	**3.9**	**0.061 J**	**0.054 J**	**0.059 J**	**0.38 J**	**0.36 J**	**0.11 J**
Vanadium	SW6020	ug/L	NE	8.6		**0.32 J**	**0.35 J**	**0.35 J**	**0.50 J**	**0.74 J**	**0.59 J**	**0.95 J**	**0.70 J**	**1.3**	**1.5**	**1.2**	**1.2**	**0.83 J**	**0.25 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 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	**1.8 J**	**2.4 J**	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-407R-P2	MW-407R-P3	MW-408	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2	MW-505-P3	MW-505-P3
					Sample Depth (ft BGS)	73.6-83.6	103.6-113.6	109-119	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50	40-50	65-75	65-75
					Sample Date	08-12-2021	08-12-2021	03-15-2021	05-12-2021	05-26-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	**145 J**	**811**	**184 J**	NA	**74.0 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**119 J**	< 200 U
Barium	SW6010B	ug/L	2,000	380		**1,480**	**754**	**786**	**886**	NA	**1,040**	**125**	**114**	**137**	**105**	**126**	**110**	**143**	**107**	**167**
Boron	SW6010B	ug/L	NE	400		**1,280**	**717**	**637**	**665**	NA	**671**	**41.3 J**	**35.9 J**	**34.5 J**	**46.6 J**	**62.0 J**	**42.0 J**	**41.4 J**	**44.4 J**	**50.9 J**
Calcium	SW6010B	ug/L	NE	NE		**170,000**	**232,000**	**196,000**	**215,000**	NA	**211,000**	**131,000**	**150,000**	**151,000**	**46,200**	**56,400**	**56,100**	**69,600**	**58,600**	**96,800**
Cobalt	SW6010B	ug/L	NE	0.6		**2.6 J**	**1.8 J**	**1.9 J**	**1.5 J**	NA	**1.4 J**	< 5.0 U	**1.4 J**	**1.8 J**	**4.5 J**	**5.0**	**4.8 J**	**2.4 J**	**4.2 J**	**0.62 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**697,000**	**800,000**	**661,000**	**723,000**	NA	**709,000**	**414,000**	**465,000**	**466,000**	**163,000**	**196,000**	**193,000**	**234,000**	**200,000**	**324,000**
Iron	SW6010B	ug/L	NE	1,400		**20,700**	**20,000**	**15,100**	**15,400**	NA	**13,000**	**1,480**	**924**	**2,110**	**314**	**386**	**421**	**2,480**	**1,610**	**6,250**
Lithium	SW6010B	ug/L	NE	4		**49.2**	**38.9**	**35.1**	**31.7**	NA	**34.9**	**12.6 J**	**5.7 J**	**11.4 J**	< 20.0 U	**4.0 J**	< 20.0 U	**7.4 J**	< 20.0 UJ	**13.8 J**
Magnesium	SW6010B	ug/L	NE	NE		**66,200**	**53,300**	**41,300**	**45,400**	NA	**44,500**	**21,000**	**22,100**	**21,300**	**11,500**	**13,400**	**12,800**	**14,600**	**13,000**	**20,000**
Manganese	SW6010B	ug/L	NE	43		**403**	**1,200**	**776**	**774**	NA	**693**	**849**	**956**	**1,120**	**2,800**	**3,670**	**3,180**	**2,970**	**3,000**	**2,890**
Molybdenum	SW6010B	ug/L	NE	10		**0.77 J**	**0.88 J**	< 10.0 U	< 10.0 U	NA	< 10.0 U	**18.3**	**5.6 J**	**7.4 J**	**14.1**	**15.2**	**19.2**	**15.2**	**20.8**	**7.4 J**
Nickel	SW6010B	ug/L	NE	39		**10.4**	**7.6 J**	**6.9 J**	**6.3 J**	NA	< 10.0 U	< 10.0 U	**2.7 J**	< 10.0 U	**11.7**	**14.1**	**10.6**	< 10.0 U	**11.7**	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE		**29,400**	**20,000**	**11,900**	**12,100**	NA	**11,900**	**4,790**	**3,340**	**3,150**	**2,530**	**2,870**	**2,600**	**3,550**	**2,630**	**3,250**
Silicon	SW6010B	ug/L	NE	NE		**15,400**	**12,200**	**12,000**	**11,000**	NA	**10,200**	**10,100**	**9,930**	**9,360**	**6,110**	**6,430**	**6,550**	**6,700**	**6,910**	**9,070**
Sodium	SW6010B	ug/L	NE	20,000		**150,000**	**115,000**	**90,300**	**94,900**	NA	**96,600**	**31,000**	**15,100**	**8,690**	**23,000**	**22,200**	**22,600**	**53,100**	**23,000**	**20,300**
Strontium	SW6010B	ug/L	NE	1,200		**1,100**	**817**	**635**	**668**	NA	**667**	**709**	**650**	**686**	**183**	**213**	**207**	**242**	**207**	**336**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	NA	**6.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	**12.1**	**1.6 J**	NA	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.9 J**	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	NA	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**10.7 J**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.13 J**	**0.076 J**	< 1.0 U	**0.20 J**	NA	< 1.0 U	< 1.0 U	< 1.0 U	**0.092 J**	**0.49 J**	**0.16 J**	**2.0**	**0.26 J**	**2.1**	**0.25 J**
Arsenic	SW6020	ug/L	10	0.052		**0.75 J**	**0.36 J**	**0.45 J**	**0.43 J**	NA	**0.33 J**	**1.4**	**1.4**	**2.9**	**1.7**	**1.8**	**2.7**	**3.7**	**4.0**	**3.2**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	**0.39**	**0.27**	**0.21**	NA	**0.16 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	NA	< 0.20 U	< 0.20 U	**0.033 J**	< 0.20 U	< 0.20 U	**0.041 J**	**0.043 J**	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	**1.9 J**	< 2.0 U	NA	< 2.0 U	**0.32 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	NA	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	NA	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		< 1.0 U	< 1.0 U	**1.4 J+**	**7.2**	NA	**0.46 J**	< 1.0 U	**0.37 J**	**0.38 J**	< 1.0 U	**0.59 J**	**1.1 J+**	**0.33 J**	< 1.0 U	**0.28 J**
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	**1.1**	**0.17 J**	NA	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**2.2**	**2.6**	**1.4**	**0.72 J**
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	**0.48 J**	< 1.0 U	NA	< 1.0 U	**0.39 J**	**0.88 J**	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	NA	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	**1.2**	**0.12 J**	NA	**0.29 J**	**0.15 J**	< 1.0 U	**0.21 J**	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.033 J**	**0.027 J**	**0.27 J**	**0.093 J**	NA	**0.15 J**	**1.0**	**1.3**	**1.8**	**0.73 J**	**1.2**	**1.7**	**2.0**	**2.7**	**0.47 J**
Vanadium	SW6020	ug/L	NE	8.6		**1.2**	**0.93 J**	**2.5**	**0.67 J**	NA	**0.36 J**	**0.44 J**	**0.62 J**	**0.40 J**	**0.31 J**	**0.22 J**	**0.62 J**	**0.78 J**	**0.58 J**	**0.27 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	NA	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	NA	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.4 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10	S-10
				Sample Depth (ft BGS)	39-48.8	39-48.8	39-48.8	17.1-26.9	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52
				Sample Date	03-01-2021	05-17-2021	08-18-2021	03-10-2021	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**44.4 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**673**	**264**	**326**
Barium	SW6010B	ug/L	2,000	380	**1,490**	**1,690**	**2,060**	**2,620**	**2,760**	**2,850**	**251**	**526**	**564**	**398**	**332**	**246**	**259**	**237**	**196**
Boron	SW6010B	ug/L	NE	400	**594**	**1,030**	**1,650**	**1,960**	**1,970**	**1,940**	**3,300**	**2,850**	**2,950**	**112**	**86.8 J**	**93.6 J**	**1,230**	**1,300**	**1,130**
Calcium	SW6010B	ug/L	NE	NE	**272,000**	**288,000**	**249,000**	**71,100**	**69,500**	**74,200**	**55,700**	**59,300**	**57,600**	**127,000**	**116,000**	**90,600**	**199,000**	**195,000**	**210,000**
Cobalt	SW6010B	ug/L	NE	0.6	**1.9 J**	**1.8 J**	**2.7 J**	**2.7 J**	**2.5 J**	**2.3 J**	**10.2**	**7.1**	**7.1**	**2.3 J**	**2.5 J**	**2.0 J**	**1.4 J**	**2.6 J**	**2.6 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**994,000**	**1,050,000**	**960,000**	**429,000**	**424,000**	**447,000**	**374,000**	**404,000**	**405,000**	**391,000**	**357,000**	**274,000**	**1,130,000**	**909,000**	**1,020,000**
Iron	SW6010B	ug/L	NE	1,400	**20,200**	**23,200**	**28,200**	**18,800**	**19,400**	**20,200**	**10,400**	**18,400**	**19,400**	**547**	**828**	**438**	**147,000**	**72,700**	**108,000**
Lithium	SW6010B	ug/L	NE	4	**28.8**	**37.3**	**28.2**	**25.7**	**25.8**	**24.2**	**25.7**	**25.7**	**25.6**	**16.5 J**	**13.6 J**	**14.9 J**	**55.0**	**47.5**	**49.2**
Magnesium	SW6010B	ug/L	NE	NE	**76,200**	**80,700**	**81,800**	**61,200**	**60,700**	**63,600**	**57,000**	**62,300**	**63,400**	**18,000**	**16,100**	**11,700**	**155,000**	**102,000**	**120,000**
Manganese	SW6010B	ug/L	NE	43	**1,210**	**1,230**	**1,200**	**65.8**	**68.4**	**70.0**	**220**	**138**	**127**	**1,160**	**782**	**552**	**7,340**	**3,370**	**4,960**
Molybdenum	SW6010B	ug/L	NE	10	**1.0 J**	**0.79 J**	**3.0 J**	**57.0**	**58.7**	**56.3**	**2.1 J**	**1.3 J**	**1.9 J**	**15.8**	**10.6**	**12.9**	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**15.8**	**18.1**	**22.8**	**31.9**	**36.8**	**42.2**	**63.6**	**38.5**	**40.7**	< 10.0 U	**5.0 J**	**4.8 J**	**14.0**	**13.6**	**11.6**
Potassium	SW6010B	ug/L	NE	NE	**10,500**	**13,000**	**16,400**	**126,000**	**130,000**	**134,000**	**227,000**	**216,000**	**224,000**	**6,220**	**6,640**	**5,420**	**42,000**	**34,000**	**36,900**
Silicon	SW6010B	ug/L	NE	NE	**17,400**	**21,000**	**21,800**	**23,200**	**23,500**	**21,200**	**17,300 J**	**17,700 J-**	**16,000**	**10,800**	**9,230**	**8,670**	**22,300**	**23,800**	**21,100**
Sodium	SW6010B	ug/L	NE	20,000	**146,000**	**212,000**	**298,000**	**306,000**	**309,000**	**318,000**	**580,000**	**438,000**	**456,000**	**31,800**	**32,100**	**30,000**	**213,000**	**186,000**	**183,000**
Strontium	SW6010B	ug/L	NE	1,200	**1,040**	**1,140**	**1,330**	**1,030**	**1,070**	**1,110**	**292**	**327**	**341**	**664**	**516**	**393**	**1,140**	**1,080**	**1,060**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**23.9**	**12.2**	**12.7**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	**0.99 J**	< 10.0 U	< 10.0 U	**5.1 J**	**4.1 J**	**3.6 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**15.8 J**	**36.9**	**11.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	**0.17 J**	< 1.0 U	**0.56 J**	**0.62 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.087 J**	< 1.0 U	**0.26 J**	**0.10 J**
Arsenic	SW6020	ug/L	10	0.052	**1.1**	**3.0**	**29.6**	**213**	**220**	**222**	**15.9**	**11.1**	**10.5**	**1.9**	**2.2**	**1.8**	**51.0**	**51.5**	**42.8**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	**0.023 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.54**	**0.27**	**0.29**
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.39**	**0.16 J**	**0.19 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**0.65 J**	< 2.0 U	< 2.0 U	**3.1**	**2.5**	**2.9**	**4.7**	**4.9**	**5.1**	**0.24 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.98 J**	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	**0.111**	**0.149**	**0.0575 J**	**0.376**	**0.222**	**0.129**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.39 J**	**0.49 J**	< 1.0 U	**0.63 J**	**1.1**	**1.4 J+**	**0.58 J**	**0.59 J**	< 1.0 U	**0.25 J**	**0.26 J**	**1.4 J+**	**0.64 J**	**0.74 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**	**0.18 J**	**2.9**	**1.3**	**1.6**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	**0.41 J**	**0.42 J**	< 1.0 U	**0.48 J**	**0.47 J**	**0.27 J**	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.55 J**	**0.47 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.030 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.27 J**	**0.36 J**	**0.37 J**	**0.013 J**	< 1.0 U	**0.010 J**	**0.13 J**	< 1.0 U	< 1.0 U	**2.4**	**2.2**	**2.0**	**0.13 J**	**0.21 J**	**0.19 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.82 J**	**1.1**	**1.4**	**4.5**	**4.5**	**4.6**	**3.0**	**1.7**	**1.8**	**0.20 J**	< 1.0 U	**0.18 J**	**3.5**	**2.7**	**2.8**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	**1.8 J**	**2.6 J**	**2.8 J**	**2.4 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**3.5 J**	< 5.0 U	**2.4 J**	< 5.0 UJ

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS
					Sample Depth (ft BGS)	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6
					Sample Date	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**256**	**128 J**	**116 J**
Barium	SW6010B	ug/L	2,000	380		**952**	**1,060**	**1,460**	**8.5 J**	**9.2 J**	**7.7 J**	**901**	**1,050**	**1,000**	**312**	**333**	**326**	**65.5**	**67.9**	**67.0**
Boron	SW6010B	ug/L	NE	400		**4,000**	**3,120**	**2,590**	**607**	**644**	**592**	**206**	**232**	**204**	< 100 U	**26.9 J**	< 100 U	**138 J+**	**121**	**114**
Calcium	SW6010B	ug/L	NE	NE		**174,000**	**195,000**	**231,000**	**20,200**	**21,500**	**20,300**	**147,000**	**170,000**	**156,000**	**75,600**	**78,600**	**77,400**	**91,300**	**95,200**	**93,900**
Cobalt	SW6010B	ug/L	NE	0.6		**3.4 J**	**6.8**	**7.2**	< 5.0 U	< 5.0 U	< 5.0 U	**6.5**	**8.1**	**7.6**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**744,000**	**845,000**	**950,000**	**99,000**	**105,000**	**99,100**	**589,000**	**672,000**	**618,000**	**328,000**	**337,000**	**332,000**	**433,000**	**446,000**	**439,000**
Iron	SW6010B	ug/L	NE	1,400		**26,800**	**28,800**	**35,000**	**178**	**168**	**135**	**55,400**	**62,800**	**57,900**	**153**	**295**	**394**	**173**	**102**	**89.1**
Lithium	SW6010B	ug/L	NE	4		**46.0**	**49.6**	**47.6**	**130**	**141**	**140**	**14.2 J**	**22.5**	**18.6 J**	**7.8 J**	**11.1 J**	**7.4 J**	**41.4**	**45.0**	**42.9**
Magnesium	SW6010B	ug/L	NE	NE		**75,000**	**86,900**	**90,300**	**11,800**	**12,400**	**11,800**	**54,000**	**60,300**	**55,500**	**33,900**	**34,300**	**33,600**	**49,800**	**50,700**	**49,700**
Manganese	SW6010B	ug/L	NE	43		**1,220**	**1,250**	**1,200**	**17.2**	**18.4**	**15.8**	**370**	**391**	**345**	**86.0**	**81.2**	**92.0**	**11.6**	**5.5 J+**	**5.5 J+**
Molybdenum	SW6010B	ug/L	NE	10		**13.7**	**12.9**	**13.3**	< 10.0 U	**0.55 J**	< 10.0 U	**9.3 J**	**9.1 J**	**9.5 J**	**2.4 J**	**1.9 J**	**1.6 J**	**1.1 J**	**1.2 J**	**0.69 J**
Nickel	SW6010B	ug/L	NE	39		**22.3**	**30.0**	**29.3**	< 10.0 U	< 10.0 U	< 10.0 U	**9.4 J**	**13.7**	**14.2**	**3.5 J**	**1.7 J**	< 10.0 U	**8.9 J**	**7.4 J**	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE		**14,300**	**14,600**	**23,900**	**4,650**	**5,120**	**4,860**	**5,290**	**5,620**	**5,490**	**2,290**	**2,340**	**2,340**	**2,540**	**2,610**	**2,590**
Silicon	SW6010B	ug/L	NE	NE		**19,900**	**19,900**	**19,500**	**4,010**	**4,220**	**3,780**	**22,700**	**27,000**	**26,300**	**6,030**	**6,190**	**5,940**	**6,420**	**6,290**	**5,720**
Sodium	SW6010B	ug/L	NE	20,000		**305,000**	**308,000**	**293,000**	**228,000**	**240,000**	**234,000**	**26,600**	**27,300**	**24,500**	**6,760**	**7,140**	**6,950**	**9,850**	**10,400**	**9,630**
Strontium	SW6010B	ug/L	NE	1,200		**1,250**	**1,340**	**1,570**	**2,740**	**3,050**	**2,860**	**662**	**778**	**719**	**379**	**393**	**383**	**1,440**	**1,530**	**1,480**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.7 J**	**1.3 J**	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	**91.7**	**41.8**	**19.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	**134**	**79.8**	**30.1**	**17.9 J**	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.12 J**	**0.31 J**	< 1.0 U	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	< 1.0 U	**0.21 J**	**0.10 J**	< 1.0 U	**0.52 J**	**0.44 J**	**0.50 J**
Arsenic	SW6020	ug/L	10	0.052		**201**	**210**	**262**	< 1.0 U	< 1.0 U	< 1.0 U	**406**	**468**	**442**	**0.94 J**	**1.1**	**1.3**	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	**0.045 J**	< 0.20 U	**0.024 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.022 J**	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.23 J**	< 2.0 U	< 2.0 U	**0.33 J**	< 2.0 U	< 2.0 U	**0.43 J**	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	**0.0588 J**	< 0.100 U	**0.0737 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0852 J**	**0.0603 J**
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.54 J**	**0.73 J**	**0.42 J**	**0.41 J**	**0.21 J**	**0.24 J**	< 1.0 U	**0.44 J**	**0.39 J**	**0.40 J**	**0.52 J**	**0.26 J**	**2.1**	**1.1**	**1.0**
Lead	SW6020	ug/L	15	15		< 1.0 U	**0.13 J**	< 1.0 U	**0.057 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.29 J**	**0.16 J**	**0.19 J**
Selenium	SW6020	ug/L	50	10		< 1.0 U	**0.36 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.049 J**	**0.026 J**	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	**0.17 J**	< 1.0 U	**0.21 J**
Uranium	SW6020	ug/L	30	0.4		**2.1**	**3.0**	**1.9**	**0.082 J**	**0.078 J**	**0.082 J**	**0.016 J**	**0.019 J**	**0.020 J**	**0.96 J**	**0.81 J**	**1.0**	**3.4**	**3.2**	**3.3**
Vanadium	SW6020	ug/L	NE	8.6		**0.68 J**	**0.77 J**	**0.76 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	**0.48 J**	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.58 J**	**0.55 J**	**0.52 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	**1.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-101-SS 145.9-155.7 03-12-2021 N	PZ-101-SS 145.9-155.7 05-17-2021 N	PZ-101-SS 145.9-155.7 08-19-2021 N	PZ-102R-SS 79.83-91.04 02-25-2021 N	PZ-102R-SS 79.83-91.04 05-06-2021 N	PZ-102R-SS 79.83-91.04 08-04-2021 N	PZ-102-SS 79.7-89.5 02-25-2021 N	PZ-102-SS 79.7-89.5 05-06-2021 N	PZ-102-SS 79.7-89.5 08-04-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 FD	PZ-103-SS 134.7-144.5 05-20-2021 N	PZ-103-SS 134.7-144.5 05-20-2021 FD	PZ-103-SS 134.7-144.5 08-24-2021 N	PZ-104-KS 397.37-407.17 02-24-2021 N
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**86.5 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**98.2 J**
Barium	SW6010B	ug/L	2,000	380	**463**	**482**	**538**	**71.3**	**72.6**	**73.1**	**166**	**160**	**166**	**1,180**	**1,160**	**1,280**	**1,280**	**1,340**	**108**
Boron	SW6010B	ug/L	NE	400	**884**	**849**	**910**	**149**	**155**	**153**	**128**	**127**	**137**	**723**	**712**	**830**	**841**	**900**	**128**
Calcium	SW6010B	ug/L	NE	NE	**150,000**	**142,000**	**156,000**	**115,000**	**113,000**	**126,000**	**104,000**	**107,000**	**113,000**	**351,000**	**339,000**	**329,000**	**328,000**	**332,000**	**84,500**
Cobalt	SW6010B	ug/L	NE	0.6	**1.5 J**	**0.92 J**	**1.3 J**	< 5.0 U	**0.54 J**	**0.91 J**	< 5.0 U	< 5.0 U	< 5.0 U	**0.63 J**	**0.60 J**	**0.96 J**	**0.61 J**	**0.43 J**	**0.70 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**742,000**	**706,000**	**740,000**	**454,000**	**450,000**	**480,000**	**420,000**	**431,000**	**445,000**	**1,490,000**	**1,440,000**	**1,420,000**	**1,420,000**	**1,400,000**	**374,000**
Iron	SW6010B	ug/L	NE	1,400	**1,810**	**2,550**	**1,730**	**502**	**658**	**904**	**1,330**	**653**	**1,020**	**20,900**	**20,700**	**21,900**	**22,100**	**23,300**	**1,100**
Lithium	SW6010B	ug/L	NE	4	**30.8**	**34.4**	**34.2**	**47.8**	**48.2**	**47.6**	**47.1**	**48.8**	**52.5**	**54.0**	**52.6**	**50.4**	**51.9**	**41.8**	**29.1**
Magnesium	SW6010B	ug/L	NE	NE	**89,000**	**85,100**	**85,400**	**40,800**	**40,600**	**40,200**	**38,600**	**40,000**	**39,300**	**149,000**	**145,000**	**145,000**	**146,000**	**139,000**	**39,600**
Manganese	SW6010B	ug/L	NE	43	**136**	**187**	**320**	**6.6**	**10.7**	**32.7**	**101**	**84.9**	**73.2**	**1,120**	**1,100**	**1,170**	**1,180**	**1,120**	**17.3**
Molybdenum	SW6010B	ug/L	NE	10	**1.7 J**	**0.92 J**	**1.4 J**	**1.5 J**	**3.0 J**	**1.3 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.6 J**
Nickel	SW6010B	ug/L	NE	39	**16.0**	**14.7**	**16.1**	< 10.0 U	**1.5 J**	**2.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	**72.4**	**71.4**	**76.4**	**76.9**	**75.4**	**1.6 J**
Potassium	SW6010B	ug/L	NE	NE	**11,500**	**10,900**	**10,600**	**3,100**	**3,340**	**3,280**	**2,590**	**2,720**	**2,970**	**8,010**	**7,830**	**7,610**	**7,610**	**7,450**	**2,000**
Silicon	SW6010B	ug/L	NE	NE	**17,300**	**17,200**	**19,400**	**8,210**	**8,400**	**7,750**	**7,500**	**7,250**	**7,240**	**22,600**	**23,300**	**23,800**	**24,000**	**21,500**	**4,490**
Sodium	SW6010B	ug/L	NE	20,000	**136,000**	**132,000**	**146,000**	**15,900**	**18,600**	**14,300**	**13,800**	**13,800**	**13,000**	**166,000**	**165,000**	**180,000**	**179,000**	**187,000**	**37,600**
Strontium	SW6010B	ug/L	NE	1,200	**2,130**	**2,040**	**2,010**	**1,460**	**1,500**	**1,550**	**792**	**828**	**868**	**7,380**	**7,250**	**6,660**	**6,660**	**6,180**	**2,940**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**149**	**15.8 J**	**6.1 J**	**25.6**	**10.6 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**9.3 J**
Antimony	SW6020	ug/L	6	0.78	**0.76 J**	**0.23 J**	**0.20 J**	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.19 J**	**0.17 J**	**0.16 J**	**0.14 J**	**0.18 J**	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**68.5**	**59.7**	**44.6**	**0.75 J**	**0.90 J**	**1.1**	< 1.0 U	< 1.0 U	< 1.0 U	**10.1**	**10**	**18.7**	**18.9**	**23.6**	**0.42 J**
Beryllium	SW6020	ug/L	4	2.5	**0.036 J**	**0.050 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.081 J**	**0.084 J**	**0.066 J**	**0.056 J**	**0.076 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	**0.049 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**2.2**	< 2.0 U	< 2.0 U	**0.21 J**	< 2.0 U	< 2.0 U	**0.18 J**	< 2.0 U	< 2.0 U	**2.5**	**2.8**	**2.4**	**2.4**	**2.7**	**0.23 J**
Chromium (VI)	SW7199	ug/L	100	0.035	**0.160**	**0.116 J+**	**0.122**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.223**	**0.0603 J**	**0.209 J-**	< 0.100 U	**0.0640 J**	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	**1.2 J+**	**0.36 J**	< 1.0 U	< 1.0 U	**0.99 J**	**0.87 J**	< 1.0 U	**0.33 J**	**0.56 J**	**0.81 J**	**0.81 J**	< 1.0 U	< 1.0 U	**1.2**	< 1.0 U
Lead	SW6020	ug/L	15	15	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.066 J**	< 1.0 U	< 1.0 U	**0.098 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.14 J**	**0.096 J**	**0.066 J**	**1.9**	**2.2**	**1.4**	**0.14 J**	**0.12 J**	**0.58 J**	**0.11 J**	**0.12 J**	**0.086 J**	**0.086 J**	**0.062 J**	**0.29 J**
Vanadium	SW6020	ug/L	NE	8.6	**2.5**	**2.7**	**2.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**5.8**	**5.9**	**5.6**	**5.7**	**6.4**	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS
					Sample Depth (ft BGS)	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57
					Sample Date	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021
					Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**111**	**117**	**432**	**407**	**409**	**408**	**99.2**	**101**	**102**	**304**	**307**	**330**	**37.4**	**41.3**
Boron	SW6010B	ug/L	NE	400		**129**	**140**	**339**	**371**	**336**	**340**	**152**	**154**	**169**	**130**	**149**	**173**	**176**	**177**
Calcium	SW6010B	ug/L	NE	NE		**84,300**	**87,300**	**94,900**	**104,000**	**106,000**	**106,000**	**85,800**	**86,000**	**87,000**	**113,000**	**114,000**	**117,000**	**52,600**	**55,500**
Cobalt	SW6010B	ug/L	NE	0.6		< 5.0 U	< 5.0 U	**0.49 J**	**0.92 J**	**0.68 J**	**0.94 J**	< 5.0 U	< 5.0 U	< 5.0 U	**0.92 J**	**0.65 J**	**1.2 J**	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**377,000**	**383,000**	**440,000**	**483,000**	**480,000**	**480,000**	**409,000**	**415,000**	**410,000**	**507,000**	**522,000**	**525,000**	**271,000**	**289,000**
Iron	SW6010B	ug/L	NE	1,400		**1,130**	**1,100**	**3,960**	**4,360**	**4,290**	**4,280**	**1,490**	**395**	**280**	**4,230**	**3,300**	**3,590**	**761**	**794**
Lithium	SW6010B	ug/L	NE	4		**28.8**	**29.4**	**18.3 J**	**21.4**	**14.0 J**	**16.4 J**	**36.7**	**40.7**	**38.6**	**21.8**	**23.7**	**21.4**	**42.3**	**44.5**
Magnesium	SW6010B	ug/L	NE	NE		**40,500**	**40,000**	**49,300**	**53,900**	**52,500**	**52,400**	**47,300**	**48,500**	**46,700**	**54,600**	**57,600**	**56,700**	**33,800**	**36,400**
Manganese	SW6010B	ug/L	NE	43		**15.8**	**16.4**	**106**	**123**	**121**	**120**	**14.6**	**8.6**	**6.5 J+**	**385**	**392**	**428**	**4.5 J**	**5.1**
Molybdenum	SW6010B	ug/L	NE	10		**1.3 J**	**0.94 J**	**0.89 J**	**1.3 J**	**1.5 J**	**1.3 J**	**9.1 J**	**7.4 J**	**5.7 J**	**5.0 J**	**5.5 J**	**5.6 J**	**0.68 J**	**1.9 J**
Nickel	SW6010B	ug/L	NE	39		< 10.0 U	**1.3 J**	**19.9**	**25.5**	**23.4**	**23.5**	**1.8 J**	**3.5 J**	**2.6 J**	**15.9**	**19.9**	**23.3**	**5.2 J**	**3.8 J**
Potassium	SW6010B	ug/L	NE	NE		**1,880**	**2,150**	**9,920**	**9,540**	**8,760**	**8,870**	**2,390**	**2,280**	**2,500**	**2,540**	**2,620**	**2,690**	**1,880**	**2,070**
Silicon	SW6010B	ug/L	NE	NE		**4,220**	**4,140**	**11,600**	**12,000**	**11,000**	**10,700**	**10,500**	**11,300**	**10,800**	**15,400**	**15,400**	**15,900**	**3,970**	**4,090**
Sodium	SW6010B	ug/L	NE	20,000		**37,300**	**39,000**	**61,500**	**69,200**	**64,300**	**64,500**	**13,900**	**15,500**	**16,200**	**49,900**	**51,500**	**54,100**	**56,200**	**61,100**
Strontium	SW6010B	ug/L	NE	1,200		**2,950**	**2,990**	**657**	**684**	**671**	**669**	**1,040**	**1,020**	**1,010**	**882**	**857**	**858**	**4,730**	**5,150**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.4 J**	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	**72.9**	< 20.0 U	< 20.0 U	< 20.0 U	**52.6**	**90.2**	**52.3**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	**0.14 J**	< 1.0 U	< 1.0 U	**0.068 J**	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**0.45 J**	**0.44 J**	**16.8**	**19.6**	**18.9**	**18.7**	**2.7**	**1.4**	**1.1**	**3.0**	**3.4**	**4.6**	**1.8**	**1.7**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.028 J**	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	**3.7**	**4.3**	**3.6**	**3.7**	**0.33 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	**0.602**	**0.611**	**0.193**	**0.186**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.20 J**	< 1.0 U	**4.9**	< 1.0 U	< 1.0 U	< 1.0 U	**9.5**	**9.6**	**5.2**	**0.72 J**	**0.33 J**	**0.48 J**	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	**0.30 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	**0.053 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.48 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.28 J**	**0.27 J**	**0.12 J**	**0.077 J**	**0.080 J**	**0.077 J**	**1.4**	**1.6**	**1.5**	**1.4**	**1.5 J**	**1.4**	**1.4**	**1.3**
Vanadium	SW6020	ug/L	NE	8.6		< 1.0 U	< 1.0 U	**2.8**	**2.8**	**2.6**	**2.6**	< 1.0 U	< 1.0 U	< 1.0 U	**0.23 J**	**0.36 J**	**0.17 J**	< 1.0 U	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS
					Sample Depth (ft BGS)	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96
					Sample Date	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	**46.7 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**43.1**	**125**	**121**	**136**	**1,270**	**1,070**	**939**	**939**	**1,140**	**1,330**	**67.6**	**64.2**	**64.5**	**6.6 J**
Boron	SW6010B	ug/L	NE	400		**178**	< 100 U	**73.1 J**	< 100 U	**288**	**256**	**224**	**1,200**	**1,500**	**1,680**	**186**	**188**	**199**	**1,180**
Calcium	SW6010B	ug/L	NE	NE		**57,800**	**101,000**	**102,000**	**109,000**	**130,000**	**127,000**	**130,000**	**249,000**	**244,000**	**250,000**	**90,700**	**92,400**	**95,000**	**8,340**
Cobalt	SW6010B	ug/L	NE	0.6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.1 J**	**3.1 J**	**3.1 J**	**0.66 J**	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**287,000**	**458,000**	**463,000**	**477,000**	**585,000**	**575,000**	**569,000**	**1,140,000**	**1,140,000**	**1,160,000**	**431,000**	**443,000**	**445,000**	**43,000**
Iron	SW6010B	ug/L	NE	1,400		**817**	**856**	**708**	**758**	**2,250**	**2,270**	**2,460**	**4,350**	**5,070**	**7,080**	**277**	**112**	**113**	**565**
Lithium	SW6010B	ug/L	NE	4		**52.2**	**19.4 J**	**15.3 J**	**21.4**	**40.6**	**39.0**	**40.9**	**46.1**	**53.8**	**48.0**	**24.8**	**24.9**	**26.5**	**215**
Magnesium	SW6010B	ug/L	NE	NE		**34,600**	**49,900**	**50,600**	**49,800**	**63,200**	**62,900**	**59,100**	**127,000**	**129,000**	**129,000**	**49,700**	**51,500**	**50,500**	**5,390**
Manganese	SW6010B	ug/L	NE	43		< 5.0 U	**41.5**	**61.8**	**36.3**	**18.6**	**20.0**	**17.6**	**87.2**	**103**	**106**	**12.4**	< 5.0 U	< 5.0 U	**5.3**
Molybdenum	SW6010B	ug/L	NE	10		**1.3 J**	**2.6 J**	**2.4 J**	**3.0 J**	**4.4 J**	**4.1 J**	**3.6 J**	**1.0 J**	**0.87 J**	**1.1 J**	**1.7 J**	**1.9 J**	**0.95 J**	**1.4 J**
Nickel	SW6010B	ug/L	NE	39		**5.1 J**	**2.3 J**	**1.5 J**	**2.1 J**	**10.9**	**11.4**	**9.0 J**	**42.4**	**44.0**	**45.1**	< 10.0 U	< 10.0 U	**1.6 J**	**3.1 J**
Potassium	SW6010B	ug/L	NE	NE		**1,870**	**3,080**	**3,030**	**2,830**	**5,750**	**6,010**	**5,280**	**15,800**	**19,400**	**21,200**	**3,570**	**3,320**	**3,520**	**6,900**
Silicon	SW6010B	ug/L	NE	NE		**4,050**	**8,380**	**8,400**	**7,730**	**8,710**	**8,220**	**7,950**	**18,100**	**20,200**	**18,100**	**5,160**	**5,030**	**4,780**	**4,220**
Sodium	SW6010B	ug/L	NE	20,000		**61,300**	**22,800**	**21,700**	**22,600**	**109,000**	**105,000**	**87,100**	**199,000**	**234,000**	**270,000**	**9,880**	**9,890**	**10,100**	**392,000**
Strontium	SW6010B	ug/L	NE	1,200		**5,240**	**1,320**	**1,250**	**1,380**	**1,130**	**1,110**	**1,120**	**1,440**	**1,600**	**1,550**	**3,040**	**3,060**	**3,030**	**1,630**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.4 J**	< 10.0 U	**0.62 J**	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	**16.0 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**290**	**255**	**95.1**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.063 J**	**0.21 J**	**0.25 J**	< 1.0 U	**2.5**	**1.4**	**0.77 J**	**0.12 J**
Arsenic	SW6020	ug/L	10	0.052		**1.8**	**0.86 J**	**0.68 J**	**0.98 J**	**0.93 J**	**1.0**	**0.98 J**	**4.2**	**5.0**	**5.6**	**1.2**	**0.73 J**	**0.65 J**	**2.3**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.026 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.036 J**	**0.18 J**	**0.084 J**	**0.060 J**	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**8.6**	**10.3**	**12.7**	**0.53 J**	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 UJ	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.508**	**0.157 J+**	**0.345**	< 0.100 U	**0.0478 J**	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**8.1 J**	**10**	**12**	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.22 J**	**0.97 J**	**0.45 J**	**0.40 J**	**0.55 J**	**0.39 J**	**0.36 J**	< 1.0 U	**0.35 J**	**1.0**	**2.3**	**1.2**	**0.83 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**	**0.035 J**	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**1.4**	**0.076 J**	**0.12 J**	**0.064 J**	**0.35 J**	**0.32 J**	**0.35 J**	**0.43 J**	**0.42 J**	**0.33 J**	**0.45 J**	**0.35 J**	**0.31 J**	**6.0**
Vanadium	SW6020	ug/L	NE	8.6		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.97 J**	**0.96 J**	**0.88 J**	**11.2**	**12.7**	**16.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.2 J-**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
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				Sample Location	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD
				Sample Depth (ft BGS)	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4
				Sample Date	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021
				Sample Type	N	N	N	N	N	N	FD	N	FD	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Total																			
Aluminum	SW6010B	ug/L	NE	2,000	**67.9 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**5.3 J**	**4.9 J**	**104**	**102**	**102**	**836**	**829**	**941**	**963**	**752**	**1,800**	**1,810**	**1,790**	**1,780**	**1,760**
Boron	SW6010B	ug/L	NE	400	**1,150**	**1,140**	**51.5 J**	**50.3 J**	< 100 U	**741**	**737**	**835**	**850**	**671**	**1,200**	**1,210**	**1,040**	**1,040**	**1,010**
Calcium	SW6010B	ug/L	NE	NE	**8,240**	**8,120**	**92,500**	**91,000**	**93,700**	**239,000**	**232,000**	**238,000**	**249,000**	**237,000**	**205,000**	**208,000**	**211,000**	**208,000**	**216,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	**0.81 J**	**0.50 J**	< 5.0 U	< 5.0 U	**2.0 J**	**1.9 J**	**2.9 J**	**2.7 J**	**1.4 J**	**2.8 J**	**2.4 J**	**2.4 J**	**2.7 J**	**2.0 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**43,000**	**41,500**	**439,000**	**438,000**	**443,000**	**1,030,000**	**1,020,000**	**1,060,000**	**1,100,000**	**1,050,000**	**787,000**	**799,000**	**816,000**	**806,000**	**830,000**
Iron	SW6010B	ug/L	NE	1,400	**599**	**581**	**1,240**	**848**	**37.2 J**	**2,610**	**2,620**	**3,320**	**3,390**	**2,390**	**28,800**	**29,000**	**29,000**	**28,900**	**30,100**
Lithium	SW6010B	ug/L	NE	4	**210**	**208**	**15.5 J**	**13.5 J**	**16.2 J**	**40.7**	**40.0**	**46.3**	**45.4**	**40.1**	**30.3**	**30.1**	**36.8**	**34.3**	**30.2**
Magnesium	SW6010B	ug/L	NE	NE	**5,460**	**5,150**	**50,500**	**51,100**	**50,800**	**106,000**	**106,000**	**112,000**	**115,000**	**111,000**	**66,900**	**67,700**	**70,100**	**69,500**	**70,300**
Manganese	SW6010B	ug/L	NE	43	< 5.0 U	< 5.0 U	**6.5**	**7.8**	< 5.0 U	**37.8**	**37.8**	**88.3**	**56.8**	**27.7**	**443**	**445**	**448**	**447**	**445**
Molybdenum	SW6010B	ug/L	NE	10	**1.6 J**	**1.0 J**	**3.4 J**	**4.4 J**	**4.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.75 J**	**0.51 J**	**0.79 J**	**0.56 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**2.7 J**	**1.6 J**	< 10.0 U	< 10.0 U	**1.8 J**	**22.6**	**22.6**	**24.5**	**24.5**	**21.6**	< 10.0 U	< 10.0 U	**9.6 J**	**9.7 J**	**8.8 J**
Potassium	SW6010B	ug/L	NE	NE	**6,870**	**6,970**	**1,640**	**1,560**	**1,750**	**8,040**	**8,020**	**8,690**	**8,890**	**7,860**	**19,800**	**20,000**	**19,200**	**19,200**	**18,700**
Silicon	SW6010B	ug/L	NE	NE	**4,080**	**3,820**	**6,960**	**6,720**	**6,510**	**12,700**	**12,400**	**12,900**	**13,300**	**11,300**	**16,500**	**16,100**	**17,900**	**17,900**	**18,600**
Sodium	SW6010B	ug/L	NE	20,000	**395,000**	**402,000**	**16,900**	**17,800**	**19,000**	**291,000**	**279,000**	**302,000**	**316,000**	**269,000**	**241,000**	**246,000**	**230,000**	**224,000**	**221,000**
Strontium	SW6010B	ug/L	NE	1,200	**1,620**	**1,570**	**1,110**	**1,100**	**1,100**	**2,960**	**2,970**	**2,880**	**2,930**	**2,980**	**698**	**700**	**743**	**743**	**737**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.8 J**	< 10.0 U	< 10.0 U	**1.8 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.2 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**59.6**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	**0.11 J**	**0.13 J**	< 1.0 U	< 1.0 U	**0.24 J**	**0.11 J**	**0.11 J**	< 1.0 U	< 1.0 U	**0.12 J**	**0.12 J**	**0.12 J**	**0.25 J**	< 1.0 U	**0.10 J**
Arsenic	SW6020	ug/L	10	0.052	**2.6**	**2.7**	**1.4**	**1.8**	**0.45 J**	**2.0**	**2.0**	**1.3**	**1.4**	**1.8**	**1.8**	**1.9**	**1.7**	**1.6**	**1.7**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.053 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.54 J**	**0.58 J**	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0413 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	< 1.0 U	**0.43 J**	**1.2**	**4.1**	< 1.0 U	< 1.0 U	**0.37 J**	**0.36 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.76 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.055 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.23 J**
Uranium	SW6020	ug/L	30	0.4	**6.3**	**6.3**	**0.49 J**	**0.59 J**	**0.67 J**	**0.46 J**	**0.45 J**	**0.36 J**	**0.33 J**	**0.32 J**	**0.11 J**	**0.12 J**	**0.11 J**	**0.10 J**	**0.095 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	**0.65 J**	**0.62 J**	**0.78 J**	**0.55 J**	< 1.0 U	**0.39 J**	**0.38 J**	**0.44 J**	**0.43 J**	**0.34 J**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 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	**11**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS
					Sample Depth (ft BGS)	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161
					Sample Date	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021
					Sample Type	FD	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**1,730**	**886**	**782**	**768**	**760**	**185**	**187**	**185**	**960**	**848**	**1,070**	**510**	**516**	**490**	**104**
Boron	SW6010B	ug/L	NE	400		**995**	**262**	**290**	**275**	**274**	**39.7 J**	**39.5 J**	< 100 U	**197**	**170**	**159**	**431**	**426**	**397**	**420**
Calcium	SW6010B	ug/L	NE	NE		**214,000**	**173,000**	**184,000**	**192,000**	**190,000**	**54,300**	**55,600**	**55,400**	**210,000**	**180,000**	**229,000**	**220,000**	**220,000**	**216,000**	**50,600**
Cobalt	SW6010B	ug/L	NE	0.6		**2.0 J**	**8.4**	**10.0**	**12.4**	**12.0**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.40 J**	**27.6**	**27.8**	**28.2**	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**822,000**	**626,000**	**672,000**	**694,000**	**689,000**	**257,000**	**259,000**	**254,000**	**723,000**	**637,000**	**797,000**	**953,000**	**945,000**	**911,000**	**275,000**
Iron	SW6010B	ug/L	NE	1,400		**29,900**	**7,170**	**5,930**	**7,620**	**7,660**	**362**	**315**	**295**	**62,900**	**56,900**	**74,300**	**3,400**	**3,310**	**3,290**	**44.2 J**
Lithium	SW6010B	ug/L	NE	4		**29.0**	**16.9 J**	**23.3**	**24.5**	**24.0**	**7.6 J**	**9.1 J**	**10.7 J**	**13.4 J**	**17.8 J**	**12.3 J**	**19.5 J**	**23.1**	**22.7**	**37.4**
Magnesium	SW6010B	ug/L	NE	NE		**69,800**	**47,100**	**51,800**	**52,400**	**52,000**	**29,600**	**29,300**	**28,100**	**48,400**	**45,500**	**55,000**	**98,000**	**96,300**	**90,400**	**36,100**
Manganese	SW6010B	ug/L	NE	43		**444**	**4,920**	**4,950**	**5,860**	**5,770**	**37.7**	**32.9**	**28.8**	**3,870**	**3,690**	**4,780**	**88.8**	**84.3**	**89.4**	**44.6**
Molybdenum	SW6010B	ug/L	NE	10		< 10.0 U	**2.4 J**	**1.7 J**	< 10.0 U	< 10.0 U	**17.3**	**16.0**	**15.7**	**0.83 J**	**1.3 J**	**0.64 J**	**1.0 J**	**0.76 J**	< 10.0 U	**3.8 J**
Nickel	SW6010B	ug/L	NE	39		**8.8 J**	**12.4**	**13.2**	**14.6**	**14.8**	< 10.0 U	< 10.0 U	< 10.0 U	**1.3 J**	< 10.0 U	< 10.0 U	**64.4**	**68.6**	**66.1**	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE		**18,500**	**10,300**	**9,160**	**7,020**	**6,940**	**1,550**	**1,570**	**1,590**	**6,720**	**5,830**	**6,410**	**5,410**	**5,380**	**5,420**	**4,020**
Silicon	SW6010B	ug/L	NE	NE		**18,400**	**15,600 J-**	**16,900**	**14,900**	**14,900**	**7,220**	**7,470**	**6,830**	**24,200**	**24,800**	**25,800**	**20,500**	**21,100**	**18,000**	**9,010**
Sodium	SW6010B	ug/L	NE	20,000		**217,000**	**71,800**	**73,300**	**69,900**	**68,900**	**20,900**	**22,300**	**20,800**	**214,000**	**193,000**	**218,000**	**207,000**	**208,000**	**204,000**	**23,100**
Strontium	SW6010B	ug/L	NE	1,200		**726**	**625**	**650**	**646**	**637**	**579**	**604**	**567**	**871**	**779**	**954**	**1,750**	**1,800**	**1,610**	**4,590**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**16.6 J**
Antimony	SW6020	ug/L	6	0.78		**0.098 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**
Arsenic	SW6020	ug/L	10	0.052		**1.6**	**18.6**	**14.8**	**16.2**	**15.6**	**1.0**	**0.84 J**	**0.94 J**	**99.4**	**101**	**104**	**5.7**	**6.0**	**6.5**	**0.62 J**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	**0.27 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.52 J**	< 2.0 U	< 2.0 U	**0.44 J**
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0440 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.71 J**	< 1.0 U	**0.29 J**	**0.65 J**	**0.67 J**	**0.28 J**	**0.19 J**	**0.34 J**	< 1.0 U	**0.32 J**	**0.85 J**	< 1.0 U	**0.61 J**	**1.0 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.035 J**	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.093 J**	**1.8**	**1.8**	**1.6**	**1.7**	**1.1**	**1.1**	**1.1**	< 1.0 U	**0.016 J**	**0.010 J**	**4.2**	**4.4**	**4.0**	**2.8**
Vanadium	SW6020	ug/L	NE	8.6		**0.32 J**	**0.51 J**	**0.64 J**	**0.50 J**	**0.50 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	**0.31 J**	**0.39 J**	**0.56 J**	**0.72 J**	**0.70 J**	**0.71 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 UJ	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS
					Sample Depth (ft BGS)	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1
					Sample Date	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021	03-10-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**108**	**105**	**602**	**580**	**580**	**125**	**131**	**129**	**2,370**	**1,880**	**1,670**	**112**	**118**	**129**	**427**
Boron	SW6010B	ug/L	NE	400		**449**	**418**	**42.5 J**	**39.5 J**	**42.3 J**	< 100 U	**34.8 J**	< 100 U	**463**	**337**	**331**	**136 J+**	**175**	**145**	**341**
Calcium	SW6010B	ug/L	NE	NE		**52,800**	**49,800**	**274,000**	**270,000**	**268,000**	**95,100**	**99,500**	**99,600**	**472,000**	**387,000**	**351,000**	**99,300**	**96,800**	**102,000**	**320,000**
Cobalt	SW6010B	ug/L	NE	0.6		< 5.0 U	< 5.0 U	**4.2 J**	**1.1 J**	**1.0 J**	< 5.0 U	< 5.0 U	< 5.0 U	**2.7 J**	**4.5 J**	**1.7 J**	< 5.0 U	< 5.0 U	< 5.0 U	**2.4 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**282,000**	**267,000**	**1,200,000**	**1,200,000**	**1,160,000**	**424,000**	**440,000**	**430,000**	**1,970,000**	**1,570,000**	**1,430,000**	**439,000**	**424,000**	**432,000**	**1,250,000**
Iron	SW6010B	ug/L	NE	1,400		**46.1 J**	**32.4 J**	**3,420**	**2,570**	**1,820**	**63.9**	**134**	**76.2 J+**	**41,300**	**42,800**	**37,500**	**2,170**	**2,090**	**1,560**	**10,500**
Lithium	SW6010B	ug/L	NE	4		**40.4**	**39.3**	**27.1**	**24.0**	**24.7**	**15.1 J**	**13.7 J**	**13.1 J**	**37.8**	**38.9**	**25.9**	**33.2**	**42.7**	**48.6**	**30.2**
Magnesium	SW6010B	ug/L	NE	NE		**36,500**	**34,600**	**126,000**	**127,000**	**119,000**	**45,300**	**46,600**	**44,100**	**191,000**	**147,000**	**134,000**	**46,500**	**44,200**	**43,200**	**109,000**
Manganese	SW6010B	ug/L	NE	43		**34.0**	**13.5**	**2,040**	**1,950**	**2,630**	**22.7**	**21.4**	**23.3**	**1,390**	**1,300**	**1,180**	**15.5**	**13.6**	**12.4**	**3,110**
Molybdenum	SW6010B	ug/L	NE	10		**4.0 J**	**3.6 J**	**1.8 J**	**1.6 J**	**2.0 J**	**1.4 J**	**1.5 J**	< 10.0 U	< 10.0 U	**0.73 J**	< 10.0 U	**3.1 J**	**2.7 J**	**2.2 J**	**1.5 J**
Nickel	SW6010B	ug/L	NE	39		< 10.0 U	**2.4 J**	**13.9**	**8.3 J**	< 10.0 U	**1.2 J**	< 10.0 U	< 10.0 U	**22.0**	**18.8**	**17.7**	**6.3 J**	**5.2 J**	**6.0 J**	**59.0**
Potassium	SW6010B	ug/L	NE	NE		**4,320**	**4,200**	**2,270**	**2,120**	**2,260**	**2,200**	**2,090**	**2,180**	**6,520**	**5,720**	**5,400**	**2,560**	**2,560**	**2,380**	**6,280**
Silicon	SW6010B	ug/L	NE	NE		**10,300**	**8,830**	**20,900**	**21,200**	**18,800**	**14,000**	**13,800**	**12,600**	**19,400 J+**	**26,500**	**23,000**	**7,550**	**7,040**	**7,970**	**17,500**
Sodium	SW6010B	ug/L	NE	20,000		**24,600**	**23,400**	**39,800**	**39,700**	**38,000**	**10,000**	**10,100**	**9,390**	**360,000**	**251,000**	**232,000**	**10,300**	**22,500**	**21,600**	**267,000**
Strontium	SW6010B	ug/L	NE	1,200		**4,920**	**4,670**	**582**	**564**	**540**	**451**	**473**	**442**	**987**	**820**	**709**	**818**	**791**	**911**	**687**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.1 J**
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	**9.9 J**	< 20.0 U	< 20.0 U	< 20.0 U	**22.9**	**14.9 J**	**18.0 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.16 J**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	**0.12 J**	**0.10 J**	< 1.0 U	**0.24 J**	< 1.0 U	**0.15 J**
Arsenic	SW6020	ug/L	10	0.052		**0.62 J**	**0.60 J**	**7.3**	**4.2**	**2.0**	**0.78 J**	**0.91 J**	**0.79 J**	**31.1**	**19.3**	**13.9**	**2.7**	**2.6**	**3.2**	**10.4**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.027 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.045 J**	**0.058 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	**0.071 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**3.5**	**2.8**	**2.8**	< 2.0 U	< 2.0 U	< 2.0 U	**2.3**
Chromium (VI)	SW7199	ug/L	100	0.035		**0.0449 J**	**0.468**	< 0.100 U	< 0.100 U	< 0.100 U	**0.0562 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.165**	< 0.100 U	**0.0690 J**
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.90 J**	**2.0**	< 1.0 U	**0.71 J**	**0.47 J**	**1.9**	**1.7**	**1.8**	< 1.0 U	**1.6 J+**	**1.1**	< 1.0 U	< 1.0 U	**0.42 J**	**0.98 J**
Lead	SW6020	ug/L	15	15		**0.072 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.099 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.046 J**
Selenium	SW6020	ug/L	50	10		< 1.0 U	**0.89 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.44 J**	< 1.0 U	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	**0.40 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.061 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**2.7**	**2.7**	**0.71 J**	**0.61 J**	**0.50 J**	**3.8**	**3.8**	**3.7**	**0.099 J**	**0.096 J**	**0.092 J**	**0.66 J**	**0.63 J**	**1.2**	**4.2**
Vanadium	SW6020	ug/L	NE	8.6		**0.78 J**	**1.1**	**0.61 J**	**0.53 J**	**0.63 J**	< 1.0 U	< 1.0 U	< 1.0 U	**11.7**	**8.9**	**8.0**	**0.44 J**	**0.42 J**	**0.38 J**	**3.6**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS
					Sample Depth (ft BGS)	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7
					Sample Date	05-19-2021	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		**109 J**	**88.0 J**	< 200 U	< 200 U	< 200 U	**101 J**	**136 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**583**	**223**	**147**	**153**	**163**	**6,320**	**6,460**	**6,460**	**149**	**152**	**160**	**74.2**	**70.0**	**68.8**	**667**
Boron	SW6010B	ug/L	NE	400		**403**	**126**	**77.4 J**	**80.8 J**	**82.1 J**	**2,860**	**3,080**	**3,040**	**54.0 J**	**61.6 J**	**71.2 J**	**179**	**167**	**162**	**1,080**
Calcium	SW6010B	ug/L	NE	NE		**363,000**	**239,000**	**73,800**	**74,700**	**76,900**	**868,000**	**888,000**	**857,000**	**99,100**	**111,000**	**113,000**	**120,000**	**120,000**	**126,000**	**152,000**
Cobalt	SW6010B	ug/L	NE	0.6		**3.5 J**	**3.6 J**	**0.43 J**	< 5.0 U	< 5.0 U	**6.9**	**6.1**	**4.4 J**	< 5.0 U	**0.62 J**	**0.58 J**	< 5.0 U	< 5.0 U	< 5.0 U	**3.0 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**1,400,000**	**911,000**	**393,000**	**393,000**	**399,000**	**3,170,000**	**3,300,000**	**3,170,000**	**472,000**	**513,000**	**517,000**	**634,000**	**626,000**	**638,000**	**684,000**
Iron	SW6010B	ug/L	NE	1,400		**10,700**	**11,000**	**102**	**345**	**158**	**88,600**	**91,400**	**88,000**	**73.9**	**197**	**359**	**2,980**	**1,560**	**1,300**	**20,800**
Lithium	SW6010B	ug/L	NE	4		**38.0**	**29.4**	**36.9**	**38.7**	**36.0**	**105**	**105**	**117**	**23.6**	**29.8**	**30.0**	**33.9**	**36.1**	**35.6**	**26.4**
Magnesium	SW6010B	ug/L	NE	NE		**121,000**	**76,500**	**50,700**	**50,100**	**50,200**	**243,000**	**264,000**	**249,000**	**54,400**	**57,300**	**56,800**	**81,100**	**79,200**	**78,700**	**74,000**
Manganese	SW6010B	ug/L	NE	43		**3,700**	**2,730**	**15.5**	**16.8**	**11.1**	**1,170**	**1,210**	**1,100**	< 5.0 U	**45.2**	**65.7**	**46.9**	**31.3**	**25.6**	**77.9**
Molybdenum	SW6010B	ug/L	NE	10		**1.1 J**	**4.9 J**	**2.0 J**	**1.7 J**	**1.9 J**	**18.4**	**1.2 J**	< 10.0 U	**2.5 J**	**2.9 J**	**2.9 J**	< 10.0 U	< 10.0 U	< 10.0 U	**0.65 J**
Nickel	SW6010B	ug/L	NE	39		**63.9**	**40.7**	< 10.0 U	**1.3 J**	< 10.0 U	**116**	**24.1**	**25.2**	**2.3 J**	**5.2 J**	**8.6 J**	**3.7 J**	**3.5 J**	< 10.0 U	**14.7**
Potassium	SW6010B	ug/L	NE	NE		**7,360**	**7,060**	**2,260**	**2,220**	**2,400**	**28,300**	**27,900**	**27,400**	**1,820**	**2,200**	**2,440**	**4,040**	**3,970**	**4,090**	**51,700**
Silicon	SW6010B	ug/L	NE	NE		**20,200**	**19,900**	**11,400**	**11,600**	**11,500**	**23,200**	**7,770**	**40,800**	**9,520**	**11,700**	**11,500**	**7,510**	**6,520**	**6,090**	**18,700**
Sodium	SW6010B	ug/L	NE	20,000		**327,000**	**160,000**	**23,100**	**23,200**	**23,700**	**666,000**	**700,000**	**674,000**	**15,200**	**30,300**	**36,400**	**22,900**	**23,000**	**23,100**	**219,000**
Strontium	SW6010B	ug/L	NE	1,200		**810**	**563**	**1,700**	**1,660**	**1,820**	**5,010**	**5,320**	**5,230**	**494**	**591**	**599**	**4,500**	**4,700**	**4,620**	**785**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		**3.7 J**	**2.0 J**	< 10.0 U	< 10.0 U	< 10.0 U	**10.6**	**7.7 J**	**5.8 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.75 J**
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	**8.6 J**	< 20.0 U	**10.7 J**	< 20.0 U	< 20.0 U	**19.2 J**	**33.5**	**8.9 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.15 J**	**0.10 J**	< 1.0 U	< 1.0 U	**0.093 J**	**0.90 J**	**0.92 J**	< 1.0 U	**0.31 J**	**0.14 J**	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**
Arsenic	SW6020	ug/L	10	0.052		**8.2**	**18.7**	**0.43 J**	**0.57 J**	**0.43 J**	**60.6**	**38.1**	**38.4**	**0.33 J**	**0.62 J**	**0.84 J**	**1.8**	**1.3**	**1.0**	**5.8**
Beryllium	SW6020	ug/L	4	2.5		**0.033 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 UJ	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		**2.4**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**130**	**7.6**	**10.3**	**0.26 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0420 J**	< 2.00 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0465 J**	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**130**	**7.6 J**	**10**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**1.1**	**1.1**	**0.73 J**	**0.82 J**	**0.94 J**	**5.2**	**2.4**	**3.1**	**0.84 J**	**0.92 J**	**0.51 J**	< 1.0 U	**0.18 J**	**0.34 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		**0.096 J**	< 1.0 U	**0.054 J**	**0.080 J**	< 1.0 U	**0.29 J**	**0.30 J**	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.57 J**	**0.64 J**	**0.99 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.092 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.082 J**	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**3.3**	**5.0**	**2.4**	**2.3**	**2.5**	**0.071 J**	**0.036 J**	**0.030 J**	**0.80 J**	**1.5**	**1.3**	**0.21 J**	**0.072 J**	**0.056 J**	**0.013 J**
Vanadium	SW6020	ug/L	NE	8.6		**4.2**	**2.3**	< 1.0 U	< 1.0 U	**0.18 J**	**1.9**	**7.0**	**7.1**	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**	**0.38 J**	**0.18 J**	**1.3**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.18 J**
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 10 U	< 10 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS
					Sample Depth (ft BGS)	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248	238-248	238-248	138-148
					Sample Date	05-17-2021	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021	08-12-2021	03-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**435**	< 200 U	< 200 U	**58.8 J**	< 200 U	< 200 U	**183 J**	< 200 U	**420**	< 200 U
Barium	SW6010B	ug/L	2,000	380		**804**	**820**	**171**	**163**	**174**	**41.0**	**43.8**	**46.6**	**93.5**	**94.8**	**89.9**	**112**	**102**	**106**	**126**
Boron	SW6010B	ug/L	NE	400		**985**	**1,040**	**41.5 J**	**42.9 J**	**45.9 J**	**143**	**116**	**106**	**276**	**296**	**273**	**100**	**109**	**107**	**163**
Calcium	SW6010B	ug/L	NE	NE		**153,000**	**157,000**	**107,000**	**105,000**	**112,000**	**56,600**	**62,900**	**67,400**	**70,500**	**74,400**	**71,600**	**81,200**	**82,500**	**83,100**	**106,000**
Cobalt	SW6010B	ug/L	NE	0.6		**3.1 J**	**3.1 J**	< 5.0 U	**0.65 J**	**0.41 J**	< 5.0 U	< 5.0 U	**0.74 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.51 J**	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**680,000**	**675,000**	**474,000**	**471,000**	**485,000**	**281,000**	**313,000**	**330,000**	**378,000**	**391,000**	**378,000**	**387,000**	**403,000**	**393,000**	**481,000**
Iron	SW6010B	ug/L	NE	1,400		**23,300**	**23,500**	**554**	**394**	**284**	**97.8**	< 50.0 U	**75.3**	**1,420**	**968**	**1,590**	**76.1**	**428**	**1,520**	**4,630**
Lithium	SW6010B	ug/L	NE	4		**28.2**	**22.6**	**16.5 J**	**16.2 J**	**18.2 J**	**43.5**	**38.4**	**36.9**	**38.3**	**43.2**	**43.2**	**26.4**	**30.2**	**32.7**	**28.9**
Magnesium	SW6010B	ug/L	NE	NE		**72,500**	**68,900**	**50,200**	**51,000**	**49,700**	**33,900**	**37,900**	**39,300**	**49,100**	**49,800**	**48,200**	**44,700**	**47,800**	**45,100**	**52,400**
Manganese	SW6010B	ug/L	NE	43		**97.3**	**96.4**	**33.0**	**15.0**	**10.5**	**10.2**	**26.2**	**33.5**	**32.7**	**21.8**	**25.9**	**44.5**	**49.6**	**33.2**	**44.2**
Molybdenum	SW6010B	ug/L	NE	10		< 10.0 U	**0.65 J**	**1.4 J**	**2.6 J**	**1.6 J**	**20.4**	**13.0**	**9.6 J**	**3.5 J**	**4.3 J**	**1.9 J**	**7.2 J**	**6.8 J**	**9.6 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39		**12.5**	**10.6**	**1.2 J**	**2.4 J**	**1.5 J**	**1.6 J**	**2.2 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.4 J**	**2.5 J**	**2.4 J**	**4.4 J**
Potassium	SW6010B	ug/L	NE	NE		**52,900**	**51,000**	**1,810**	**2,020**	**1,680**	**4,050**	**2,800**	**2,390**	**3,360**	**3,520**	**3,370**	**2,720**	**3,030**	**2,730**	**3,490**
Silicon	SW6010B	ug/L	NE	NE		**20,600**	**19,600**	**13,700**	**12,500**	**13,400**	**7,780**	**6,760**	**6,350**	**5,910**	**6,430**	**5,540**	**6,910**	**6,350**	**7,360**	**10,400**
Sodium	SW6010B	ug/L	NE	20,000		**210,000**	**219,000**	**52,600**	**55,900**	**57,800**	**90,400**	**71,900**	**59,300**	**9,960**	**12,000**	**9,380**	**32,800**	**35,100**	**34,900**	**49,400**
Strontium	SW6010B	ug/L	NE	1,200		**808**	**809**	**479**	**452**	**487**	**1,430**	**1,430**	**1,460**	**4,970**	**5,320**	**4,980**	**1,640**	**1,560**	**1,630**	**1,940**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**3.0 J**	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		**0.97 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.2 J**	**0.85 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.64 J**	< 10.0 U	**2.6 J**	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	**11.7 J**	< 20.0 U	< 20.0 U	**22.5**	**55.1**	**35.5**	< 20.0 U	< 20.0 U	< 20.0 U	**889**	**554**	**314**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.16 J**	**0.15 J**	**0.17 J**	< 1.0 U	**0.077 J**	**0.65 J**	**0.87 J**	**0.70 J**	**0.11 J**	**0.32 J**	**0.16 J**	**0.12 J**	< 1.0 U	**0.060 J**	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**14.3**	**33.0**	< 1.0 U	< 1.0 U	**0.16 J**	**1.7**	**1.0 J**	**0.97 J**	**1.1**	**0.98 J**	**1.4**	**0.32 J**	**0.91 J**	**1.9**	**2.0**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.040 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.048 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.024 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	**0.34 J**	< 2.0 U	< 2.0 U	**0.21 J**	< 2.0 U	< 2.0 U	**0.52 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035		< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.0628 J**
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.39 J**	< 1.0 U	< 1.0 U	**0.37 J**	**0.54 J**	**0.46 J**	**0.28 J**	**0.36 J**	**0.46 J**	**0.25 J**	**0.28 J**	< 1.0 U	< 1.0 U	**0.40 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		**0.28 J**	< 1.0 U	< 1.0 U	**0.035 J**	< 1.0 U	**0.41 J**	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	**0.057 J**	< 1.0 U	< 1.0 U	**0.33 J**	< 1.0 U
Selenium	SW6020	ug/L	50	10		**0.29 J**	< 1.0 U	**0.43 J**	**0.55 J**	**0.84 J**	**0.53 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.045 J**	**0.031 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**	**0.28 J**	**1.1**	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.017 J**	**0.016 J**	**2.7**	**2.7**	**2.9**	**5.1**	**3.8**	**2.8**	**0.61 J**	**0.73 J**	**0.43 J**	**0.89 J**	**0.96 J**	**1.1**	**0.068 J**
Vanadium	SW6020	ug/L	NE	8.6		**1.7**	**1.9**	**0.25 J**	**0.26 J**	**0.21 J**	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-210-SS	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS	PZ-212-SS	PZ-302-AI
					Sample Depth (ft BGS)	138-148	138-148	237-247	237-247	237-247	137-147	137-147	137-147	234-244	234-244	234-244	134-144	134-144	134-144	32.6-42.4
					Sample Date	05-12-2021	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021	05-11-2021	08-10-2021	03-12-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Metals, Total																				
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**236**	< 200 U	< 200 U	**171 J**	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**137**	**153**	**204**	**189**	**160**	**55.9**	**53.2**	**55.1**	**265**	**225**	**234**	**119**	**112**	**114**	**479**
Boron	SW6010B	ug/L	NE	400		**195**	**220**	**103 J+**	**92.4 J**	< 100 U	**425**	**412**	**430**	**44.1 J**	**60.2 J**	< 100 U	**43.5 J**	**38.8 J**	< 100 U	**366**
Calcium	SW6010B	ug/L	NE	NE		**124,000**	**134,000**	**95,100**	**96,300**	**93,200**	**65,600**	**64,800**	**67,100**	**136,000**	**136,000**	**132,000**	**80,300**	**86,700**	**80,800**	**229,000**
Cobalt	SW6010B	ug/L	NE	0.6		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.56 J**	**0.51 J**	**0.88 J**	**0.69 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**12.5**
Hardness as CaCO3	SW6010B	ug/L	NE	NE		**570,000**	**598,000**	**435,000**	**442,000**	**420,000**	**336,000**	**333,000**	**339,000**	**586,000**	**578,000**	**549,000**	**278,000**	**285,000**	**286,000**	**810,000**
Iron	SW6010B	ug/L	NE	1,400		**7,810**	**6,880**	**3,050**	**2,500**	**1,690**	**206**	**511**	**451**	**269**	< 50.0 U	< 50.0 U	**1,400**	**875**	**58.7**	**3,530**
Lithium	SW6010B	ug/L	NE	4		**33.6**	**29.2**	**24.9**	**26.4**	**25.3**	**49.4**	**48.4**	**49.6**	**10.9 J**	**18.4 J**	**20.6**	< 20.0 U	**4.1 J**	**7.2 J**	**23.1**
Magnesium	SW6010B	ug/L	NE	NE		**63,200**	**64,100**	**48,100**	**48,900**	**45,400**	**41,800**	**41,600**	**41,600**	**59,500**	**57,600**	**53,400**	**18,900**	**16,600**	**20,600**	**57,900**
Manganese	SW6010B	ug/L	NE	43		**52.2**	**47.9**	**103**	**92.2**	**62.6**	**18.2**	**45.8**	**17.6**	**595**	**30.9**	**91.4**	**250**	**33.2**	**50.1**	**375**
Molybdenum	SW6010B	ug/L	NE	10		< 10.0 U	< 10.0 U	**20.5**	**16.3**	**12.2**	**7.4 J**	**6.8 J**	**7.3 J**	**7.7 J**	**5.9 J**	**5.4 J**	**6.2 J**	< 10.0 U	**8.7 J**	**12.4**
Nickel	SW6010B	ug/L	NE	39		**5.9 J**	**7.9 J**	**3.3 J**	**7.8 J**	**2.2 J**	< 10.0 U	**3.3 J**	**1.4 J**	< 10.0 U	**2.0 J**	**4.0 J**	< 10.0 U	< 10.0 U	< 10.0 U	**29.1**
Potassium	SW6010B	ug/L	NE	NE		**3,740**	**3,870**	**3,630**	**3,480**	**3,490**	**3,920**	**3,590**	**3,920**	**2,690**	**3,420**	**4,110**	**998 J**	**735 J**	**1,700**	**7,780**
Silicon	SW6010B	ug/L	NE	NE		**10,800**	**10,700**	**7,380**	**6,950**	**7,150**	**5,020**	**4,780**	**4,760**	**12,000**	**12,800**	**10,400**	**6,360**	**6,680**	**6,040**	**13,500**
Sodium	SW6010B	ug/L	NE	20,000		**48,000**	**46,000**	**44,600**	**41,500**	**36,800**	**19,900**	**19,700**	**19,500**	**44,700**	**51,700**	**41,600**	**38,800**	**42,800**	**43,200**	**55,800**
Strontium	SW6010B	ug/L	NE	1,200		**2,090**	**2,170**	**1,430**	**1,520**	**1,600**	**4,470**	**4,360**	**4,610**	**538**	**537**	**515**	**760**	**330**	**1,360**	**923**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**3.7 J**	< 10.0 U	< 10.0 U	**2.6 J**	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	**9.8 J**	< 20.0 U	**19.1 J**	**10.8 J**	< 20.0 U	**43.1**	**16.9 J**	**36.0**	**87.7**	**12.2 J**	**10.6 J**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78		**0.20 J**	< 1.0 U	**0.14 J**	**0.22 J**	< 1.0 U	**0.16 J**	**0.18 J**	**0.20 J**	**0.16 J**	**0.29 J**	**0.070 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052		**2.5**	**2.4**	**2.9**	**2.1**	**1.8**	**1.1**	**1.7**	**1.4**	**1.7**	**0.81 J**	**0.58 J**	**2.5**	**1.9**	**0.64 J**	**2.1**
Beryllium	SW6020	ug/L	4	2.5		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.13 J**	**0.035 J**	**0.12 J**	**0.036 J**	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.33 J**	< 2.0 U	< 2.0 U	**1.0 J**	**0.76 J**	< 2.0 U	**0.28 J**	< 2.0 U	< 2.0 U	**2.8**
Chromium (VI)	SW7199	ug/L	100	0.035		**0.113**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	**0.511**	**0.436**	**0.118**	< 0.100 U	**0.0439 J**	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200		< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80		**0.28 J**	< 1.0 U	**0.56 J**	**0.44 J**	**0.34 J**	< 1.0 U	**0.38 J**	**0.29 J**	< 1.0 U	< 1.0 U	**0.48 J**	**1.1**	**0.51 J**	**0.51 J**	< 1.0 U
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	**0.27 J**	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.9**	**1.8**	**0.50 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.057 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.063 J**	**0.057 J**	**2.9**	**2.2**	**1.5**	**1.0**	**1.0**	**0.96 J**	**4.4**	**4.8**	**4.8**	**0.82 J**	**0.62 J**	**1.3**	**11.6**
Vanadium	SW6020	ug/L	NE	8.6		**0.32 J**	**0.48 J**	**0.32 J**	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.5**	**0.79 J**	**0.63 J**	**0.31 J**	< 1.0 U	< 1.0 U	< 1.0 U
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
				Sample Depth (ft BGS)	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8
				Sample Date	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021
				Sample Type	N	N	N	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1									
Metals, Total													
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	**82.1 J**	**60.4 J**	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**488**	**497**	**587**	**512**	**337**	**702**	**710**	**710**	**729**
Boron	SW6010B	ug/L	NE	400	**366**	**366**	**527**	**514**	**489**	**216**	**219**	**186**	**189**
Calcium	SW6010B	ug/L	NE	NE	**226,000**	**227,000**	**190,000**	**186,000**	**193,000**	**235,000**	**235,000**	**229,000**	**233,000**
Cobalt	SW6010B	ug/L	NE	0.6	**11.6**	**11.9**	**2.4 J**	**11.2**	**8.6**	**1.8 J**	**2.2 J**	**2.4 J**	**2.4 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**794,000**	**798,000**	**721,000**	**725,000**	**758,000**	**828,000**	**831,000**	**826,000**	**844,000**
Iron	SW6010B	ug/L	NE	1,400	**3,310**	**3,140**	**33,100**	**49,600**	**95,800**	**70,700**	**71,200**	**66,400**	**68,400**
Lithium	SW6010B	ug/L	NE	4	**28.9**	**21.2**	**9.9 J**	**14.9 J**	**12.2 J**	**30.7**	**29.7**	**24.7**	**24.0**
Magnesium	SW6010B	ug/L	NE	NE	**55,500**	**56,100**	**59,900**	**63,400**	**67,000**	**58,400**	**59,200**	**62,000**	**63,800**
Manganese	SW6010B	ug/L	NE	43	**356**	**344**	**1,910**	**6,770**	**8,310**	**1,200**	**1,210**	**950**	**970**
Molybdenum	SW6010B	ug/L	NE	10	**11.5**	**11.2**	**4.1 J**	**19.0**	**125**	< 10.0 U	**0.54 J**	**0.82 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**26.7**	**27.3**	**11.0**	**37.0**	**82.0**	**10.4**	**10.2**	**9.0 J**	**8.9 J**
Potassium	SW6010B	ug/L	NE	NE	**7,600**	**7,770**	**8,180**	**9,130**	**7,690**	**4,380**	**4,430**	**4,040**	**4,130**
Silicon	SW6010B	ug/L	NE	NE	**13,800**	**11,800**	**18,200**	**19,000**	**15,800**	**26,100**	**26,500**	**28,100**	**28,100**
Sodium	SW6010B	ug/L	NE	20,000	**53,100**	**53,500**	**45,200**	**45,200**	**44,200**	**44,500**	**44,900**	**40,000**	**40,800**
Strontium	SW6010B	ug/L	NE	1,200	**950**	**937**	**1,130**	**1,030**	**1,160**	**663**	**667**	**672**	**688**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	**2.0 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**10.4 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**2.2**	**2.1**	**136**	**215**	**526**	**80.8**	**81.7**	**80.3**	**81.1**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Copper	SW6020	ug/L	1,300	80	**0.35 J**	**0.67 J**	**0.81 J**	**1.5**	**1.5**	**1.1**	**0.64 J**	**0.49 J**	**0.47 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	**0.065 J**	**0.14 J**	< 1.0 U	**0.18 J**	**0.18 J**	**0.14 J**	**0.14 J**
Selenium	SW6020	ug/L	50	10	**0.28 J**	< 1.0 U	< 1.0 U	**0.31 J**	**0.58 J**	**0.43 J**	**0.78 J**	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**10.5**	**10.8**	**0.55 J**	**6.9**	**5.2**	**0.018 J**	**0.018 J**	**0.030 J**	**0.029 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	**1.7**	**2.4**	**1.8**	**1.2**	**1.4**	**1.1**	**1.2**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.0 J-**	< 5.0 U	< 5.0 U	**9.9 J**	< 10 U

Notes and definitions are presented on Page 24

Table 12e: Validated Groundwater Data—Total Metals
West Lake Landfill OU-3
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			Sample Location	PZ-303-AS
			Sample Depth (ft BGS)	16-25.8
			Sample Date	08-24-2021
			Sample Type	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	
Metals, Total					
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U
Barium	SW6010B	ug/L	2,000	380	**758**
Boron	SW6010B	ug/L	NE	400	**210**
Calcium	SW6010B	ug/L	NE	NE	**238,000**
Cobalt	SW6010B	ug/L	NE	0.6	**2.5 J**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**851,000**
Iron	SW6010B	ug/L	NE	1,400	**74,100**
Lithium	SW6010B	ug/L	NE	4	**21.9**
Magnesium	SW6010B	ug/L	NE	NE	**62,300**
Manganese	SW6010B	ug/L	NE	43	**1,240**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE	**4,380**
Silicon	SW6010B	ug/L	NE	NE	**25,200**
Sodium	SW6010B	ug/L	NE	20,000	**42,400**
Strontium	SW6010B	ug/L	NE	1,200	**694**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**76.3**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U
Chromium (VI)	SW7199	ug/L	100	0.035	< 0.100 U
Chromium (III)	CALC	ug/L	100	2,200	< 10 U
Copper	SW6020	ug/L	1,300	80	**0.83 J**
Lead	SW6020	ug/L	15	15	**0.20 J**
Selenium	SW6020	ug/L	50	10	**0.65 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.027 J**
Vanadium	SW6020	ug/L	NE	8.6	**1.5**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	< 5.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 24

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13	D-81	D-81
			Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133	45-60	45-60
			Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021	03-09-2021	05-05-2021
			Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.16 J**	**0.15 J**	**0.19 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**7.4**	**5.2**	**8.6**	**0.28 J**	**0.25 J**	**0.24 J**	**0.25 J**	**0.42 J**	**0.41 J**	**0.39 J**	**0.35 J**	**0.20 J**	< 1.0 U	**0.22 J**	**8.6**	**9.3**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	**0.025 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.18 J**	**0.18 J**	**0.16 J**	**0.16 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.78 J**	< 2.0 U	< 2.0 U	**0.39 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.68 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.20 J**	< 2.0 U	< 2.0 U	**0.20 J**
Copper	SW6020	ug/L	1,300	80	**0.55 J**	**0.53 J**	< 1.0 U	**0.52 J**	**0.39 J**	< 1.0 U	< 1.0 U	**0.98 J**	**0.81 J**	< 1.0 U	< 1.0 U	**0.38 J**	**0.25 J**	< 1.0 U	**0.42 J**	**0.41 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	**0.15 J**	< 1.0 U	**0.24 J**	**0.21 J**	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.14 J**	**0.14 J**	**0.11 J**	**0.23 J**	**0.20 J**	**0.21 J**	**0.20 J**	**0.24 J**	**0.23 J**	**0.26 J**	**0.25 J**	**0.065 J**	**0.062 J**	**0.067 J**	**3.9**	**3.3**
Vanadium	SW6020	ug/L	NE	8.6	**0.48 J**	**0.57 J**	**0.49 J**	< 1.0 U	**0.22 J**	**0.20 J**	**0.21 J**	**0.42 J**	**0.58 J**	**0.46 J**	**0.50 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**135 J**	**153 J**	**144 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**2,400**	**2,330**	**2,610**	**1,150**	**1,170**	**1,250**	**1,230**	**756**	**831**	**844**	**862**	**543**	**526**	**518**	**379**	**356**
Boron	SW6010B	ug/L	NE	400	**1,250**	**1,280**	**1,240**	**782**	**773**	**710**	**692**	**822**	**795**	**808**	**832**	**138**	**136**	**134**	**133**	**128**
Calcium	SW6010B	ug/L	NE	NE	**170,000**	**179,000**	**184,000**	**174,000**	**174,000**	**179,000**	**175,000**	**340,000**	**324,000**	**322,000**	**331,000**	**119,000**	**118,000**	**112,000**	**183,000**	**180,000**
Cobalt	SW6010B	ug/L	NE	0.6	**2.5 J**	**2.8 J**	**3.0 J**	**1.2 J**	**1.4 J**	**1.6 J**	**1.4 J**	**1.4 J**	**1.6 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**6.6**	**6.5**
Iron	SW6010B	ug/L	NE	1,400	**32,600**	**30,000**	**36,200**	**12,400**	**12,500**	**13,100**	**12,800**	**11,100**	**11,600**	**11,200**	**11,500**	**10,100**	**9,790**	**9,240**	**15,800**	**16,300**
Lithium	SW6010B	ug/L	NE	4	**32.5**	**35.4**	**33.0**	**31.5**	**34.1**	**33.0**	**33.3**	**24.2**	**31.1**	**32.2**	**33.6**	**17.5 J**	**22.4**	**21.3**	**27.0**	**25.8**
Magnesium	SW6010B	ug/L	NE	NE	**59,300**	**62,500**	**62,000**	**45,300**	**45,700**	**44,200**	**43,200**	**48,200**	**47,600**	**47,300**	**48,400**	**26,200**	**25,500**	**23,800**	**42,700**	**42,300**
Manganese	SW6010B	ug/L	NE	43	**369**	**303**	**390**	**416**	**422**	**416**	**409**	**496**	**481**	**491**	**503**	**308**	**290**	**277**	**1,320**	**1,380**
Molybdenum	SW6010B	ug/L	NE	10	**0.71 J**	< 10.0 U	**1.0 J**	**1.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.50 J**	**0.72 J**	**0.94 J**	< 10.0 U	**0.75 J**	**2.4 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**11.0**	**10.4**	**9.4 J**	**6.0 J**	**7.2 J**	**5.4 J**	**5.5 J**	**3.3 J**	**4.0 J**	**4.9 J**	**5.7 J**	**4.9 J**	**7.2 J**	**11.0**	**12.3**	**12.1**
Potassium	SW6010B	ug/L	NE	NE	**30,000**	**28,100**	**33,500**	**13,200**	**13,300**	**13,500**	**13,200**	**10,000**	**9,820**	**10,300**	**10,600**	**5,570**	**5,690**	**5,720**	**4,150**	**3,830**
Silicon	SW6010B	ug/L	NE	NE	**16,700**	**17,500**	**17,400**	**13,400**	**13,400**	**13,200**	**12,600**	**13,700**	**13,500**	**13,200**	**12,700**	**12,200**	**12,500**	**11,700**	**14,000**	**14,300**
Sodium	SW6010B	ug/L	NE	20,000	**232,000**	**246,000**	**224,000**	**99,500**	**101,000**	**92,900**	**90,800**	**114,000**	**111,000**	**116,000**	**119,000**	**71,400**	**75,600**	**80,300**	**11,600**	**10,300**
Strontium	SW6010B	ug/L	NE	1,200	**838**	**798**	**833**	**590**	**578**	**603**	**592**	**876**	**857**	**836**	**858**	**287**	**292**	**280**	**654**	**575**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.8 J**	**1.4 J**	**1.1 J**	**1.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	**0.11 J**	**0.099 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89	D-89	D-89	D-89
			Sample Depth (ft BGS)	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48	33-48	33-48	33-48
			Sample Date	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021	05-19-2021	05-19-2021
			Sample Type	N	N	N	N	N	N	N	FD	N	N	N	FD	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.080 J**	**0.094 J**	< 1.0 U	< 1.0 U	**0.16 J**	**0.14 J**	**0.45 J**	**0.44 J**	**0.46 J**	**0.46 J**
Arsenic	SW6020	ug/L	10	0.052	**8.6**	**0.70 J**	**0.54 J**	**0.24 J**	**31.8**	**31.9**	**32.4**	**31.6**	**1.5**	**1.8**	**1.5**	**1.6**	**46.4**	**47.0**	**54.8**	**55.7**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	**0.44 J**	< 2.0 U	< 2.0 U	**0.22 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.51 J**	< 2.0 U	< 2.0 U	**10.3**	**10.1**	**11.4**	**11.1**
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.39 J**	**0.33 J**	< 1.0 U	**0.62 J**	**0.40 J**	< 1.0 U	< 1.0 U	**0.53 J**	**0.42 J**	< 1.0 U	< 1.0 U	**1.1**	**1.1**	**0.74 J**	**0.68 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.51 J**	**0.76 J**	**0.49 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.090 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**2.9**	**0.019 J**	**0.025 J**	**0.029 J**	**0.092 J**	**0.081 J**	**0.083 J**	**0.086 J**	**0.20 J**	**0.21 J**	**0.19 J**	**0.20 J**	**0.13 J**	**0.13 J**	**0.11 J**	**0.12 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.18 J**	**0.24 J**	**0.32 J**	**0.32 J**	**7.7**	**7.0**	**8.2**	**7.9**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**351**	**996**	**925**	**762**	**1,520**	**1,560**	**1,550**	**1,550**	**1,320**	**1,430**	**1,450**	**1,470**	**1,970**	**1,960**	**2,130**	**2,130**
Boron	SW6010B	ug/L	NE	400	**125**	**367**	**328**	**190**	**185**	**185**	**187**	**184**	**958**	**1,140**	**1,070**	**1,100**	**2,240**	**2,230**	**2,620**	**2,580**
Calcium	SW6010B	ug/L	NE	NE	**163,000**	**65,600**	**70,200**	**72,000**	**225,000**	**228,000**	**220,000**	**223,000**	**182,000**	**185,000**	**193,000**	**197,000**	**462,000**	**453,000**	**448,000**	**447,000**
Cobalt	SW6010B	ug/L	NE	0.6	**6.3**	< 5.0 U	< 5.0 U	< 5.0 U	**1.8 J**	**2.5 J**	**2.0 J**	**2.0 J**	**1.2 J**	**1.4 J**	**2.5 J**	**2.4 J**	**18.2**	**17.6**	**21.5**	**21.4**
Iron	SW6010B	ug/L	NE	1,400	**15,400**	**10,400**	**10,200**	**9,200**	**39,500**	**39,700**	**40,700**	**40,000**	**23,100**	**24,400**	**24,100**	**24,600**	**73,400**	**73,400**	**76,700**	**76,200**
Lithium	SW6010B	ug/L	NE	4	**18.1 J-**	**16.0 J**	**23.0**	< 20.0 U	**24.3**	**30.4**	**23.5**	**22.7**	**29.5**	**33.0**	**33.7**	**34.0**	**50.4**	**53.2**	**62.2**	**60.9**
Magnesium	SW6010B	ug/L	NE	NE	**37,900**	**22,400**	**26,700**	**30,900**	**54,600**	**54,500**	**55,600**	**54,300**	**47,800**	**52,200**	**50,100**	**51,300**	**166,000**	**164,000**	**172,000**	**170,000**
Manganese	SW6010B	ug/L	NE	43	**1,160**	**259**	**276**	**282**	**670**	**681**	**656**	**646**	**316**	**328**	**331**	**338**	**2,510**	**2,490**	**2,740**	**2,720**
Molybdenum	SW6010B	ug/L	NE	10	**3.0 J**	**0.74 J**	< 10.0 U	**0.58 J**	**1.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.63 J**	**0.62 J**	**3.3 J**	**3.2 J**	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**10.4**	< 10.0 U	**1.5 J**	**1.3 J**	**3.8 J**	**5.3 J**	**6.1 J**	**5.4 J**	**4.5 J**	**4.8 J**	**6.1 J**	**6.2 J**	**133**	**131**	**166**	**167**
Potassium	SW6010B	ug/L	NE	NE	**3,690**	**32,400**	**31,400**	**31,000**	**7,540**	**7,600**	**7,670**	**7,570**	**17,200**	**18,600**	**18,600**	**19,100**	**32,200**	**32,200**	**37,000**	**37,100**
Silicon	SW6010B	ug/L	NE	NE	**13,300**	**13,900**	**14,700**	**13,600**	**19,200**	**20,500**	**18,800**	**18,600**	**17,000**	**17,300**	**15,400**	**15,500**	**12,800 J**	**23,500 J**	**27,200**	**23,200**
Sodium	SW6010B	ug/L	NE	20,000	**9,950**	**51,900**	**47,200**	**46,700**	**176,000**	**181,000**	**181,000**	**177,000**	**157,000**	**168,000**	**176,000**	**178,000**	**428,000**	**428,000**	**466,000**	**464,000**
Strontium	SW6010B	ug/L	NE	1,200	**545**	**400**	**423**	**415**	**566**	**600**	**571**	**572**	**578**	**584**	**568**	**579**	**2,160**	**2,150**	**2,220**	**2,210**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**5.6 J**	**5.7 J**	**9.0 J**	**9.1 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**17.3 J**	**9.8 J**	**9.9 J**	**9.3 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11	I-11	I-62	I-62	I-62
			Sample Depth (ft BGS)	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44
			Sample Date	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021
			Sample Type	N	N	FD	N	FD	N	N	N	N	FD	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.47 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.061 J**	< 1.0 U	**0.15 J**	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**55.3**	**0.72 J**	**0.69 J**	**0.54 J**	**0.57 J**	**0.52 J**	**27.7**	**31.2**	**28.9**	**29.0**	**10.1**	**10.8**	**12.0**	**12.0**	**11.4**	**10.6**
Beryllium	SW6020	ug/L	4	2.5	**0.048 J**	< 0.20 U	**0.022 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**11.5**	< 2.0 U	< 2.0 U	**0.60 J**	**0.60 J**	< 2.0 U	< 2.0 U	**0.82 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.41 J**	< 2.0 U	< 2.0 U	**0.14 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**1.4**	**0.74 J**	**0.63 J**	**0.50 J**	**0.49 J**	< 1.0 U	**0.67 J**	**0.57 J**	< 1.0 U	< 1.0 U	**0.43 J**	**0.39 J**	< 1.0 U	**0.33 J**	**0.24 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.76 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	**0.13 J**	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	**0.50 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**
Uranium	SW6020	ug/L	30	0.4	**0.11 J**	**0.33 J**	**0.32 J**	**0.26 J**	**0.27 J**	**0.25 J**	**0.16 J**	**0.16 J**	**0.18 J**	**0.19 J**	**1.1**	**1.1**	**1.2**	**0.28 J**	**0.31 J**	**0.27 J**
Vanadium	SW6020	ug/L	NE	8.6	**8.0**	**0.25 J**	**0.29 J**	**0.28 J**	**0.32 J**	**0.17 J**	**0.34 J**	**0.39 J**	**0.45 J**	**0.36 J**	< 1.0 U	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**2,000**	**1,580**	**1,610**	**1,780**	**1,760**	**1,930**	**2,070**	**2,090**	**2,050**	**1,970**	**960**	**896**	**962**	**358**	**377**	**357**
Boron	SW6010B	ug/L	NE	400	**2,460**	**1,440**	**1,460**	**1,470**	**1,450**	**1,340**	**2,090**	**2,160**	**1,910**	**1,870**	**912**	**905**	**856**	**102**	**110**	**109**
Calcium	SW6010B	ug/L	NE	NE	**431,000**	**236,000**	**238,000**	**254,000**	**258,000**	**249,000**	**257,000**	**272,000**	**273,000**	**272,000**	**165,000**	**163,000**	**171,000**	**99,300**	**108,000**	**104,000**
Cobalt	SW6010B	ug/L	NE	0.6	**21.0**	**3.0 J**	**2.9 J**	**2.7 J**	**2.7 J**	**3.5 J**	**2.7 J**	**2.2 J**	**3.1 J**	**2.8 J**	**1.6 J**	**1.8 J**	**2.1 J**	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**80,300**	**16,900**	**17,200**	**17,900**	**17,400**	**17,300**	**41,600**	**42,700**	**41,400**	**40,200**	**17,000**	**16,400**	**16,900**	**7,420**	**7,680**	**6,380**
Lithium	SW6010B	ug/L	NE	4	**50.9**	**42.5**	**43.6**	**46.5**	**48.6**	**45.4**	**53.5**	**56.7**	**55.4**	**51.8**	**24.6**	**31.9**	**34.0**	**13.1 J**	**20.7**	**19.8 J**
Magnesium	SW6010B	ug/L	NE	NE	**156,000**	**61,700**	**62,700**	**65,800**	**63,800**	**61,700**	**77,400**	**78,900**	**75,900**	**73,400**	**57,200**	**56,700**	**54,200**	**19,000**	**21,000**	**19,300**
Manganese	SW6010B	ug/L	NE	43	**2,550**	**390**	**396**	**417**	**404**	**378**	**434**	**454**	**432**	**419**	**542**	**539**	**536**	**582**	**591**	**475**
Molybdenum	SW6010B	ug/L	NE	10	**3.3 J**	**0.72 J**	**0.71 J**	< 10.0 U	< 10.0 U	< 10.0 U	**2.5 J**	< 10.0 U	**2.3 J**	**2.2 J**	**1.9 J**	< 10.0 U	**2.0 J**	**3.9 J**	< 10.0 U	**3.3 J**
Nickel	SW6010B	ug/L	NE	39	**163**	**9.2 J**	**8.8 J**	**10.2**	**9.8 J**	**10.4**	**10.7**	**12.0**	**10.8**	**11.6**	**7.5 J**	**7.1 J**	**6.2 J**	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE	**34,800**	**14,400**	**14,600**	**15,000**	**14,600**	**15,100**	**25,900**	**26,200**	**25,500**	**24,600**	**15,700**	**15,000**	**14,900**	**7,790**	**7,960**	**8,240**
Silicon	SW6010B	ug/L	NE	NE	**26,500**	**15,500**	**15,600**	**16,500**	**16,300**	**13,600**	**19,200**	**20,300**	**17,800**	**17,800**	**13,000**	**13,100**	**12,600**	**13,400**	**14,200**	**13,300**
Sodium	SW6010B	ug/L	NE	20,000	**448,000**	**211,000**	**211,000**	**218,000**	**222,000**	**221,000**	**216,000**	**227,000**	**223,000**	**219,000**	**104,000**	**104,000**	**106,000**	**27,800**	**28,400**	**28,100**
Strontium	SW6010B	ug/L	NE	1,200	**2,010**	**843**	**855**	**899**	**884**	**844**	**1,050**	**1,100**	**1,050**	**1,010**	**1,060**	**1,060**	**1,120**	**372**	**396**	**394**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**6.6 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68	I-68	I-73	I-73	I-73	I-73
			Sample Depth (ft BGS)	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2
			Sample Date	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.14 J**	**0.16 J**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	**0.29 J**	**0.36 J**	**0.34 J**	**0.33 J**	**0.31 J**	**0.35 J**
Arsenic	SW6020	ug/L	10	0.052	**0.98 J**	**0.84 J**	**0.81 J**	**1.5**	**1.4**	**2.2**	**2.1**	**2.4**	**3.0**	**0.76 J**	**0.73 J**	**0.84 J**	**302**	**302**	**323**	**314**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	**0.16 J**	**0.097 J**	**0.14 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.82**	**0.64**	**0.77**	**0.11 J**	**0.099 J**	**0.079 J**	**0.091 J**
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.26 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**19.1**	**19.0**	**19.9**	**19.8**
Copper	SW6020	ug/L	1,300	80	**0.70 J**	**0.64 J**	< 1.0 U	**0.54 J**	< 1.0 U	< 1.0 U	**0.62 J**	< 1.0 U	< 1.0 U	**0.95 J**	< 1.0 U	< 1.0 U	**0.75 J**	**0.65 J**	**0.61 J**	**0.59 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	**0.034 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.038 J**	**2.4**	**2.4**	**2.0**	**2.2**
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.4**	**1.6**	**2.5**	**0.61 J**	**0.69 J**	**0.61 J**	**0.47 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	**0.046 J**	**0.031 J**	**0.040 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.032 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**2.0**	**2.3**	**2.1**	**4.6**	**4.7**	**4.0**	**1.8**	**1.5**	**1.5**	**2.9**	**2.9**	**3.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	**0.23 J**	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.55 J**	**0.41 J**	**0.37 J**	**1.7**	**1.6**	**1.8**	**15.5**	**15.5**	**16.1**	**15.8**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**277**	**276**	**263**	**150**	**147**	**148**	**295**	**307**	**328**	**289**	**306**	**342**	**3,580**	**3,550**	**3,790**	**3,780**
Boron	SW6010B	ug/L	NE	400	**147**	**131**	**126**	**433**	**411**	**421**	**223**	**208**	**200**	**59.7 J**	**49.4 J**	**54.4 J**	**1,890**	**1,890**	**1,950**	**1,940**
Calcium	SW6010B	ug/L	NE	NE	**154,000**	**160,000**	**142,000**	**175,000**	**172,000**	**164,000**	**198,000**	**208,000**	**213,000**	**221,000**	**237,000**	**253,000**	**49,900**	**49,700**	**53,500**	**52,400**
Cobalt	SW6010B	ug/L	NE	0.6	**1.7 J**	**1.1 J**	**1.2 J**	**3.2 J**	**3.3 J**	**3.8 J**	< 5.0 U	< 5.0 U	< 5.0 U	**7.8**	**5.7**	**7.1**	**28.8**	**28.3**	**34.2**	**34.1**
Iron	SW6010B	ug/L	NE	1,400	< 50.0 U	< 50.0 U	< 50.0 U	**400**	**508**	**903**	**10,400**	**12,200**	**12,900**	< 50.0 U	< 50.0 U	< 50.0 U	**54,800**	**54,000**	**62,000**	**61,600**
Lithium	SW6010B	ug/L	NE	4	**14.4 J**	**16.1 J**	**13.0 J**	**29.3**	**28.6**	**28.8**	**22.9**	**24.5**	**23.7**	**16.5 J**	**15.9 J**	**18.3 J**	**161**	**157**	**159**	**158**
Magnesium	SW6010B	ug/L	NE	NE	**17,600**	**19,200**	**17,300**	**14,900**	**14,900**	**14,400**	**34,000**	**34,700**	**36,400**	**41,100**	**46,300**	**50,000**	**62,100**	**61,500**	**74,700**	**74,000**
Manganese	SW6010B	ug/L	NE	43	**180**	**77.1**	**183**	**1,710**	**1,820**	**2,100**	**1,530**	**1,380**	**1,430**	**2,580**	**1,390**	**2,030**	**250**	**245**	**295**	**285**
Molybdenum	SW6010B	ug/L	NE	10	**3.6 J**	< 10.0 U	**3.7 J**	**2.8 J**	< 10.0 U	**3.0 J**	**2.7 J**	< 10.0 U	**1.8 J**	**1.0 J**	< 10.0 U	**1.2 J**	**6.7 J**	**7.0 J**	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**5.9 J**	**6.6 J**	**6.4 J**	**8.5 J**	**8.4 J**	**7.3 J**	< 10.0 U	< 10.0 U	< 10.0 U	**17.5**	**14.4**	**17.6**	**536**	**530**	**567**	**565**
Potassium	SW6010B	ug/L	NE	NE	**8,740**	**8,410**	**8,370**	**5,860**	**5,650**	**5,550**	**6,810**	**6,550**	**6,560**	**3,600**	**3,450**	**3,560**	**244,000**	**244,000**	**254,000**	**253,000**
Silicon	SW6010B	ug/L	NE	NE	**8,400**	**8,170**	**7,750**	**11,300**	**10,800**	**9,940**	**14,700**	**14,300**	**14,600**	**11,600**	**11,600**	**11,000**	**9,130**	**6,810**	**16,000**	**15,000**
Sodium	SW6010B	ug/L	NE	20,000	**95,300**	**87,200**	**111,000**	**97,800**	**102,000**	**95,200**	**64,300**	**60,100**	**56,300**	**87,400**	**90,800**	**96,000**	**216,000**	**216,000**	**220,000**	**219,000**
Strontium	SW6010B	ug/L	NE	1,200	**615**	**619**	**568**	**851**	**789**	**724**	**763**	**723**	**713**	**580**	**598**	**648**	**1,360**	**1,340**	**1,480**	**1,480**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**9.4 J**	**9.9 J**	**6.5 J**	**5.7 J**
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**8.4 J**	**9.0 J**	**9.0 J**	**9.1 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**119**	**115**	**86.1**	**85.0**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3
			Sample Depth (ft BGS)	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-	-	-	-	39-49	39-49	54-64	54-64	79-89
			Sample Date	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	05-06-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.33 J**	**0.14 J**	**0.14 J**	**0.14 J**	< 1.0 U	< 1.0 U	**0.15 J**	**0.22 J**	**0.31 J**	**0.22 J**	**0.32 J**	**0.22 J**	**0.20 J**	**0.13 J**	**1.1**
Arsenic	SW6020	ug/L	10	0.052	**320**	**1.4**	**1.3**	**1.4**	**0.53 J**	**0.48 J**	**1.6**	**3.7**	**2.7**	**1.4**	**4.7**	**5.1**	**4.2**	**4.6**	**3.2**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.025 J**	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	**0.085 J**	**0.033 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**18.1**	< 2.0 U	**1.2 J**	< 2.0 U	**0.24 J**	< 2.0 U	**0.44 J**	**3.0**	**0.16 J**	< 2.0 U	**0.31 J**	< 2.0 U	**0.36 J**	< 2.0 U	**0.72 J**
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.38 J**	**0.21 J**	< 1.0 U	**0.27 J**	< 1.0 U	**0.26 J**	< 1.0 U	**0.27 J**	< 1.0 U	**0.39 J**	< 1.0 U	**0.44 J**	< 1.0 U	**0.45 J**
Lead	SW6020	ug/L	15	15	**1.9**	**0.10 J**	**0.12 J**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.057 J**	< 1.0 U	< 1.0 U	**0.071 J**	< 1.0 U
Selenium	SW6020	ug/L	50	10	**1.2**	< 1.0 U	< 1.0 U	**0.38 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.53 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**5.8**	**5.2**	**1.8**	**1.4**	**3.4**	**2.0**	**2.4**	**1.0**	**0.84 J**	**0.59 J**	**1.0**
Vanadium	SW6020	ug/L	NE	8.6	**13.1**	**0.56 J**	**0.67 J**	**0.58 J**	**0.70 J**	**0.69 J**	< 1.0 U	**2.9**	**0.25 J**	< 1.0 U	**0.47 J**	**1.1**	**0.88 J**	**1.2**	**1.4**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**3,610**	**433**	**451**	**419**	**212**	**201**	**481**	**573**	**152**	**151**	**498**	**783**	**970**	**937**	**865**
Boron	SW6010B	ug/L	NE	400	**1,780**	**1,570**	**1,640**	**1,560**	**239**	**228**	**158**	**558**	**109**	**111**	**198**	**388**	**430**	**492**	**822**
Calcium	SW6010B	ug/L	NE	NE	**54,000**	**126,000**	**130,000**	**126,000**	**89,600**	**89,200**	**76,400**	**126,000**	**78,700**	**81,700**	**188,000**	**188,000**	**230,000**	**222,000**	**149,000**
Cobalt	SW6010B	ug/L	NE	0.6	**37.8**	**0.96 J**	**1.5 J**	**1.4 J**	< 5.0 U	< 5.0 U	**0.41 J**	**1.3 J**	< 5.0 U	< 5.0 U	**4.7 J**	**2.6 J**	**0.60 J**	**2.4 J**	**2.4 J**
Iron	SW6010B	ug/L	NE	1,400	**68,300**	**18,700**	**20,000**	**20,300**	< 50.0 U	**95.6**	**650**	**4,840**	**670**	**739**	**17,100**	**24,300**	**34,500**	**32,400**	**16,000**
Lithium	SW6010B	ug/L	NE	4	**135**	**18.6 J**	**23.3**	**17.5 J**	**44.2**	**41.2**	**31.6**	**34.2**	**30.5**	**27.4**	**42.1**	**37.3**	**50.0**	**39.3**	**50.9**
Magnesium	SW6010B	ug/L	NE	NE	**96,000**	**56,300**	**61,400**	**57,200**	**30,700**	**28,200**	**39,000**	**63,900**	**50,600**	**49,700**	**50,000**	**51,800**	**61,000**	**60,000**	**45,600**
Manganese	SW6010B	ug/L	NE	43	**298**	**192**	**208**	**212**	**576**	**533**	**366**	**474**	**99.6**	**79.0**	**2,250**	**1,320**	**1,770**	**1,420**	**818**
Molybdenum	SW6010B	ug/L	NE	10	**5.9 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**6.8 J**	**11.9**	**12.0**	**52.3**	**35.0**	< 10.0 U	**2.1 J**	< 10.0 U	**1.5 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**575**	**14.9**	**16.6**	**14.7**	**2.2 J**	**2.8 J**	**4.1 J**	**16.7**	**4.1 J**	**2.4 J**	**8.4 J**	**8.2 J**	**6.7 J**	**9.7 J**	**15.4**
Potassium	SW6010B	ug/L	NE	NE	**247,000**	**63,900**	**65,500**	**58,400**	**3,280**	**3,410**	**3,640**	**8,240**	**2,740**	**2,660**	**6,680**	**7,740**	**8,180**	**8,490**	**12,400**
Silicon	SW6010B	ug/L	NE	NE	**32,000**	**10,800**	**10,900**	**10,200**	**7,020**	**6,400**	**9,390**	**13,200**	**5,820**	**5,650**	**16,200**	**13,500**	**16,900**	**14,200**	**12,500**
Sodium	SW6010B	ug/L	NE	20,000	**184,000**	**130,000**	**144,000**	**119,000**	**14,800**	**17,800**	**106,000**	**228,000**	**24,000**	**23,400**	**108,000**	**142,000**	**105,000**	**141,000**	**277,000**
Strontium	SW6010B	ug/L	NE	1,200	**1,560**	**544**	**548**	**512**	**484**	**483**	**1,050**	**1,390**	**2,680**	**2,900**	**1,960**	**2,520**	**1,880**	**2,430**	**2,730**
Tin	SW6010B	ug/L	NE	1,200	**8.4 J**	< 10.0 U	**2.2 J**	**2.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	**0.86 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**102**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**9.3 J**	< 20.0 U	**33.6**	**38.2**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**15.2 J**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.085 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

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USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location		MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204
			Sample Depth (ft BGS)		79-89	45-55	70-80	90-100	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5
			Sample Date		08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021
			Sample Type		N	N	N	N	N	N	N	N	FD	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.20 J**	**0.26 J**	**0.19 J**	**0.22 J**	**0.060 J**	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	**0.069 J**	**0.15 J**	**0.11 J**	**0.16 J**	**0.15 J**	**0.11 J**
Arsenic	SW6020	ug/L	10	0.052	**3.5**	**1.3**	**2.3**	**2.5**	**1.4**	**179**	**257**	**4.9**	**5.0**	**12.1**	**3.1**	**3.1**	**3.1**	**3.1**	**2.7**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.026 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.078 J**	**0.071 J**	**0.072 J**	**0.073 J**	**0.086 J**
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.39 J**	< 2.0 U	**0.42 J**	**0.42 J**	< 2.0 U	**9.3**	**9.1**	**8.5**	**8.6**	**7.7**
Copper	SW6020	ug/L	1,300	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**	< 1.0 U	**0.42 J**	**0.44 J**	< 1.0 U	**1.0**	**1.0**	**0.96 J**	**1.3**	**1.1 J+**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**	**0.31 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.30 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.062 J**	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	**0.067 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.48 J**	**0.32 J**	**0.10 J**	**0.044 J**	**0.026 J**	**0.092 J**	**0.064 J**	**1.9**	**1.9**	**2.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	**1.9**	**1.2**	**1.9**	**2.2**	**0.25 J**	**1.1**	**0.73 J**	**0.90 J**	**1.0**	**1.1**	**3.6**	**3.5**	**3.3**	**3.5**	**3.2**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**1,500**	**1,570**	**1,910**	**2,670**	**209**	**1,270**	**1,200**	**990**	**968**	**1,150**	**7,970**	**7,870**	**7,640**	**7,660**	**7,600**
Boron	SW6010B	ug/L	NE	400	**1,230**	**525**	**998**	**2,020**	**97.6 J**	**249**	**232**	**449**	**440**	**439**	**1,070**	**1,080**	**1,120**	**1,130**	**1,040**
Calcium	SW6010B	ug/L	NE	NE	**198,000**	**185,000**	**212,000**	**216,000**	**78,800**	**185,000**	**192,000**	**247,000**	**245,000**	**282,000**	**221,000**	**221,000**	**232,000**	**233,000**	**223,000**
Cobalt	SW6010B	ug/L	NE	0.6	**5.9**	**1.4 J**	**2.0 J**	**5.2**	< 5.0 U	< 5.0 U	< 5.0 U	**0.65 J**	< 5.0 U	**0.88 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**22,300**	**33,200**	**43,900**	**48,800**	**3,800**	**63,400**	**61,600**	**30,500**	**30,100**	**25,900**	**12,100**	**12,200**	**12,300**	**12,300**	**11,800**
Lithium	SW6010B	ug/L	NE	4	**46.8**	**35.0**	**40.8**	**42.9**	**27.7**	**26.7**	**16.1 J**	**36.2**	**34.0**	**23.0**	**53.2**	**52.8**	**53.6**	**53.6**	**47.8**
Magnesium	SW6010B	ug/L	NE	NE	**68,600**	**54,500**	**60,000**	**63,200**	**39,400**	**66,400**	**66,100**	**60,600**	**59,900**	**69,300**	**89,000**	**90,300**	**95,600**	**94,800**	**89,600**
Manganese	SW6010B	ug/L	NE	43	**490**	**673**	**552**	**350**	**81.7**	**1,250**	**1,280**	**1,370**	**1,350**	**1,720**	**348**	**349**	**362**	**362**	**355**
Molybdenum	SW6010B	ug/L	NE	10	**1.2 J**	**0.58 J**	**1.3 J**	**2.4 J**	**1.1 J**	< 10.0 U	**8.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**24.0**	**7.9 J**	**7.5 J**	**18.8**	**1.6 J**	**2.0 J**	**2.1 J**	**6.6 J**	**7.1 J**	**9.6 J**	**9.2 J**	**9.8 J**	**10.1**	**10.0**	**8.6 J**
Potassium	SW6010B	ug/L	NE	NE	**15,800**	**19,600**	**21,500**	**35,300**	**3,550**	**12,700**	**11,200**	**7,940**	**7,790**	**7,900**	**30,700**	**30,600**	**30,300**	**30,300**	**28,900**
Silicon	SW6010B	ug/L	NE	NE	**14,700**	**16,800**	**19,300**	**19,100**	**6,280**	**21,800**	**19,600**	**16,100**	**15,900**	**16,900**	**10,300**	**10,400**	**10,900**	**11,000**	**10,000**
Sodium	SW6010B	ug/L	NE	20,000	**416,000**	**109,000**	**187,000**	**364,000**	**41,500**	**89,400**	**88,300**	**98,000**	**95,800**	**63,100**	**258,000**	**256,000**	**263,000 J-**	**263,000**	**244,000**
Strontium	SW6010B	ug/L	NE	1,200	**4,740**	**840**	**855**	**1,000**	**1,500**	**940**	**891**	**718**	**703**	**794**	**2,620**	**2,620**	**2,570**	**2,580**	**2,460**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2
			Sample Depth (ft BGS)	160-170	160-170	50-60	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136
			Sample Date	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	**0.066 J**	< 1.0 U	**0.28 J**	**0.27 J**	**0.15 J**	**0.12 J**	**0.25 J**	**0.20 J**	**0.19 J**	**0.22 J**	**0.19 J**	**0.11 J**	**0.11 J**
Arsenic	SW6020	ug/L	10	0.052	**1.7**	**1.0**	**1.9**	**0.38 J**	**4.2**	**5.1**	**12.2**	**16.7**	**1.6**	**1.7**	**0.84 J**	**0.77 J**	**0.98 J**	**0.47 J**	**0.41 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**0.86 J**	< 2.0 U	< 2.0 U	< 2.0 U	**4.4**	**4.3**	**0.43 J**	< 2.0 U	**2.5**	**2.4**	**1.5 J**	**1.3 J**	< 2.0 U	**0.83 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.34 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.67 J**	**1.2 J+**	**0.55 J**	< 1.0 U	**0.79 J**	< 1.0 U	**0.58**	**0.60 J**	**1.3**	**0.46 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	**0.75 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.60 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.051 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**3.7**	**0.93 J**	**0.34 J**	**0.094 J**	**0.060 J**	**0.040 J**	**0.055 J**	**0.056 J**	**0.032 J**	**0.022 J**	**0.13 J**	**0.13 J**	**0.093 J**	**0.13 J**	**0.11 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	**0.28 J**	**0.21 J**	< 1.0 U	**7.5**	**6.1**	**0.42 J**	**0.32 J**	**1.7**	**1.7**	**1.1**	**1.1**	**1.2**	**0.63 J**	**0.62 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**62.7**	**82.4**	**484**	**550**	**1,960**	**1,830**	**1,200**	**1,020**	**2,840**	**2,430**	**2,060**	**1,980**	**2,380**	**1,220**	**713**
Boron	SW6010B	ug/L	NE	400	**122**	**133**	**91.5 J**	**83.2 J**	**1,450**	**1,220**	**352**	**330**	**978**	**1,020**	**706**	**689**	**745**	**499**	**435**
Calcium	SW6010B	ug/L	NE	NE	**106,000**	**96,200**	**168,000**	**150,000**	**417,000**	**392,000**	**218,000**	**216,000**	**369,000**	**373,000**	**348,000**	**338,000**	**345,000**	**227,000**	**191,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**4.3 J**	**3.6 J**	< 5.0 U	**0.48 J**	**2.9 J**	**2.4 J**	**2.3 J**	**2.3 J**	**2.9 J**	**1.3 J**	**1.5 J**
Iron	SW6010B	ug/L	NE	1,400	**6,030**	**4,190**	**19,800**	**15,500**	**103,000**	**89,600**	**40,700**	**44,100**	**58,500**	**50,200**	**31,100**	**29,000**	**29,300**	**16,300**	**11,300**
Lithium	SW6010B	ug/L	NE	4	**32.5**	**28.7**	**17.0 J**	**28.8**	**43.3**	**28.2**	**42.0**	**27.2 J-**	**47.7**	**34.5**	**48.9**	**49.5**	**46.8**	**46.8**	**38.7**
Magnesium	SW6010B	ug/L	NE	NE	**43,700**	**40,800**	**40,300**	**39,000**	**131,000**	**118,000**	**67,700**	**66,500**	**113,000**	**111,000**	**90,700**	**89,000**	**93,100**	**69,300**	**62,000**
Manganese	SW6010B	ug/L	NE	43	**113**	**99.3**	**680**	**422**	**2,530**	**2,440**	**719**	**786**	**818**	**1,040**	**375**	**363**	**355**	**271**	**276**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.2 J**	< 10.0 U	**3.9 J**	< 10.0 U	**0.78 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**3.2 J**	**2.5 J**	< 10.0 U	**1.2 J**	**81.5**	**88.3**	**9.3 J**	**9.3 J**	**77.4**	**74.9**	**35.5**	**34.9**	**38.8**	**20.3**	**14.2**
Potassium	SW6010B	ug/L	NE	NE	**2,750**	**4,410**	**5,730**	**6,050**	**11,800**	**10,400**	**10,900**	**6,840**	**17,900**	**13,700**	**13,300**	**13,000**	**13,500**	**9,420**	**7,510**
Silicon	SW6010B	ug/L	NE	NE	**8,230**	**8,060**	**12,300**	**12,100**	**20,900**	**22,400**	**17,700**	**17,600**	**20,500**	**18,600**	**19,400**	**18,500**	**19,300**	**14,400**	**11,500**
Sodium	SW6010B	ug/L	NE	20,000	**65,000**	**87,200**	**16,200**	**27,300**	**406,000**	**363,000**	**62,100**	**51,800**	**306,000**	**281,000**	**191,000**	**188,000**	**206,000**	**126,000**	**111,000**
Strontium	SW6010B	ug/L	NE	1,200	**776**	**661**	**338**	**388**	**1,970**	**1,750**	**803**	**770**	**1,680**	**1,620**	**1,300**	**1,270**	**1,310**	**1,180**	**1,130**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2
			Sample Depth (ft BGS)	221-231	221-231	221-231	25-35	25-35	80-90	80-90	80-90	110-120	110-120	110-120	20-30	20-30	55-65	55-65
			Sample Date	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021
			Sample Type	N	N	FD	N	N	N	N	FD	N	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.17 J**	**0.14 J**	**0.15 J**	**0.59 J**	**0.16 J**	**0.34 J**	< 1.0 U	< 1.0 U	**0.24 J**	< 1.0 U	< 1.0 U	**0.76 J**	**0.12 J**	**0.14 J**	**0.073 J**
Arsenic	SW6020	ug/L	10	0.052	**0.36 J**	**0.54 J**	**0.58 J**	**6.7**	**8.5**	**2.5**	**2.0**	**2.1**	**1.0**	**1.3**	**1.4**	**2.7**	**2.4**	**0.30 J**	**0.28 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**0.62 J**	< 2.0 U	< 2.0 U	**0.76 J**	< 2.0 U	**0.70 J**	< 2.0 U	< 2.0 U	**0.66 J**	< 2.0 U	< 2.0 U	**0.49 J**	< 2.0 U	**0.64 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.49 J**	< 1.0 U	< 1.0 U	**0.40 J**	< 1.0 U	**0.65 J**	< 1.0 U	< 1.0 U	**0.69 J**	< 1.0 U	< 1.0 U	**0.34 J**	< 1.0 U	**0.38 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	**0.28 J**	< 1.0 U	**0.26 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.045 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.41 J**	**0.062 J**	**0.059 J**	**0.40 J**	**0.29 J**	**0.21 J**	**0.61 J**	**0.60 J**	**0.11 J**	**0.10 J**	**0.10 J**	**0.64 J**	**0.12 J**	**0.030 J**	**0.015 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.32 J**	**0.21 J**	**0.20 J**	**1.8**	**2.1**	**1.5**	**1.2**	**1.2**	**1.4**	**1.8**	**2.0**	**0.63 J**	**0.48 J**	**0.44 J**	**0.33 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**792**	**381**	**381**	**828**	**1,040**	**1,590**	**1,980**	**2,010**	**3,740**	**4,720**	**4,700**	**1,240**	**908**	**2,020**	**1,970**
Boron	SW6010B	ug/L	NE	400	**524**	**473**	**472**	**1,300**	**1,450**	**886**	**1,360**	**1,360**	**523**	**362**	**356**	**633**	**407**	**875**	**883**
Calcium	SW6010B	ug/L	NE	NE	**137,000**	**88,000**	**88,200**	**176,000**	**224,000**	**252,000**	**272,000**	**271,000**	**273,000**	**278,000**	**276,000**	**116,000**	**106,000**	**139,000**	**125,000**
Cobalt	SW6010B	ug/L	NE	0.6	**1.1 J**	**1.2 J**	**1.1 J**	**1.7 J**	**2.4 J**	**1.6 J**	**2.9 J**	**2.8 J**	**2.1 J**	**3.1 J**	**2.9 J**	**1.1 J**	< 5.0 U	**1.2 J**	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**10,100**	**2,310**	**2,140**	**21,000**	**25,900**	**17,800**	**19,300**	**19,600**	**20,100**	**19,500**	**19,400**	**16,900**	**13,000**	**22,800**	**19,000**
Lithium	SW6010B	ug/L	NE	4	**94.0**	**75.2**	**76.6**	**114**	**63.8**	**66.3**	**47.5**	**48.7**	**70.9**	**60.4**	**57.8**	**70.0**	**66.0**	**42.4**	**44.8**
Magnesium	SW6010B	ug/L	NE	NE	**49,500**	**35,000**	**35,000**	**68,100**	**78,000**	**71,900**	**68,700**	**68,500**	**83,100**	**81,700**	**81,400**	**41,100**	**36,700**	**43,200**	**40,100**
Manganese	SW6010B	ug/L	NE	43	**168**	**127**	**127**	**1,370**	**1,420**	**414**	**260**	**262**	**176**	**129**	**128**	**353**	**324**	**410**	**418**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**1.6 J**	**1.7 J**	< 10.0 U	**1.0 J**	< 10.0 U	**0.90 J**	**0.88 J**	< 10.0 U	**1.7 J**	**1.6 J**	< 10.0 U	**13.0**	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**17.8**	**9.3 J**	**9.7 J**	**14.8**	**20.3**	**9.8 J**	**8.8 J**	**8.8 J**	**11.8**	**10.5**	**11.4**	< 10.0 U	**3.7 J**	< 10.0 U	**4.4 J**
Potassium	SW6010B	ug/L	NE	NE	**9,760**	**8,510**	**8,550**	**33,300**	**44,000**	**15,500**	**12,200**	**12,100**	**11,800**	**10,200**	**10,200**	**23,500**	**20,000**	**32,600**	**44,900**
Silicon	SW6010B	ug/L	NE	NE	**9,850**	**9,160**	**9,220**	**15,100**	**15,600**	**17,600**	**15,800**	**16,000**	**18,100**	**16,600**	**16,200**	**12,000**	**12,400**	**14,300**	**14,400**
Sodium	SW6010B	ug/L	NE	20,000	**207,000**	**206,000**	**205,000**	**251,000**	**199,000**	**306,000**	**231,000**	**232,000**	**274,000**	**274,000**	**273,000**	**96,300**	**81,800**	**105,000**	**126,000**
Strontium	SW6010B	ug/L	NE	1,200	**3,490**	**4,120**	**4,120**	**1,080**	**1,220**	**1,060**	**889**	**888**	**1,110**	**1,120**	**1,110**	**738**	**731**	**744**	**817**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.98 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**46.2**	< 20.0 U	**12.8 J**	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2
			Sample Depth (ft BGS)	90-100	90-100	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72	92-102	92-102	92-102	48-58	73-83
			Sample Date	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	**0.068 J**	**0.22 J**	**0.088 J**	**0.17 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	**0.16 J**
Arsenic	SW6020	ug/L	10	0.052	**0.55 J**	**0.69 J**	**1.1**	**1.0**	**1.7**	**1.0**	**1.1**	**1.4**	< 1.0 U	**0.14 J**	**0.58 J**	**2.8**	**2.8**	**2.1**	**1.2**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**0.70 J**	< 2.0 U	**0.52 J**	< 2.0 U	**0.52 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.31 J**	< 2.0 U	**0.48 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.43 J**	< 1.0 U	**0.36 J**	< 1.0 U	**0.31 J**	< 1.0 U	**0.26 J**	< 1.0 U	**0.22 J**	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.088 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	< 1.0 U	**0.080 J**	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.044 J**	**0.029 J**	**0.32 J**	**0.35 J**	**0.36 J**	**0.42 J**	**0.21 J**	**0.23 J**	**0.019 J**	**0.056 J**	**0.014 J**	**0.027 J**	**0.026 J**	**0.055 J**	**0.10 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.69 J**	**0.98 J**	**1.0**	**0.33 J**	**0.92 J**	**0.63 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.27 J**	**0.33 J**	**0.34 J**	**0.54 J**	**0.67 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**2,030**	**2,200**	**1,700**	**512**	**1,040**	**219**	**496**	**390**	**374**	**413**	**1,140**	**1,270**	**1,300**	**1,590**	**1,600**
Boron	SW6010B	ug/L	NE	400	**907**	**971**	**731**	**424**	**828**	**836**	**137**	**89.4 J**	**190**	**148**	**630**	**731**	**740**	**1,380**	**1,500**
Calcium	SW6010B	ug/L	NE	NE	**159,000**	**180,000**	**118,000**	**64,900**	**104,000**	**53,100**	**76,500**	**91,800**	**82,600**	**106,000**	**107,000**	**98,400**	**101,000**	**167,000**	**243,000**
Cobalt	SW6010B	ug/L	NE	0.6	**0.71 J**	< 5.0 U	**1.0 J**	< 5.0 U	**0.68 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.69 J**	**1.6 J**	**2.4 J**
Iron	SW6010B	ug/L	NE	1,400	**23,500**	**21,500**	**13,400**	**3,470**	**11,600**	**2,010**	**3,120**	**6,960**	**10,800**	**7,760**	**19,500**	**15,400**	**16,100**	**25,300**	**23,400**
Lithium	SW6010B	ug/L	NE	4	**36.2**	**37.7**	**42.4**	**38.3**	**79.5**	**103**	**28.8**	**19.2 J**	**16.5 J**	**24.2**	**29.8**	**25.0**	**27.7**	**165**	**43.4**
Magnesium	SW6010B	ug/L	NE	NE	**46,500**	**49,300**	**41,200**	**29,000**	**40,200**	**25,600**	**21,100**	**22,300**	**21,400**	**24,100**	**32,000**	**28,000**	**28,500**	**72,800**	**62,100**
Manganese	SW6010B	ug/L	NE	43	**439**	**440**	**231**	**141**	**172**	**95.6**	**340**	**625**	**395**	**354**	**488**	**355**	**364**	**392**	**434**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**0.57 J**	< 10.0 U	**2.0 J**	< 10.0 U	**1.3 J**	< 10.0 U	**5.0 J**	< 10.0 U	**1.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	< 10.0 U	**6.6 J**	< 10.0 U	**1.8 J**	< 10.0 U	**4.1 J**	**2.2 J**	**3.2 J**	< 10.0 U	**4.3 J**	**2.3 J**	**2.5 J**	**2.2 J**	**5.8 J**	**8.7 J**
Potassium	SW6010B	ug/L	NE	NE	**27,800**	**28,900**	**21,600**	**12,300**	**21,000**	**12,300**	**21,100**	**13,700**	**7,630**	**5,870**	**28,600**	**31,100**	**31,700**	**20,100**	**15,500**
Silicon	SW6010B	ug/L	NE	NE	**14,500**	**14,300**	**10,700**	**6,940**	**10,500**	**7,790**	**8,300**	**9,960**	**12,900**	**11,300**	**15,900**	**14,600**	**14,900**	**14,000**	**18,400**
Sodium	SW6010B	ug/L	NE	20,000	**97,900**	**116,000**	**105,000**	**134,000**	**150,000**	**344,000**	**138,000**	**61,600**	**37,700**	**50,900**	**60,800**	**58,500**	**59,600**	**250,000**	**198,000**
Strontium	SW6010B	ug/L	NE	1,200	**748**	**811**	**1,260**	**1,590**	**2,480**	**3,490**	**464**	**469**	**313**	**436**	**552**	**516**	**524**	**1,950**	**857**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**0.88 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

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Bold *= Detected*

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J = Estimated concentration.

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Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2	MW-407R-P3	MW-408	MW-408	MW-408	MW-409
			Sample Depth (ft BGS)	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6	103.6-113.6	109-119	109-119	109-119	23-33
			Sample Date	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021
			Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.12 J**	**0.22 J**	**0.12 J**	**0.18 J**	**0.20 J**	**0.12 J**	**0.17 J**	**0.078 J**	**0.093 J**	**0.12 J**	**0.092 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**1.0**	**3.5**	**6.7**	**1.1**	**1.1**	**0.87 J**	**1.0**	**0.60 J**	**0.67 J**	**0.68 J**	**0.36 J**	**0.31 J**	**0.39 J**	**0.31 J**	**1.3**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.036 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.37**	**0.22**	**0.21**	**0.15 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.61 J**	< 2.0 U	**0.86 J**	**0.87 J**	< 2.0 U	**0.71 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.65 J**	< 2.0 U	< 2.0 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.98 J**	< 1.0 U	**0.58 J**	**0.57 J**	< 1.0 U	**0.47 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.46 J**	**0.46 J**	< 1.0 U	**0.36 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.31 J**	< 1.0 U	**0.28 J**	**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	**0.41 J**	**0.20 J**	**0.15 J**	**0.12 J**	< 1.0 U	**0.38 J**	< 1.0 U	**0.073 J**	**0.67 J**	**0.90 J**	**0.16 J**	**0.35 J**	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.036 J**	**3.4**	**3.9**	**0.067 J**	**0.060 J**	**0.064 J**	**0.41 J**	**0.37 J**	**0.11 J**	**0.032 J**	**0.033 J**	**0.20 J**	**0.11 J**	**0.15 J**	**0.98 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.59 J**	**0.89 J**	**0.65 J**	**1.2**	**1.3**	**1.1**	**0.95 J**	**0.85 J**	**0.21 J**	**1.2**	**0.94 J**	**0.29 J**	**0.37 J**	**0.34 J**	**0.30 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**142 J**	**106 J**	**94.9 J**	**57.1 J**	< 200 U
Barium	SW6010B	ug/L	2,000	380	**2,480**	**237**	**137**	**2,650**	**2,850**	**2,760**	**1,610**	**1,660**	**500**	**1,480**	**749**	**762**	**859**	**1,010**	**123**
Boron	SW6010B	ug/L	NE	400	**1,630**	**2,400**	**2,440**	**1,570**	**1,650**	**1,540**	**1,210**	**1,120**	**350**	**1,320**	**726**	**647**	**656**	**666**	**48.0 J**
Calcium	SW6010B	ug/L	NE	NE	**262,000**	**302,000**	**345,000**	**210,000**	**225,000**	**219,000**	**177,000**	**191,000**	**197,000**	**174,000**	**233,000**	**191,000**	**206,000**	**207,000**	**127,000**
Cobalt	SW6010B	ug/L	NE	0.6	**3.1 J**	**3.4 J**	**3.9 J**	**3.2 J**	**3.4 J**	**3.8 J**	**1.9 J**	**1.9 J**	**0.42 J**	**2.6 J**	**1.4 J**	**1.5 J**	**1.6 J**	**1.5 J**	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**17,000**	**28,500**	**20,700**	**17,200**	**18,900**	**15,700**	**12,800**	**13,600**	**35,100**	**20,900**	**19,900**	**14,800**	**14,700**	**12,600**	**1,420**
Lithium	SW6010B	ug/L	NE	4	**37.8**	**48.6**	**48.3**	**48.3**	**51.8**	**55.8**	**43.7**	**40.8**	**42.9**	**46.8**	**39.9**	**36.7**	**33.4**	**35.4**	**13.4 J**
Magnesium	SW6010B	ug/L	NE	NE	**73,400**	**99,000**	**99,100**	**63,100**	**66,000**	**58,900**	**50,200**	**51,900**	**60,600**	**68,900**	**54,500**	**41,700**	**43,900**	**43,700**	**21,100**
Manganese	SW6010B	ug/L	NE	43	**164**	**2,100**	**3,020**	**271**	**285**	**291**	**740**	**781**	**1,280**	**410**	**1,200**	**726**	**753**	**680**	**812**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	< 10.0 U	**2.4 J**	< 10.0 U	< 10.0 U	**1.9 J**	< 10.0 U	**0.74 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**18.2**
Nickel	SW6010B	ug/L	NE	39	**10.1**	**12.7**	**11.3**	**10.4**	**11.2**	**11.5**	**8.0 J**	**8.0 J**	**2.1 J**	**10.3**	**6.7 J**	**5.2 J**	< 10.0 U	**6.4 J**	**1.5 J**
Potassium	SW6010B	ug/L	NE	NE	**13,200**	**22,400**	**14,200**	**23,000**	**24,600**	**24,900**	**32,700**	**33,400**	**14,600**	**29,900**	**20,400**	**12,600**	**11,900**	**11,700**	**5,140**
Silicon	SW6010B	ug/L	NE	NE	**15,900**	**15,000**	**14,200**	**16,000**	**16,700**	**15,900**	**14,500**	**13,000**	**16,100**	**16,800**	**12,300**	**10,600**	**10,600**	**10,000**	**9,800**
Sodium	SW6010B	ug/L	NE	20,000	**272,000**	**105,000**	**92,900**	**218,000**	**233,000**	**220,000**	**143,000**	**145,000**	**38,000**	**150,000**	**114,000**	**89,900**	**93,200**	**95,600**	**30,000**
Strontium	SW6010B	ug/L	NE	1,200	**954**	**1,600**	**1,810**	**799**	**860**	**832**	**688**	**738**	**1,220**	**1,100**	**815**	**649**	**664**	**667**	**698**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-409 23-33 05-05-2021 N	MW-409 23-33 08-06-2021 N	MW-505-P1 15-25 05-25-2021 N	MW-505-P1 15-25 08-05-2021 N	MW-505-P2 40-50 05-25-2021 N	MW-505-P2 40-50 08-05-2021 N	MW-505-P3 65-75 05-25-2021 N	MW-505-P3 65-75 08-05-2021 N	PZ-304-AI 39-48.8 03-01-2021 N	PZ-304-AI 39-48.8 05-17-2021 N	PZ-304-AI 39-48.8 08-18-2021 N	PZ-304-AS 17.1-26.9 03-10-2021 N	PZ-304-AS 17.1-26.9 05-20-2021 N	PZ-304-AS 17.1-26.9 08-23-2021 N	S-5 30-40 03-08-2021 N	S-5 30-40 05-12-2021 N
Metals, Dissolved																				
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	**0.079 J**	**0.24 J**	**0.15 J**	**1.9**	**0.20 J**	**1.9**	**0.19 J**	< 1.0 U	< 1.0 U	**0.17 J**	**0.18 J**	**0.22 J**	**0.21 J**	**0.51 J**	**0.56 J**
Arsenic	SW6020	ug/L	10	0.052	**1.3**	**2.9**	**1.6**	**1.8**	**2.5**	**3.5**	**4.0**	**3.3**	**0.96 J**	**2.6**	**30.4**	**210**	**219**	**226**	**15.0**	**9.8**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.021 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.21**	**0.12 J**
Chromium	SW6020	ug/L	100	NE	**0.35 J**	< 2.0 U	**0.23 J**	< 2.0 U	**0.23 J**	< 2.0 U	**0.24 J**	< 2.0 U	< 2.0 U	**0.79 J**	< 2.0 U	**2.5**	**2.6**	**2.7**	**4.2**	**5.0**
Copper	SW6020	ug/L	1,300	80	**0.35 J**	< 1.0 U	**0.44 J**	< 1.0 U	**0.56 J**	< 1.0 U	**0.26 J**	< 1.0 U	**0.57 J**	**0.43 J**	< 1.0 U	**0.49 J**	**0.58 J**	< 1.0 U	**0.52 J**	**0.32 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	**0.24 J**	**0.17 J**	**0.68 J**	**0.24 J**	**0.088 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	**0.17 J**
Selenium	SW6020	ug/L	50	10	**0.59 J**	**1.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.48 J**	**0.43 J**	**0.70 J**	**0.47 J**	**0.35 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**1.3**	**1.7**	**0.70 J**	**1.2**	**1.6**	**2.0**	**2.7**	**0.58 J**	**0.28 J**	**0.35 J**	**0.40 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.17 J**	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	**0.62 J**	**0.33 J**	**0.22 J**	< 1.0 U	**0.59 J**	**0.73 J**	**0.40 J**	**0.24 J**	**0.87 J**	**1.1**	**1.5**	**4.3**	**4.5**	**4.7**	**2.7**	**1.9**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**57.0 J**	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**111**	**134**	**106**	**128**	**112**	**145**	**108**	**165**	**1,450**	**1,660**	**2,020**	**2,750**	**2,640**	**2,850**	**177**	**523**
Boron	SW6010B	ug/L	NE	400	**31.8 J**	**34.3 J**	**54.2 J**	**62.8 J**	**49.2 J**	**43.4 J**	**50.2 J**	**55.0 J**	**598**	**1,000**	**1,580**	**1,900**	**1,980**	**1,960**	**3,340**	**2,750**
Calcium	SW6010B	ug/L	NE	NE	**151,000**	**147,000**	**46,700**	**57,600**	**55,000**	**71,800**	**58,000**	**94,600**	**272,000**	**279,000**	**254,000**	**69,500**	**69,500**	**73,900**	**52,200**	**59,300**
Cobalt	SW6010B	ug/L	NE	0.6	**1.2 J**	**1.5 J**	**4.5 J**	**5.4**	**4.7 J**	**2.4 J**	**3.8 J**	**0.74 J**	**2.3 J**	**2.0 J**	**2.5 J**	**1.7 J**	**2.2 J**	**2.0 J**	**10.1**	**6.8**
Iron	SW6010B	ug/L	NE	1,400	**894**	**2,040**	**293**	**368**	**334**	**2,340**	**1,390**	**5,880**	**19,600**	**21,900**	**27,100**	**19,500**	**19,000**	**20,300**	**9,160**	**18,300**
Lithium	SW6010B	ug/L	NE	4	**8.1 J**	**11.9 J**	**4.0 J**	< 20.0 U	< 20.0 U	**5.7 J**	**4.4 J**	**9.6 J**	**27.6**	**36.6**	**24.3**	**27.0**	**29.0**	**26.9**	**26.1**	**27.0**
Magnesium	SW6010B	ug/L	NE	NE	**21,900**	**20,900**	**11,700**	**13,700**	**12,600**	**15,000**	**12,800**	**19,600**	**74,400**	**78,000**	**79,800**	**58,000**	**60,000**	**63,000**	**56,900**	**62,100**
Manganese	SW6010B	ug/L	NE	43	**890**	**1,090**	**2,780**	**3,730**	**3,080**	**3,020**	**2,950**	**2,880**	**1,200**	**1,200**	**1,150**	**65.7**	**68.9**	**69.3**	**216**	**136**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**7.3 J**	**13.7**	**15.4**	**18.5**	**15.0**	**20.4**	**6.7 J**	**1.1 J**	< 10.0 U	< 10.0 U	**56.6**	**55.9**	**55.7**	**2.3 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**4.3 J**	**3.4 J**	**11.0**	**14.4**	**9.6 J**	**4.3 J**	**10.3**	**3.0 J**	**14.6**	**18.1**	**22.9**	**32.0**	**37.4**	**42.9**	**59.9**	**36.7**
Potassium	SW6010B	ug/L	NE	NE	**3,160**	**3,060**	**2,600**	**3,050**	**2,720**	**3,690**	**2,730**	**3,160**	**10,400**	**12,400**	**16,000**	**127,000**	**131,000**	**130,000**	**207,000**	**207,000**
Silicon	SW6010B	ug/L	NE	NE	**9,860**	**8,550**	**6,400**	**5,980**	**6,660**	**6,350**	**6,980**	**8,750**	**17,600**	**20,200**	**19,000**	**23,500**	**23,300**	**22,700**	**17,000**	**17,200**
Sodium	SW6010B	ug/L	NE	20,000	**14,400**	**8,700**	**24,100**	**22,800**	**23,200**	**53,500**	**23,700**	**19,600**	**143,000**	**206,000**	**289,000**	**307,000**	**316,000**	**306,000**	**540,000**	**415,000**
Strontium	SW6010B	ug/L	NE	1,200	**650**	**666**	**183**	**216**	**203**	**248**	**204**	**331**	**1,020**	**1,110**	**1,280**	**1,100**	**1,060**	**1,110**	**267**	**325**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**16.6**	**9.3 J**
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.1 J**	**0.87 J**	< 10.0 U	**3.5 J**	**2.8 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**28.1**	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

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USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

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Qualifier Definition

J = Estimated concentration.

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Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	S-5	S-8	S-8	S-8	S-10	S-10	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84
			Sample Depth (ft BGS)	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9
			Sample Date	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.58 J**	< 1.0 U	< 1.0 U	**0.091 J**	< 1.0 U	< 1.0 U	**0.085 J**	**0.11 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**10.4**	**1.7**	**1.5**	**1.6**	**53.3**	**50.1**	**42.9**	**197**	**214**	**261**	< 1.0 U	< 1.0 U	< 1.0 U	**390**	**458**	**434**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.51**	**0.21**	**0.24**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	**0.16 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.039 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**4.9**	< 2.0 U	**0.22 J**	< 2.0 U	< 2.0 U	**0.89 J**	< 2.0 U	< 2.0 U	**0.70 J**	< 2.0 U	< 2.0 U	**0.22 J**	< 2.0 U	< 2.0 U	**0.26 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.39 J**	**0.28 J**	< 1.0 U	**2.0**	**0.68 J**	< 1.0 U	**0.49 J**	**0.63 J**	< 1.0 U	< 1.0 U	**0.20 J**	< 1.0 U	**0.51 J**	**0.45 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.44 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.43 J**	**0.43 J**	< 1.0 U	< 1.0 U	**0.29 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	**0.12 J**	**0.16 J**	< 1.0 U	< 1.0 U	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	< 1.0 U	**2.3**	**2.2 J**	**1.9**	**0.14 J**	**0.21 J**	**0.19 J**	**2.2**	**2.8**	**1.9 J**	**0.079 J**	**0.078 J**	**0.083 J**	**0.016 J**	**0.018 J**	**0.020 J**
Vanadium	SW6020	ug/L	NE	8.6	**1.7**	< 1.0 U	< 1.0 U	< 1.0 U	**3.2**	**2.5**	**2.8**	**0.63 J**	**0.72 J**	**0.83 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.36 J**	**0.45 J**	**0.39 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	**570**	**227**	**289**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**544**	**383**	**330**	**247**	**272**	**284**	**234**	**921**	**1,070**	**1,500**	**8.7 J**	**9.2 J**	**8.3 J**	**871**	**1,010**	**932**
Boron	SW6010B	ug/L	NE	400	**2,930**	**111**	**90.8 J**	**98.4 J**	**1,220**	**1,250**	**1,170**	**4,220**	**3,120**	**2,480**	**614**	**624**	**595**	**203**	**226**	**211**
Calcium	SW6010B	ug/L	NE	NE	**55,600**	**125,000**	**121,000**	**91,700**	**182,000**	**196,000**	**213,000**	**171,000**	**191,000**	**223,000**	**20,500**	**21,200**	**20,200**	**145,000**	**169,000**	**156,000**
Cobalt	SW6010B	ug/L	NE	0.6	**7.2**	**2.7 J**	**2.3 J**	**2.0 J**	**1.6 J**	**2.4 J**	**2.2 J**	**3.4 J**	**6.2**	**7.2**	< 5.0 U	< 5.0 U	< 5.0 U	**6.8**	**7.7**	**7.0**
Iron	SW6010B	ug/L	NE	1,400	**19,000**	**486**	**340**	**317**	**136,000**	**72,200**	**105,000**	**27,000**	**28,000**	**34,800**	**145 J+**	**172**	**123**	**54,000**	**61,900**	**56,000**
Lithium	SW6010B	ug/L	NE	4	**25.9**	**15.3 J**	**16.8 J**	**13.4 J**	**54.1**	**45.9**	**50.1**	**46.6**	**52.7**	**53.4**	**132**	**138**	**141**	**12.8 J**	**22.3**	**18.3 J**
Magnesium	SW6010B	ug/L	NE	NE	**63,800**	**17,800**	**16,300**	**11,800**	**148,000**	**99,400**	**121,000**	**78,000**	**85,900**	**85,900**	**12,100**	**12,400**	**11,800**	**52,300**	**59,800**	**56,600**
Manganese	SW6010B	ug/L	NE	43	**123**	**1,130**	**794**	**557**	**6,480**	**3,210**	**4,770**	**1,190**	**1,240**	**1,180**	**17.1**	**18.5**	**16.6**	**358**	**387**	**340**
Molybdenum	SW6010B	ug/L	NE	10	**1.5 J**	**15.3**	**10.5**	**13.1**	< 10.0 U	< 10.0 U	< 10.0 U	**13.8**	**13.3**	**12.9**	**0.73 J**	< 10.0 U	< 10.0 U	**8.9 J**	**9.2 J**	**9.1 J**
Nickel	SW6010B	ug/L	NE	39	**39.5**	**6.4 J**	**4.5 J**	**4.9 J**	**13.2**	**13.5**	**11.6**	**21.8**	**28.0**	**29.7**	< 10.0 U	< 10.0 U	< 10.0 U	**10.2**	**14.1**	**13.5**
Potassium	SW6010B	ug/L	NE	NE	**220,000**	**6,000**	**6,400**	**5,560**	**37,800**	**31,800**	**37,000**	**13,900**	**14,800**	**24,300**	**4,670**	**4,940**	**4,820**	**5,110**	**5,470**	**5,490**
Silicon	SW6010B	ug/L	NE	NE	**16,800**	**10,600**	**10,200**	**9,730**	**21,600**	**22,400**	**22,500**	**19,900**	**20,800**	**19,400**	**3,980**	**4,100**	**3,830**	**23,300**	**26,400**	**24,400**
Sodium	SW6010B	ug/L	NE	20,000	**454,000**	**30,800**	**31,200**	**30,300**	**199,000**	**172,000**	**182,000**	**304,000**	**307,000**	**281,000**	**229,000**	**240,000**	**235,000**	**25,600**	**26,200**	**24,000**
Strontium	SW6010B	ug/L	NE	1,200	**322**	**636**	**519**	**395**	**1,060**	**1,020**	**1,080**	**1,210**	**1,370**	**1,540**	**2,810**	**2,960**	**2,880**	**650**	**756**	**691**
Tin	SW6010B	ug/L	NE	1,200	**11.2**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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NE = Not Established

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Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS
			Sample Depth (ft BGS)	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5
			Sample Date	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.24 J**	**0.15 J**	**0.085 J**	**0.59 J**	**0.41 J**	**0.54 J**	< 1.0 U	< 1.0 U	**0.10 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**0.64 J**	**0.73 J**	**1.1**	< 1.0 U	< 1.0 U	**0.12 J**	**49.5**	**55.5**	**46.9**	**0.61 J**	**0.60 J**	**0.69 J**	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.047 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	**0.028 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.045 J**	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.32 J**	< 2.0 U	< 2.0 U	**0.26 J**	< 2.0 U	< 2.0 U	**1.5 J**	< 2.0 U	< 2.0 U	**0.15 J**	< 2.0 U	< 2.0 U	**0.18 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.52 J**	**0.69 J**	< 1.0 U	**1.9**	**1.0**	< 1.0 U	**0.44 J**	**0.22 J**	< 1.0 U	**0.62 J**	**0.48 J**	< 1.0 U	**0.23 J**	**0.19 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.25 J**	**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	**0.24 J**	< 1.0 U	< 1.0 U	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.95 J**	**0.80 J**	**0.99 J**	**3.5**	**3.2**	**3.3**	**0.16 J**	**0.089 J**	**0.068 J**	**1.9**	**2.2**	**1.4**	**0.14 J**	**0.12 J**	**0.64 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	**0.45 J**	**0.45 J**	**1.8**	**2.3**	**2.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**312**	**327**	**329**	**67.6**	**66.7**	**64.7**	**477**	**486**	**541**	**71.0**	**73.7**	**71.1**	**167**	**157**	**164**
Boron	SW6010B	ug/L	NE	400	**29.8 J**	**25.6 J**	**29.1 J**	**120**	**118**	**114**	**814**	**857**	**938**	**151**	**163**	**145**	**123**	**130**	**131**
Calcium	SW6010B	ug/L	NE	NE	**73,800**	**79,100**	**76,600**	**92,400**	**95,200**	**91,300**	**134,000**	**139,000**	**155,000**	**114,000**	**119,000**	**121,000**	**104,000**	**108,000**	**108,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.5 J**	**1.2 J**	**1.3 J**	< 5.0 U	< 5.0 U	**0.64 J**	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**113 J+**	**173**	**222**	< 50.0 U	< 50.0 U	< 50.0 U	**1,070**	**2,210**	**1,690**	**361**	**398**	**434**	**1,340**	**528**	**955**
Lithium	SW6010B	ug/L	NE	4	**6.0 J**	**12.3 J**	**9.6 J**	**39.1**	**45.1**	**43.4**	**33.8**	**34.8**	**29.9**	**49.5**	**55.5**	**44.3**	**49.2**	**55.5**	**48.8**
Magnesium	SW6010B	ug/L	NE	NE	**33,100**	**34,900**	**33,400**	**50,700**	**51,400**	**48,700**	**81,900**	**81,600**	**85,900**	**39,900**	**41,000**	**40,700**	**37,600**	**39,100**	**39,100**
Manganese	SW6010B	ug/L	NE	43	**84.0**	**73.6**	**81.2**	< 5.0 U	< 5.0 U	< 5.0 U	**158**	**212**	**350**	**6.1**	**6.0**	**11.3**	**102**	**85.1**	**74.9**
Molybdenum	SW6010B	ug/L	NE	10	**2.5 J**	< 10.0 U	**1.9 J**	**0.72 J**	< 10.0 U	**0.62 J**	**1.4 J**	< 10.0 U	< 10.0 U	**2.1 J**	< 10.0 U	**1.2 J**	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**2.5 J**	**5.3 J**	**1.7 J**	**7.8 J**	**8.7 J**	**7.9 J**	**15.2**	**14.9**	**16.9**	**1.8 J**	**1.8 J**	**2.1 J**	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE	**2,170**	**2,320**	**2,340**	**2,550**	**2,560**	**2,480**	**12,200**	**10,600**	**10,600**	**3,120**	**3,310**	**3,100**	**2,570**	**2,610**	**2,850**
Silicon	SW6010B	ug/L	NE	NE	**5,670**	**6,030**	**5,860**	**5,770**	**5,940**	**5,380**	**16,000**	**17,000**	**17,700**	**8,410**	**8,980**	**7,790**	**7,650**	**7,420**	**7,110**
Sodium	SW6010B	ug/L	NE	20,000	**6,480**	**6,770**	**7,000**	**10,100**	**10,100**	**9,310**	**124,000**	**135,000**	**150,000**	**16,100**	**19,000**	**13,400**	**14,400**	**13,700**	**12,900**
Strontium	SW6010B	ug/L	NE	1,200	**368**	**385**	**384**	**1,470**	**1,500**	**1,460**	**2,000**	**1,960**	**1,940**	**1,490**	**1,550**	**1,500**	**801**	**830**	**830**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**160**	**117**	**49.7**	**19.2 J**	< 20.0 U	**8.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	**22.9**	**9.5 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

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West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS	PZ-104-KS	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS
					Sample Depth (ft BGS)	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17	397.37-407.17	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3
					Sample Date	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021	02-24-2021	05-05-2021	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021
					Sample Type	N	FD	N	FD	N	N	N	N	N	N	N	FD	N	N	N
Metals, Dissolved																				
Antimony	SW6020	ug/L	6	0.78		**0.17 J**	**0.17 J**	**0.17 J**	**0.16 J**	**0.16 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.080 J**	**0.079 J**	**0.15 J**	**0.13 J**	**0.12 J**
Arsenic	SW6020	ug/L	10	0.052		**9.3**	**9.3**	**15.8**	**15.9**	**21.0**	**0.39 J**	**0.52 J**	**0.48 J**	**16.2**	**20.0**	**20.1**	**20.1**	**1.3**	**0.78 J**	**0.76 J**
Beryllium	SW6020	ug/L	4	2.5		**0.073 J**	**0.080 J**	**0.091 J**	**0.082 J**	**0.10 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.050 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.027 J**	**0.025 J**	< 0.20 U
Chromium	SW6020	ug/L	100	NE		**2.1**	**2.1**	**2.4**	**2.4**	**3.5**	< 2.0 U	**0.15 J**	< 2.0 U	**4.3**	**5.0**	**4.4**	**4.3**	< 2.0 U	**0.22 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80		**0.89 J**	**0.84 J**	**0.55 J**	**0.55 J**	< 1.0 U	**0.41 J**	< 1.0 U	< 1.0 U	**0.32 J**	**0.27 J**	< 1.0 U	< 1.0 U	**2.3**	**3.6**	**2.4**
Lead	SW6020	ug/L	15	15		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10		**0.33 J**	**0.29 J**	< 1.0 U	**0.41 J**	**0.33 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.55 J**	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4		**0.10 J**	**0.10 J**	**0.067 J**	**0.065 J**	**0.053 J**	**0.25 J**	**0.27 J**	**0.29 J**	**0.090 J**	**0.070 J**	**0.066 J**	**0.064 J**	**1.7**	**1.6**	**1.5**
Vanadium	SW6020	ug/L	NE	8.6		**5.6**	**5.5**	**5.5**	**5.4**	**5.9**	< 1.0 U	< 1.0 U	< 1.0 U	**2.8**	**3.3**	**3.0**	**2.9**	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380		**1,220**	**1,210**	**1,260**	**1,280**	**1,330**	**128**	**108**	**114**	**430**	**401**	**394**	**389**	**94.9**	**97.7**	**98.7**
Boron	SW6010B	ug/L	NE	400		**721**	**704**	**828**	**859**	**932**	**131**	**129**	**133**	**398**	**403**	**371**	**372**	**150**	**150**	**156**
Calcium	SW6010B	ug/L	NE	NE		**329,000**	**327,000**	**345,000**	**344,000**	**332,000**	**85,200**	**85,300**	**84,500**	**102,000**	**105,000**	**104,000**	**103,000**	**83,600**	**84,800**	**81,900**
Cobalt	SW6010B	ug/L	NE	0.6		< 5.0 U	**0.60 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.87 J**	**0.72 J**	**0.58 J**	**0.63 J**	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400		**21,700**	**21,700**	**21,800**	**22,100**	**23,700**	**1,150**	**1,140**	**1,160**	**4,240**	**4,600**	**4,650**	**4,680**	**322**	**100**	**104**
Lithium	SW6010B	ug/L	NE	4		**58.6**	**57.4**	**52.8**	**53.8**	**46.3**	**28.3**	**26.2**	**27.0**	**20.1**	**19.4 J**	**17.3 J**	**20.4**	**35.5**	**39.0**	**34.6**
Magnesium	SW6010B	ug/L	NE	NE		**141,000**	**142,000**	**143,000**	**145,000**	**142,000**	**40,600**	**40,800**	**40,700**	**53,000**	**53,600**	**51,600**	**51,300**	**47,200**	**47,700**	**46,500**
Manganese	SW6010B	ug/L	NE	43		**1,090**	**1,090**	**1,190**	**1,200**	**1,150**	**17.6**	**15.8**	**16.5**	**118**	**125**	**124**	**122**	**7.4**	**3.3 J**	**3.6 J**
Molybdenum	SW6010B	ug/L	NE	10		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.0 J**	< 10.0 U	**0.93 J**	**1.2 J**	< 10.0 U	**1.5 J**	**1.4 J**	**8.7 J**	< 10.0 U	**5.1 J**
Nickel	SW6010B	ug/L	NE	39		**74.2**	**72.8**	**77.1**	**77.2**	**76.4**	< 10.0 U	< 10.0 U	< 10.0 U	**24.1**	**28.4**	**27.4**	**26.7**	**4.1 J**	**2.6 J**	**2.1 J**
Potassium	SW6010B	ug/L	NE	NE		**8,260**	**8,160**	**7,530**	**7,630**	**7,390**	**2,000**	**1,930**	**1,990**	**10,300**	**9,860**	**9,290**	**9,200**	**2,290**	**2,270**	**2,380**
Silicon	SW6010B	ug/L	NE	NE		**22,600**	**21,900**	**22,600**	**23,800**	**23,100**	**4,180**	**4,160**	**4,130**	**12,200**	**12,600**	**11,600**	**11,600**	**10,800**	**11,000**	**10,500**
Sodium	SW6010B	ug/L	NE	20,000		**164,000**	**164,000**	**180,000**	**182,000**	**187,000**	**37,000**	**37,600**	**36,900**	**68,800**	**73,400**	**69,300**	**68,800**	**14,500**	**15,200**	**14,900**
Strontium	SW6010B	ug/L	NE	1,200		**7,270**	**7,200**	**6,580**	**6,700**	**6,160**	**2,900**	**2,960**	**2,940**	**678**	**691**	**668**	**664**	**981**	**998**	**972**
Tin	SW6010B	ug/L	NE	1,200		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**104**	**87.5**	**49.8**
Mercury	SW7470A	ug/L	2	0.063		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS
			Sample Depth (ft BGS)	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4
			Sample Date	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Metals, Dissolved																	
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	**0.098 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.073 J**	**0.22 J**	**0.24 J**
Arsenic	SW6020	ug/L	10	0.052	**2.7**	**3.2**	**2.8**	**1.7**	**1.5**	**1.7**	**0.82 J**	**0.91 J**	**0.94 J**	**0.90 J**	**1.1**	**0.89 J**	**3.7**	**4.4**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.022 J**	< 0.20 U	**0.030 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.73 J**	< 2.0 U	< 2.0 U	**0.20 J**	< 2.0 U	< 2.0 U	**0.60 J**	< 2.0 U	< 2.0 U	**0.81 J**	< 2.0 U	**8.1**	**9.8**
Copper	SW6020	ug/L	1,300	80	**0.48 J**	**0.32 J**	< 1.0 U	**0.19 J**	< 1.0 U	< 1.0 U	**0.38 J**	**0.24 J**	< 1.0 U	**0.44 J**	**0.40 J**	< 1.0 U	**0.51 J**	**0.42 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.46 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U	< 1.0 U	**0.055 J**	< 1.0 U	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**1.4**	**1.4**	**1.4**	**1.4**	**1.1**	**1.5**	**0.052 J**	**0.060 J**	**0.061 J**	**0.36 J**	**0.33 J**	**0.35 J**	**0.46 J**	**0.40 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	**0.18 J**	**0.28 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.94 J**	**1.0 J**	**0.83 J**	**10.5**	**12.7**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**298**	**303**	**302**	**41.4**	**38.7**	**42.9**	**142**	**136**	**141**	**1,230**	**1,090**	**910**	**993**	**1,140**
Boron	SW6010B	ug/L	NE	400	**125**	**143**	**157**	**178**	**183**	**177**	**93.6 J**	**93.7 J**	**82.0 J**	**267**	**272**	**223**	**1,170**	**1,490**
Calcium	SW6010B	ug/L	NE	NE	**109,000**	**112,000**	**112,000**	**54,400**	**57,900**	**56,200**	**108,000**	**109,000**	**109,000**	**124,000**	**135,000**	**132,000**	**239,000**	**245,000**
Cobalt	SW6010B	ug/L	NE	0.6	**0.83 J**	**0.90 J**	**1.2 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.0 J**	**2.9 J**
Iron	SW6010B	ug/L	NE	1,400	**3,980**	**3,050**	**1,960**	**701**	**709**	**721**	**828**	**805**	**736**	**2,400**	**2,600**	**2,360**	**4,560**	**4,850**
Lithium	SW6010B	ug/L	NE	4	**23.9**	**25.2**	**16.0 J**	**43.2**	**48.2**	**45.6**	**23.0**	**23.0**	**23.1**	**42.0**	**44.4**	**38.6**	**46.3**	**53.6**
Magnesium	SW6010B	ug/L	NE	NE	**53,100**	**56,300**	**55,200**	**35,000**	**36,600**	**33,700**	**53,900**	**52,900**	**50,300**	**61,200**	**64,000**	**59,200**	**119,000**	**128,000**
Manganese	SW6010B	ug/L	NE	43	**353**	**385**	**358**	< 5.0 U	< 5.0 U	< 5.0 U	**37.2**	**42.4**	**35.1**	**17.4**	**21.8**	**17.1**	**87.4**	**99.7**
Molybdenum	SW6010B	ug/L	NE	10	**4.8 J**	< 10.0 U	< 10.0 U	**0.77 J**	< 10.0 U	**1.3 J**	**2.4 J**	< 10.0 U	**2.9 J**	**3.8 J**	< 10.0 U	**3.8 J**	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**16.0**	**20.0**	**21.9**	**5.0 J**	**6.7 J**	**6.3 J**	**2.4 J**	**2.2 J**	**2.4 J**	**9.8 J**	**12.7**	**8.1 J**	**42.4**	**43.7**
Potassium	SW6010B	ug/L	NE	NE	**2,490**	**2,500**	**2,590**	**1,850**	**2,010**	**1,890**	**3,350**	**3,290**	**3,020**	**5,440**	**5,890**	**5,210**	**16,600**	**19,600**
Silicon	SW6010B	ug/L	NE	NE	**14,300**	**15,500**	**13,700 J-**	**3,980**	**4,140**	**4,010**	**8,540**	**8,550**	**8,320**	**8,220**	**8,760**	**8,030**	**18,300**	**19,600**
Sodium	SW6010B	ug/L	NE	20,000	**49,200**	**50,700**	**51,200**	**57,400**	**60,000**	**60,600**	**26,300**	**24,600**	**23,800**	**104,000**	**105,000**	**85,100**	**200,000**	**241,000**
Strontium	SW6010B	ug/L	NE	1,200	**872**	**842**	**831**	**5,010**	**5,260**	**5,110**	**1,480**	**1,410**	**1,420**	**1,100**	**1,160**	**1,110**	**1,540**	**1,550**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.87 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	**7.2 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	**0.11 J**	< 0.20 U	< 0.20 U	**0.12 J**	< 0.20 U	< 0.20 U	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS
			Sample Depth (ft BGS)	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5
			Sample Date	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.30 J**	**1.7**	**1.2**	**0.73 J**	**0.11 J**	**0.12 J**	**0.11 J**	< 1.0 U	< 1.0 U	**0.30 J**	**0.11 J**	**0.13 J**	< 1.0 U	**0.14 J**	**0.12 J**
Arsenic	SW6020	ug/L	10	0.052	**5.0**	**0.78 J**	**0.68 J**	**0.62 J**	**2.2**	**2.5**	**2.7**	**1.6**	**1.3**	**0.49 J**	**2.0**	**2.1**	**1.4**	**1.4**	**1.8**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	**0.23**	**0.047 J**	**0.061 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.059 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**12.6**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.20 J**	< 2.0 U	< 2.0 U	**0.23 J**	< 2.0 U	< 2.0 U	< 2.0 U	**1.0 J**	**0.98 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**1.9**	< 1.0 U	< 1.0 U	**0.18 J**	< 1.0 U	< 1.0 U	**0.37 J**	**0.51 J**	**5.0**	**0.54 J**	**0.64 J**	**0.42 J**	**0.43 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.50 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.32 J**	**0.41 J**	**0.35 J**	**0.29 J**	**6.0**	**6.2**	**6.2**	**0.54 J**	**0.67 J**	**0.71 J**	**0.40 J**	**0.42 J**	**0.32 J**	**0.31 J**	**0.28 J**
Vanadium	SW6020	ug/L	NE	8.6	**16.1**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.54 J**	**0.52 J**	**0.60 J**	**0.55 J**	**0.59 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**1,370**	**66.8**	**64.5**	**63.2**	**6.4 J**	**5.1 J**	**4.5 J**	**101**	**102**	**102**	**905**	**902**	**1,000**	**996**	**764**
Boron	SW6010B	ug/L	NE	400	**1,750**	**190**	**189**	**182**	**1,180**	**1,160**	**1,110**	**52.1 J**	**52.7 J**	**50.8 J**	**761**	**774**	**870**	**858**	**682**
Calcium	SW6010B	ug/L	NE	NE	**252,000**	**91,400**	**92,700**	**89,500**	**8,360**	**8,230**	**7,670**	**90,800**	**89,700**	**86,400**	**228,000**	**231,000**	**234,000**	**230,000**	**216,000**
Cobalt	SW6010B	ug/L	NE	0.6	**3.3 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.77 J**	**0.77 J**	< 5.0 U	< 5.0 U	**2.3 J**	**2.4 J**	**3.0 J**	**2.9 J**	**1.5 J**
Iron	SW6010B	ug/L	NE	1,400	**7,060**	< 50.0 U	**92.0**	**92.7**	**525**	**556**	**501**	**1,230**	**458**	< 50.0 U	**2,870**	**2,920**	**3,670**	**3,610**	**2,380**
Lithium	SW6010B	ug/L	NE	4	**49.0**	**24.4**	**26.0**	**22.9**	**208**	**214**	**204**	**13.7 J**	**15.8 J**	**13.2 J**	**43.0**	**43.7**	**48.0**	**46.3**	**41.6**
Magnesium	SW6010B	ug/L	NE	NE	**130,000**	**51,000**	**51,400**	**49,700**	**5,370**	**5,440**	**5,150**	**50,700**	**51,200**	**50,200**	**105,000**	**106,000**	**111,000**	**110,000**	**105,000**
Manganese	SW6010B	ug/L	NE	43	**110**	**5.8**	< 5.0 U	< 5.0 U	**4.4 J**	< 5.0 U	**3.5 J**	**8.4**	**10.8**	**2.1 J**	**47.9**	**48.8**	**68.2**	**66.9**	**30.8**
Molybdenum	SW6010B	ug/L	NE	10	**0.87 J**	**1.6 J**	< 10.0 U	**0.82 J**	**1.4 J**	< 10.0 U	**1.2 J**	**4.7 J**	< 10.0 U	**5.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**46.2**	**2.2 J**	**6.4 J**	< 10.0 U	**3.3 J**	**3.1 J**	**1.8 J**	**1.7 J**	**3.2 J**	**1.8 J**	**23.2**	**23.1**	**23.5**	**23.3**	**21.0**
Potassium	SW6010B	ug/L	NE	NE	**21,900**	**3,460**	**3,280**	**3,220**	**6,820**	**6,880**	**6,580**	**1,560**	**1,610**	**1,720**	**8,410**	**8,400**	**8,920**	**8,960**	**7,740**
Silicon	SW6010B	ug/L	NE	NE	**20,100**	**5,040**	**4,980**	**4,840**	**4,160**	**4,020**	**3,820**	**6,790**	**6,640**	**6,570**	**12,600**	**12,600**	**13,300**	**13,000**	**11,700**
Sodium	SW6010B	ug/L	NE	20,000	**268,000**	**9,970**	**9,860**	**9,350**	**385,000**	**400,000**	**368,000**	**16,900**	**18,400**	**18,000**	**282,000**	**287,000**	**305,000**	**300,000**	**253,000**
Strontium	SW6010B	ug/L	NE	1,200	**1,600**	**2,990**	**3,030**	**2,940**	**1,620**	**1,620**	**1,540**	**1,080**	**1,120**	**1,090**	**2,950**	**2,930**	**2,780**	**2,760**	**2,770**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	**402**	**263**	**93.2**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**18.5 J**	**67.6**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS
			Sample Depth (ft BGS)	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7
			Sample Date	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021	08-18-2021	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021
			Sample Type	N	FD	N	FD	N	FD	N	N	N	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	**0.14 J**	**0.12 J**	< 1.0 U	< 1.0 U	**0.13 J**	**0.12 J**	< 1.0 U	< 1.0 U	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**1.8**	**1.8**	**1.5**	**1.4**	**1.7**	**1.7**	**17.6**	**13.9**	**15.4**	**14.9**	**0.85 J**	**0.86 J**	**0.89 J**	**100**	**96.0**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	**0.57 J**	**0.48 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.29 J**	< 2.0 U	< 2.0 U	**0.23 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.23 J**
Copper	SW6020	ug/L	1,300	80	**0.57 J**	**0.83 J**	**0.38 J**	**0.40 J**	< 1.0 U	< 1.0 U	**0.39 J**	**0.35 J**	< 1.0 U	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U	**0.48 J**	**0.30 J**
Lead	SW6020	ug/L	15	15	**0.047 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	**0.25 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.11 J**	**0.12 J**	**0.11 J**	**0.10 J**	**0.090 J**	**0.086 J**	**1.9**	**1.8**	**1.6**	**1.7**	**1.1**	**1.0 J**	**0.96 J**	< 1.0 U	**0.018 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.39 J**	< 1.0 U	**0.43 J**	**0.38 J**	**0.34 J**	**0.31 J**	**0.51 J**	**0.61 J**	**0.50 J**	**0.52 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.33 J**	**0.42 J**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**1,830**	**1,820**	**1,810**	**1,800**	**1,700**	**1,700**	**884**	**787**	**746**	**747**	**184**	**188**	**182**	**947**	**821**
Boron	SW6010B	ug/L	NE	400	**1,230**	**1,220**	**1,040**	**1,040**	**982**	**969**	**272**	**286**	**270**	**275**	**37.9 J**	**38.2 J**	**38.9 J**	**195**	**165**
Calcium	SW6010B	ug/L	NE	NE	**209,000**	**208,000**	**213,000**	**219,000**	**214,000**	**214,000**	**177,000**	**181,000**	**185,000**	**187,000**	**54,700**	**56,500**	**54,600**	**193,000**	**170,000**
Cobalt	SW6010B	ug/L	NE	0.6	**2.9 J**	**2.8 J**	**2.3 J**	**2.1 J**	**1.8 J**	**1.7 J**	**9.4**	**10.4**	**12.2**	**12.4**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**29,200**	**29,000**	**28,600**	**28,600**	**28,900**	**28,900**	**6,780**	**5,680**	**7,180**	**7,290**	**298**	**333**	**269**	**61,800**	**53,400**
Lithium	SW6010B	ug/L	NE	4	**28.3**	**31.3**	**35.6**	**37.2**	**27.4**	**26.0**	**16.4 J**	**20.8**	**24.7**	**25.7**	**11.7 J**	**15.8 J**	**12.5 J**	**12.6 J**	**17.0 J**
Magnesium	SW6010B	ug/L	NE	NE	**68,400**	**68,200**	**70,600**	**70,600**	**68,900**	**68,600**	**47,500**	**51,200**	**50,900**	**51,500**	**29,000**	**30,000**	**27,800**	**47,400**	**43,900**
Manganese	SW6010B	ug/L	NE	43	**447**	**444**	**435**	**434**	**429**	**426**	**5,000**	**4,890**	**5,650**	**5,710**	**36.1**	**32.2**	**27.6**	**3,710**	**3,460**
Molybdenum	SW6010B	ug/L	NE	10	**0.83 J**	**0.68 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.4 J**	< 10.0 U	**2.1 J**	**2.0 J**	**17.4**	**16.2**	**15.4**	**0.96 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**8.8 J**	**8.4 J**	**9.9 J**	**9.4 J**	**8.5 J**	**8.3 J**	**12.9**	**13.2**	**14.6**	**14.0**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.6 J**
Potassium	SW6010B	ug/L	NE	NE	**20,200**	**20,200**	**19,500**	**19,500**	**18,300**	**18,400**	**10,700**	**9,050**	**6,930**	**6,910**	**1,560**	**1,610**	**1,540**	**6,390**	**5,670**
Silicon	SW6010B	ug/L	NE	NE	**16,700**	**15,800**	**17,700**	**17,600**	**17,400**	**16,700**	**15,400**	**16,600**	**14,500**	**14,700**	**7,380**	**7,460**	**6,480**	**23,700**	**23,300**
Sodium	SW6010B	ug/L	NE	20,000	**250,000**	**247,000**	**233,000**	**238,000**	**214,000**	**211,000**	**72,800**	**72,800**	**68,200**	**68,400**	**21,500**	**22,000**	**20,600**	**208,000**	**188,000**
Strontium	SW6010B	ug/L	NE	1,200	**711**	**707**	**735**	**728**	**708**	**708**	**640**	**647**	**630**	**632**	**592**	**601**	**556**	**857**	**737**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 UJ	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS
			Sample Depth (ft BGS)	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1
			Sample Date	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	**0.099 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	**0.13 J**	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.071 J**
Arsenic	SW6020	ug/L	10	0.052	**108**	**5.7**	**6.2**	**6.9**	**0.62 J**	**0.54 J**	**0.59 J**	**6.8**	**3.5**	**1.9**	**0.54 J**	**0.59 J**	**0.76 J**	**29.8**	**21.4**	**16.3**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.023 J**	< 0.20 U	< 0.20 U	< 0.20 U	**0.044 J**	**0.043 J**	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	**0.59 J**	< 2.0 U	< 2.0 U	**0.23 J**	< 2.0 U	< 2.0 U	**0.25 J**	< 2.0 U	< 2.0 U	**0.26 J**	< 2.0 U	**3.6**	**2.9**	**2.9**
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.50 J**	**0.45 J**	< 1.0 U	**0.39 J**	**0.49 J**	**1.4**	**0.69 J**	**0.63 J**	< 1.0 U	**1.6**	**1.1**	**1.5**	**1.0**	**0.69 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.78 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.38 J**	< 1.0 U	**0.38 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.48 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.0090 J**	**4.2**	**4.4**	**4.3**	**2.8**	**2.7**	**2.7**	**0.68 J**	**0.61 J**	**0.51 J**	**3.8**	**3.8**	**3.5**	**0.12 J**	**0.098 J**	**0.085 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.35 J**	**0.68 J**	**0.59 J**	**0.61 J**	**0.71 J**	**0.84 J**	**1.1**	**0.59 J**	**0.49 J**	**0.59 J**	< 1.0 U	< 1.0 U	< 1.0 U	**12.0**	**10**	**8.6**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**1,060**	**513**	**505**	**502**	**105**	**108**	**108**	**576**	**573**	**563**	**124**	**130**	**124**	**2,600**	**1,950**	**1,690**
Boron	SW6010B	ug/L	NE	400	**154**	**434**	**422**	**392**	**426**	**450**	**447**	**42.9 J**	**39.1 J**	**41.0 J**	**36.3 J**	**32.9 J**	**35.6 J**	**457**	**348**	**335**
Calcium	SW6010B	ug/L	NE	NE	**231,000**	**223,000**	**217,000**	**218,000**	**51,400**	**53,300**	**54,100**	**269,000**	**268,000**	**255,000**	**94,200**	**99,200**	**96,000**	**470,000**	**379,000**	**333,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	**27.8**	**26.5**	**25.3**	< 5.0 U	< 5.0 U	< 5.0 U	**3.9 J**	**1.0 J**	**0.72 J**	< 5.0 U	< 5.0 U	< 5.0 U	**1.5 J**	**1.3 J**	**0.50 J**
Iron	SW6010B	ug/L	NE	1,400	**72,000**	**3,340**	**3,180**	**3,220**	< 50.0 U	< 50.0 U	< 50.0 U	**3,080**	**2,360**	**1,710**	< 50.0 U	< 50.0 U	< 50.0 U	**46,400**	**46,400**	**40,700**
Lithium	SW6010B	ug/L	NE	4	**7.8 J**	**17.9 J**	**24.9**	**25.3**	**39.1**	**42.3**	**40.0**	**24.1**	**28.1**	**26.3**	**15.6 J**	**13.3 J**	**14.5 J**	**42.3**	**40.0**	**29.6**
Magnesium	SW6010B	ug/L	NE	NE	**54,400**	**97,700**	**96,500**	**91,200**	**35,900**	**37,300**	**36,100**	**127,000**	**126,000**	**116,000**	**45,000**	**46,300**	**43,300**	**187,000**	**155,000**	**137,000**
Manganese	SW6010B	ug/L	NE	43	**4,600**	**88.9**	**82.0**	**81.9**	**19.0**	**10.1**	**9.2**	**2,000**	**1,920**	**2,550**	**6.5**	**6.1**	**6.8**	**1,440**	**1,290**	**1,180**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**0.77 J**	< 10.0 U	**0.77 J**	**3.8 J**	< 10.0 U	**3.7 J**	**1.6 J**	< 10.0 U	**1.7 J**	**1.7 J**	< 10.0 U	**1.5 J**	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**2.1 J**	**65.3**	**66.6**	**64.7**	< 10.0 U	< 10.0 U	< 10.0 U	**13.3**	**7.7 J**	**9.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	**22.8**	**20.2**	**18.2**
Potassium	SW6010B	ug/L	NE	NE	**6,370**	**5,480**	**5,170**	**5,260**	**4,170**	**4,280**	**4,560**	**2,140**	**2,080**	**2,180**	**2,050**	**2,110**	**2,120**	**6,910**	**5,830**	**5,370**
Silicon	SW6010B	ug/L	NE	NE	**22,800**	**20,900**	**20,900**	**18,900**	**9,450**	**10,100**	**9,130**	**21,300**	**20,200**	**17,500**	**13,400**	**13,700**	**11,900**	**7,900**	**26,900**	**24,500**
Sodium	SW6010B	ug/L	NE	20,000	**213,000**	**210,000**	**206,000**	**197,000**	**23,800**	**24,400**	**25,400**	**39,000**	**39,300**	**37,100**	**9,640**	**9,680**	**9,870**	**360,000**	**250,000**	**224,000**
Strontium	SW6010B	ug/L	NE	1,200	**932**	**1,770**	**1,760**	**1,710**	**4,700**	**4,880**	**4,900**	**559**	**557**	**527**	**447**	**464**	**434**	**1,090**	**858**	**719**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.2 J**	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**27.5**	**15.9 J**	**21.2**	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS
			Sample Depth (ft BGS)	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37
			Sample Date	03-04-2021	05-12-2021	08-12-2021	03-10-2021	05-19-2021	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Metals, Dissolved																		
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	**0.16 J**	**0.098 J**	< 1.0 U	< 1.0 U	**0.17 J**	**0.34 J**	**0.63 J**	**0.52 J**	**1.7**	**0.17 J**	**0.27 J**
Arsenic	SW6020	ug/L	10	0.052	**2.3**	**2.5**	**2.7**	**8.8**	**7.2**	**18.7**	**0.31 J**	**0.33 J**	**0.38 J**	**34.8**	**46.7**	**40.2**	**0.49 J**	**0.40 J**	**0.68 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.032 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.033 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**1.3 J**	< 2.0 U	**2.0**	**2.3**	< 2.0 U	< 2.0 U	**0.17 J**	< 2.0 U	**16.1**	**18.5**	**9.2**	< 2.0 U	**0.34 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.34 J**	**0.29 J**	< 1.0 U	**0.75 J**	**0.62 J**	< 1.0 U	**0.46 J**	**0.40 J**	**1.3**	**1.5**	**1.9**	**3.0**	**0.90 J**	**1.2**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	**0.38 J**	**0.54 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.47 J**	**0.70 J**	**0.95 J**	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	< 1.0 U	**0.26 J**	< 1.0 U	**0.060 J**	< 1.0 U	< 1.0 U	**0.051 J**	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.64 J**	**0.60 J**	**0.95 J**	**4.8**	**3.3**	**4.9**	**2.6**	**2.3**	**2.4**	**0.049 J**	**0.032 J**	**0.031 J**	**0.86 J**	**1.5**	**1.3**
Vanadium	SW6020	ug/L	NE	8.6	**0.38 J**	**0.48 J**	**0.44 J**	**3.0**	**3.8**	**1.8**	< 1.0 U	< 1.0 U	**0.20 J**	**3.8**	**8.4**	**7.8**	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**113**	**119**	**126**	**454**	**565**	**204**	**157**	**150**	**156**	**5,060**	**7,220**	**7,340**	**130**	**152**	**155**
Boron	SW6010B	ug/L	NE	400	**133**	**163**	**143**	**337**	**409**	**126**	**76.6 J**	**77.6 J**	**80.1 J**	**1,930**	**3,760**	**3,690**	**52.3 J**	**61.6 J**	**70.9 J**
Calcium	SW6010B	ug/L	NE	NE	**99,400**	**95,100**	**101,000**	**310,000**	**367,000**	**241,000**	**73,800**	**76,000**	**74,900**	**760,000**	**959,000**	**938,000**	**86,400**	**112,000**	**110,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	**2.2 J**	**2.3 J**	**1.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	**4.4 J**	**6.0**	**6.0**	< 5.0 U	< 5.0 U	**0.61 J**
Iron	SW6010B	ug/L	NE	1,400	**2,010**	**1,850**	**1,530**	**11,000**	**10,600**	**10,500**	< 50.0 U	< 50.0 U	< 50.0 U	**84,000**	**93,900**	**94,000**	**84.1 J+**	**86.2**	**228**
Lithium	SW6010B	ug/L	NE	4	**34.1**	**40.6**	**42.4**	**31.8**	**39.6**	**26.1**	**37.6**	**39.4**	**33.5**	**91.0**	**116**	**112**	**21.0**	**30.7**	**27.7**
Magnesium	SW6010B	ug/L	NE	NE	**46,800**	**44,000**	**44,300**	**105,000**	**125,000**	**78,400**	**48,700**	**51,000**	**49,800**	**223,000**	**276,000**	**270,000**	**54,700**	**57,900**	**55,600**
Manganese	SW6010B	ug/L	NE	43	**15.0**	**13.2**	**12.3**	**3,160**	**3,780**	**2,700**	**8.3**	**5.5 J+**	< 5.0 U	**1,130**	**1,210**	**1,160**	< 5.0 U	**45.6**	**57.0**
Molybdenum	SW6010B	ug/L	NE	10	**2.7 J**	< 10.0 U	**2.7 J**	**1.4 J**	< 10.0 U	< 10.0 U	**1.6 J**	< 10.0 U	< 10.0 U	**2.2 J**	< 10.0 U	**0.67 J**	**2.9 J**	< 10.0 U	**2.7 J**
Nickel	SW6010B	ug/L	NE	39	**5.2 J**	< 10.0 U	**5.5 J**	**58.0**	**61.3**	**36.7**	< 10.0 U	< 10.0 U	< 10.0 U	**36.5**	**36.9**	**26.1**	**4.7 J**	**5.3 J**	**8.0 J**
Potassium	SW6010B	ug/L	NE	NE	**2,470**	**2,560**	**2,410**	**6,590**	**7,420**	**7,090**	**2,310**	**2,280**	**2,390**	**21,800**	**32,200**	**31,000**	**1,770**	**2,230**	**2,390**
Silicon	SW6010B	ug/L	NE	NE	**7,360**	**7,020**	**8,370**	**17,400**	**19,600**	**18,200**	**11,100**	**11,700**	**11,000**	**33,300**	**8,260**	**42,500**	**9,110**	**11,800**	**10,500**
Sodium	SW6010B	ug/L	NE	20,000	**10,200**	**19,800**	**18,200**	**262,000**	**335,000**	**157,000**	**23,400**	**23,400**	**22,400**	**488,000**	**820,000**	**812,000**	**16,100**	**30,800**	**34,900**
Strontium	SW6010B	ug/L	NE	1,200	**833**	**836**	**974**	**734**	**808**	**547**	**1,750**	**1,600**	**1,600**	**4,370**	**5,810**	**5,790**	**462**	**599**	**581**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.7 J**	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.4 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**2.9 J**	**9.1 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**8.5 J**	< 20.0 U	**24.7**	< 20.0 U	< 20.0 U	< 20.0 U	**33.6**	**10.8 J**	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD
			Sample Depth (ft BGS)	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248
			Sample Date	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	**0.15 J**	**0.22 J**	**0.12 J**	< 1.0 U	**0.12 J**	**0.64 J**	**0.83 J**	**0.23 J**	**0.18 J**	**0.12 J**	< 1.0 U	**0.13 J**
Arsenic	SW6020	ug/L	10	0.052	**1.3**	**0.97 J**	**0.70 J**	**7.2**	**16.9**	**39.5**	< 1.0 U	< 1.0 U	**0.16 J**	**1.6**	**1.1**	**0.92 J**	**0.71 J**	**0.73 J**	**1.1**	**0.39 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	**0.50 J**	< 2.0 U	< 2.0 U	**1.6 J**	< 2.0 U	< 2.0 U	**0.25 J**	< 2.0 U	< 2.0 U	**0.36 J**	< 2.0 U	< 2.0 U	**0.24 J**	< 2.0 U	< 2.0 U
Copper	SW6020	ug/L	1,300	80	**0.33 J**	**0.21 J**	< 1.0 U	**0.37 J**	**0.28 J**	< 1.0 U	**0.35 J**	**0.28 J**	< 1.0 U	**0.35 J**	**0.23 J**	< 1.0 U	**0.22 J**	**0.23 J**	< 1.0 U	**0.41 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.077 J**	< 1.0 U	**0.055 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.044 J**
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	**0.40 J**	< 1.0 U	**0.52 J**	**0.70 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.037 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	**0.13 J**	**0.10 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.10 J**
Uranium	SW6020	ug/L	30	0.4	**0.17 J**	**0.060 J**	**0.047 J**	**0.015 J**	**0.013 J**	**0.015 J**	**2.5**	**2.8**	**2.9**	**5.0**	**3.6**	**2.8**	**0.72 J**	**0.80 J**	**0.49 J**	**0.95 J**
Vanadium	SW6020	ug/L	NE	8.6	**0.26 J**	**0.40 J**	**0.18 J**	**1.3**	**1.8**	**1.8**	< 1.0 U	**0.20 J**	**0.25 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	**61.4 J**
Barium	SW6010B	ug/L	2,000	380	**71.7**	**71.0**	**64.7**	**704**	**804**	**797**	**158**	**162**	**173**	**38.3**	**44.6**	**46.4**	**94.2**	**92.2**	**91.3**	**103**
Boron	SW6010B	ug/L	NE	400	**173**	**169**	**156**	**1,030**	**1,000**	**1,040**	**41.4 J**	**43.1 J**	**43.8 J**	**142**	**116**	**105**	**287**	**288**	**278**	**105**
Calcium	SW6010B	ug/L	NE	NE	**117,000**	**120,000**	**120,000**	**148,000**	**149,000**	**154,000**	**103,000**	**106,000**	**112,000**	**55,900**	**64,300**	**66,900**	**72,000**	**74,600**	**72,100**	**78,800**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	< 5.0 U	< 5.0 U	**2.4 J**	**3.0 J**	**2.7 J**	< 5.0 U	< 5.0 U	**0.41 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.47 J**
Iron	SW6010B	ug/L	NE	1,400	**2,380**	**1,410**	**983**	**21,600**	**23,200**	**23,400**	**208**	**227**	**172**	< 50.0 U	< 50.0 U	**50.3**	**988**	**652**	**1,350**	< 50.0 U
Lithium	SW6010B	ug/L	NE	4	**36.9**	**39.3**	**35.2**	**26.5**	**27.6**	**23.5**	**15.2 J**	**18.7 J**	**16.9 J**	**43.0**	**39.3**	**34.5**	**38.2**	**44.6**	**45.3**	**29.4**
Magnesium	SW6010B	ug/L	NE	NE	**79,100**	**79,400**	**74,400**	**68,600**	**72,400**	**68,200**	**49,900**	**50,500**	**50,000**	**33,600**	**38,600**	**39,400**	**49,300**	**49,800**	**48,400**	**46,000**
Manganese	SW6010B	ug/L	NE	43	**39.5**	**29.7**	**18.1**	**82.1**	**98.0**	**96.8**	**25.9**	**12.4**	**9.4**	**10.7**	**27.1**	**33.1**	**27.5**	**21.0**	**23.7**	**42.6**
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.91 J**	**1.5 J**	< 10.0 U	**1.7 J**	**20.2**	**13.2**	**9.7 J**	**3.9 J**	< 10.0 U	**2.1 J**	**7.1 J**
Nickel	SW6010B	ug/L	NE	39	**3.0 J**	**4.4 J**	**3.4 J**	**13.0**	**11.5**	**10.2**	**1.7 J**	**1.6 J**	**1.8 J**	**1.2 J**	< 10.0 U	**1.5 J**	< 10.0 U	< 10.0 U	< 10.0 U	**2.1 J**
Potassium	SW6010B	ug/L	NE	NE	**3,870**	**4,000**	**3,890**	**53,600**	**53,600**	**50,600**	**1,780**	**1,740**	**1,720**	**3,840**	**2,910**	**2,380**	**3,470**	**3,530**	**3,440**	**2,580**
Silicon	SW6010B	ug/L	NE	NE	**6,750**	**6,560**	**5,830**	**18,200**	**21,100**	**21,100**	**13,300**	**13,900**	**13,700**	**6,860**	**6,840**	**6,230**	**6,030**	**6,280**	**5,610**	**6,500**
Sodium	SW6010B	ug/L	NE	20,000	**22,200**	**23,600**	**23,000**	**210,000**	**209,000**	**206,000**	**49,100**	**53,900**	**57,100**	**89,200**	**73,300**	**59,700**	**10,700**	**11,500**	**9,840**	**32,400**
Strontium	SW6010B	ug/L	NE	1,200	**4,580**	**4,720**	**4,430**	**824**	**802**	**786**	**455**	**448**	**480**	**1,380**	**1,460**	**1,470**	**5,000**	**5,170**	**5,200**	**1,540**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.2 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**19.5 J**	**56.6**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**854**
Mercury	SW7470A	ug/L	2	0.063	**0.12 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS
			Sample Depth (ft BGS)	238-248	238-248	138-148	138-148	138-148	237-247	237-247	237-247	137-147	137-147	137-147	234-244	234-244	234-244	134-144	134-144
			Sample Date	05-12-2021	08-12-2021	03-05-2021	05-12-2021	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021	05-11-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Metals, Dissolved																			
Antimony	SW6020	ug/L	6	0.78	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	**0.14 J**	**0.27 J**	**0.13 J**	< 1.0 U	**0.080 J**	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	10	0.052	**0.73 J**	**1.7**	**1.4**	**2.4**	**2.2**	**2.7**	**2.1**	**1.7**	**0.90 J**	**1.5**	**0.95 J**	**1.3**	**0.97 J**	**0.57 J**	**0.46 J**	**0.32 J**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.058 J**	**0.044 J**	**0.11 J**	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**0.28 J**	< 2.0 U	< 2.0 U	**0.98 J**	< 2.0 U	< 2.0 U	**0.34 J**	< 2.0 U	< 2.0 U	**0.21 J**	< 2.0 U	< 2.0 U	**0.62 J**	< 2.0 U	< 2.0 U	**0.18 J**
Copper	SW6020	ug/L	1,300	80	**0.26 J**	< 1.0 U	**0.22 J**	**0.26 J**	< 1.0 U	**0.38 J**	**0.34 J**	< 1.0 U	**0.33 J**	**0.19 J**	< 1.0 U	**0.56 J**	**0.54 J**	< 1.0 U	**0.64 J**	**0.54 J**
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.6**	**0.98 J**	**0.49 J**	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.041 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	**0.68 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.29 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.13 J**	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**0.91 J**	**0.96 J**	**0.066 J**	**0.061 J**	**0.067 J**	**2.9**	**2.2**	**1.5**	**1.0**	**1.0**	**0.93 J**	**4.5**	**5.0**	**4.8**	**0.75 J**	**0.65 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	**0.20 J**	**0.41 J**	**0.54 J**	**0.26 J**	**0.24 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.95 J**	**0.97 J**	**0.60 J**	< 1.0 U	< 1.0 U
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**101**	**105**	**116**	**137**	**143**	**209**	**188**	**148**	**53.6**	**55.4**	**52.9**	**261**	**214**	**238**	**109**	**102**
Boron	SW6010B	ug/L	NE	400	**108**	**110**	**166**	**194**	**196**	**98.4 J**	**95.9 J**	**94.0 J**	**417**	**425**	**414**	**46.4 J**	**56.2 J**	**65.1 J**	**44.9 J**	**35.2 J**
Calcium	SW6010B	ug/L	NE	NE	**79,900**	**85,100**	**102,000**	**120,000**	**123,000**	**96,400**	**98,000**	**93,600**	**63,400**	**67,100**	**64,100**	**136,000**	**128,000**	**139,000**	**80,400**	**83,200**
Cobalt	SW6010B	ug/L	NE	0.6	< 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	**1.1 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Iron	SW6010B	ug/L	NE	1,400	**367**	**1,280**	**4,230**	**7,440**	**6,160**	**3,170**	**2,250**	**1,640**	**145 J+**	**402**	**256**	< 50.0 U	< 50.0 U	< 50.0 U	**55.0 J+**	< 50.0 U
Lithium	SW6010B	ug/L	NE	4	**28.1**	**34.8**	**29.6**	**32.8**	**30.7**	**26.3**	**25.4**	**23.4**	**46.4**	**48.6**	**46.4**	**16.8 J**	**18.9 J**	**22.1**	**3.1 J**	**4.0 J**
Magnesium	SW6010B	ug/L	NE	NE	**46,200**	**46,400**	**53,000**	**61,300**	**60,800**	**48,900**	**48,800**	**46,000**	**40,800**	**42,600**	**42,100**	**58,800**	**55,700**	**54,000**	**18,000**	**16,200**
Manganese	SW6010B	ug/L	NE	43	**47.4**	**33.4**	**41.6**	**50.8**	**45.7**	**106**	**91.8**	**60.7**	**17.0**	**50.8**	**10.5**	**108**	**37.6**	**92.1**	< 5.0 U	< 5.0 U
Molybdenum	SW6010B	ug/L	NE	10	< 10.0 U	**9.8 J**	< 10.0 U	< 10.0 U	< 10.0 U	**20.0**	**15.9**	**8.7 J**	**7.2 J**	< 10.0 U	**7.0 J**	**6.8 J**	< 10.0 U	**5.9 J**	**5.9 J**	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	< 10.0 U	**2.9 J**	**5.0 J**	< 10.0 U	**5.7 J**	**2.7 J**	**3.0 J**	**2.8 J**	**1.9 J**	**1.7 J**	**1.3 J**	< 10.0 U	**2.0 J**	**4.4 J**	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	NE	NE	**2,980**	**2,880**	**3,280**	**3,640**	**3,620**	**3,570**	**3,510**	**3,450**	**3,700**	**3,760**	**3,700**	**2,710**	**3,280**	**4,350**	**950 J**	**651 J**
Silicon	SW6010B	ug/L	NE	NE	**6,260**	**6,650**	**10,200**	**10,700**	**10,200**	**7,360**	**7,440**	**6,760**	**4,860**	**4,910**	**4,840**	**12,700**	**11,800**	**11,200**	**6,440**	**6,220**
Sodium	SW6010B	ug/L	NE	20,000	**34,900**	**36,000**	**46,400**	**47,100**	**41,900**	**45,400**	**41,800**	**35,400**	**19,300**	**20,400**	**18,100**	**44,300**	**46,200**	**44,500**	**39,100**	**38,200**
Strontium	SW6010B	ug/L	NE	1,200	**1,560**	**1,660**	**1,800**	**2,070**	**2,000**	**1,490**	**1,540**	**1,520**	**4,250**	**4,500**	**4,420**	**538**	**499**	**532**	**628**	**312**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**518**	**302**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**19.9 J**	**11.2 J**	< 20.0 U	**18.4 J**	**19.4 J**	**37.0**	**40.4**	**8.8 J**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	**0.11 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12f: Validated Groundwater Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-212-SS	PZ-302-AI	PZ-302-AI	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
				Sample Depth (ft BGS)	134-144	32.6-42.4	32.6-42.4	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8	16-25.8
				Sample Date	08-10-2021	03-12-2021	05-18-2021	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021	08-24-2021
				Sample Type	N	N	N	N	N	N	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1												
Metals, Dissolved																
Antimony	SW6020	ug/L	6	0.78	**0.11 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.40 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.081 J**
Arsenic	SW6020	ug/L	10	0.052	**0.47 J**	**2.1**	**2.1**	**2.1**	**131**	**212**	**260**	**68.1**	**69.7**	**77.9**	**81.5**	**74.5**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	< 2.0 U	< 2.0 U	**0.21 J**	< 2.0 U	< 2.0 U	**0.40 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.40 J**	**0.51 J**	< 2.0 U
Copper	SW6020	ug/L	1,300	80	< 1.0 U	**0.54 J**	**0.44 J**	< 1.0 U	**0.52 J**	**0.35 J**	< 1.0 U	**0.48 J**	**0.46 J**	**0.42 J**	**0.54 J**	< 1.0 U
Lead	SW6020	ug/L	15	15	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	50	10	< 1.0 U	**0.24 J**	**0.36 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.47 J**	**0.38 J**	**0.40 J**	< 1.0 U	**0.51 J**	**0.66 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	**1.1**	**11.1**	**10.3**	**10.8**	**0.49 J**	**7.8**	**10.1**	**0.014 J**	< 1.0 U	**0.016 J**	**0.014 J**	**0.013 J**
Vanadium	SW6020	ug/L	NE	8.6	< 1.0 U	< 1.0 U	**0.21 J**	< 1.0 U	**1.4**	**2.3**	**1.4**	**1.1**	**1.1**	**0.98 J**	**0.98 J**	**1.4**
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**116**	**498**	**487**	**482**	**552**	**521**	**366**	**677**	**702**	**697**	**693**	**761**
Boron	SW6010B	ug/L	NE	400	**58.8 J**	**365**	**370**	**355**	**504**	**511**	**483**	**220**	**224**	**191**	**184**	**214**
Calcium	SW6010B	ug/L	NE	NE	**86,900**	**219,000**	**229,000**	**225,000**	**176,000**	**184,000**	**184,000**	**222,000**	**229,000**	**236,000**	**234,000**	**238,000**
Cobalt	SW6010B	ug/L	NE	0.6	< 5.0 U	**12.2**	**12.0**	**11.8**	**1.8 J**	**11.9**	**9.8**	**1.8 J**	**2.1 J**	**2.1 J**	**1.9 J**	**2.1 J**
Iron	SW6010B	ug/L	NE	1,400	< 50.0 U	**3,550**	**3,410**	**3,140**	**32,900**	**50,300**	**55,700**	**69,200**	**71,900**	**67,800**	**66,900**	**74,300**
Lithium	SW6010B	ug/L	NE	4	< 20.0 U	**26.4**	**31.0**	**23.8**	**12.0 J**	**13.8 J**	**14.2 J**	**25.4**	**28.1**	**29.0**	**25.6**	**23.0**
Magnesium	SW6010B	ug/L	NE	NE	**20,300**	**56,400**	**55,700**	**53,800**	**57,000**	**63,100**	**63,500**	**58,000**	**60,200**	**62,600**	**62,000**	**61,900**
Manganese	SW6010B	ug/L	NE	43	**33.2**	**376**	**372**	**337**	**1,810**	**6,710**	**7,770**	**1,150**	**1,180**	**978**	**946**	**1,220**
Molybdenum	SW6010B	ug/L	NE	10	**8.6 J**	**13.0**	**12.1**	**11.3**	**3.4 J**	**17.3**	**155**	< 10.0 U	**0.54 J**	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	< 10.0 U	**30.5**	**27.6**	**26.6**	**8.3 J**	**38.6**	**81.3**	**7.9 J**	**8.2 J**	**8.8 J**	**8.2 J**	**8.6 J**
Potassium	SW6010B	ug/L	NE	NE	**1,560**	**8,130**	**7,500**	**7,380**	**7,700**	**9,050**	**7,910**	**4,620**	**4,680**	**4,130**	**4,050**	**4,290**
Silicon	SW6010B	ug/L	NE	NE	**6,280**	**13,000**	**14,000**	**12,400**	**17,600**	**18,800**	**15,900**	**24,800**	**25,900**	**27,500**	**27,500**	**26,700**
Sodium	SW6010B	ug/L	NE	20,000	**45,900**	**55,100**	**52,700**	**51,800**	**43,800**	**45,100**	**43,300**	**42,600**	**43,900**	**40,100**	**39,300**	**42,100**
Strontium	SW6010B	ug/L	NE	1,200	**1,180**	**929**	**946**	**906**	**1,100**	**1,030**	**1,090**	**647**	**667**	**691**	**680**	**694**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**9.9 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13	D-81
				Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133	45-60
				Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021	03-09-2021
				Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,170 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,440 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,210 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,040 U	NA	NA	< 1,300 U	NA	NA	NA	< 2,000 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,100 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,040 U	NA	NA	< 2,000 U	NA	NA	NA	< 2,000 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,100 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,020 U	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,050 U
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.17 U	< 0.10 U	< 0.087 UJ	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.083 UJ	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.17 U	< 0.10 U	< 0.087 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.083 U	< 0.091 U	< 0.095 UJ	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.17 U	< 0.10 U	< 0.087 UJ	< 0.091 U	< 0.091 UJ	< 0.10 UJ	< 0.083 UJ	< 0.091 U	< 0.095 UJ	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.10 U

Notes:

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***Bold** = Detected*

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Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87	D-89	D-89
				Sample Depth (ft BGS)	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111	33-48	33-48
				Sample Date	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021	03-10-2021	03-10-2021
				Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**628 J**	**662 J**
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	**870 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	**870 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**628 J**	**662 J**
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,410 UJ	NA	NA	NA	**1,430 J+**	**1,280 J+**
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 UJ	NA	NA	NA	**717 J+**	**540 J+**
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 2,020 U	NA	NA	< 2,000 U	NA	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 UJ	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 2,020 U	NA	NA	< 2,000 U	NA	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 UJ	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	< 1,010 U	NA	NA	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 UJ	< 0.10 UJ	< 0.11 U	< 0.10 U	< 0.10 UJ	< 0.091 UJ	< 0.10 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.11 UJ	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 UJ	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.11 UJ	< 0.10 UJ	< 0.10 UJ	< 0.11 U	< 0.10 UJ	< 0.10 UJ	< 0.091 UJ	< 0.10 U	< 0.10 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

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J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9	I-11	I-11	I-11
					Sample Depth (ft BGS)	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1	80.5-90.5	80.5-90.5	80.5-90.5
					Sample Date	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021	03-02-2021	05-11-2021	08-12-2021
					Sample Type	N	FD	N	N	FD	N	FD	N	N	N	N	FD	N	N	N
Petroleum Hydrocarbons,Total																				
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	**829 J**	< 927 U	< 927 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 927 U	< 927 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE		**856 J**	**799 J**	**1,070**	< 927 U	< 927 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		**856 J**	**799 J**	**1,900**	< 927 U	< 927 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,380 U	< 1,030 U	NA	NA	NA	< 1,530 U	NA	NA	NA	< 1,000 U	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 U	< 2,000 U	< 2,000 U	< 2,060 U	< 2,060 U	NA	NA	NA	< 2,020 U	NA	NA	NA	< 2,000 U	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 U	< 2,000 U	< 2,000 U	< 2,060 U	< 2,060 U	NA	NA	NA	< 2,230 U	NA	NA	NA	< 2,000 U	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,030 U	NA	NA	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA
Polychlorinated Biphenyls, Total																				
Aroclor 1016	SW8082A	ug/L	0.5	0.14		< 0.095 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 UJ	< 0.17 U	< 0.095 U	< 0.087 UJ	< 0.083 UJ	< 0.091 U	< 0.095 U	< 0.095 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047		< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.17 U	< 0.095 U	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.095 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047		< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.17 U	< 0.095 U	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.095 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.17 U	< 0.095 U	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.095 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.17 U	< 0.095 U	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.095 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.17 U	< 0.095 U	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 U	< 0.095 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078		< 0.095 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.17 U	< 0.10 UJ	< 0.095 UJ	< 0.083 U	< 0.17 U	< 0.095 UJ	< 0.087 U	< 0.083 U	< 0.091 U	< 0.095 UJ	< 0.095 U
PCBs, Total	SW8082A	ug/L	0.5	NE		< 0.095 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.17 U	< 0.10 UJ	< 0.095 UJ	< 0.083 UJ	< 0.17 U	< 0.095 UJ	< 0.087 UJ	< 0.083 UJ	< 0.091 U	< 0.095 UJ	< 0.095 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-62	I-62	I-62	I-65	I-65	I-65	I-66	I-66	I-66	I-67	I-67	I-67	I-68	I-68	I-68
					Sample Depth (ft BGS)	34-44	34-44	34-44	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2
					Sample Date	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Petroleum Hydrocarbons,Total																				
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
Polychlorinated Biphenyls, Total																				
Aroclor 1016	SW8082A	ug/L	0.5	0.14		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 UJ	< 0.095 U	< 0.10 U	< 0.091 UJ	< 0.095 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078		< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE		< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.088 U	< 0.091 UJ	< 0.095 U	< 0.10 U	< 0.091 UJ	< 0.095 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.10 U	< 0.10 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1
				Sample Depth (ft BGS)	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82	234.82-254.82	-	-	-	-	39-49
				Sample Date	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021	08-16-2021	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021
				Sample Type	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	**3,080**	**3,570**	**3,080**	**2,830**	**3,800**	**960**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	**9,570**	**10,900**	**11,500**	**10,400**	**14,600**	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	**12,700**	**14,500**	**14,600**	**13,200**	**18,400**	**960**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,230 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,060 U	< 2,000 U	< 2,000 U	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,060 U	< 2,000 U	< 2,000 U	NA	NA	NA	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 UJ	< 0.095 U	< 0.11 UJ	< 0.091 U	< 0.10 UJ	< 0.091 UJ	< 0.10 U	< 0.088 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.091 UJ	< 0.095 U	< 0.10 U	< 0.10 UJ	< 0.085 U	< 0.095 UJ	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.088 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.091 UJ	< 0.095 U	< 0.10 U	< 0.10 UJ	< 0.085 UJ	< 0.095 UJ	< 0.11 UJ	< 0.091 U	< 0.10 UJ	< 0.091 UJ	< 0.10 U	< 0.088 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2	MW-112-P3	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204
				Sample Depth (ft BGS)	39-49	54-64	54-64	79-89	79-89	45-55	70-80	90-100	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5
				Sample Date	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	**748 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	**624 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	**1,370**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.095 UJ	< 0.10 U	< 0.095 UJ	< 0.10 U	< 0.091 UJ	< 0.087 UJ	< 0.083 UJ	< 0.083 UJ	< 0.10 U	< 0.091 U	< 0.11 UJ	< 0.091 U	< 0.095 U	< 0.095 UJ	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.10 UJ	< 0.091 U	< 0.087 U	< 0.083 U	< 0.083 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.091 UJ	< 0.095 UJ	< 0.095 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.095 UJ	< 0.10 UJ	< 0.095 UJ	< 0.10 UJ	< 0.091 UJ	< 0.087 UJ	< 0.083 UJ	< 0.083 UJ	< 0.10 U	< 0.091 U	< 0.11 UJ	< 0.091 UJ	< 0.095 UJ	< 0.095 UJ	< 0.10 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

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USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

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J+ = The result is an estimated concentration, but may be biased high.

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1
				Sample Depth (ft BGS)	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170	50-60	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116
				Sample Date	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021	08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021
				Sample Type	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**789 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**2,310 J+**
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**3,000 J+**
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**2,930**	**2,740**	< 900 U	< 900 U	**727 J**	**718 J**	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**3,720**	**2,740**	< 900 U	< 900 U	**727 J**	< 900 U	**5,310 J+**
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	**2,060 J+**
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 UJ	< 0.10 U	< 0.10 UJ	< 0.095 UJ	< 0.091 UJ	< 0.089 U	< 0.083 UJ	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 U	< 0.083 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 U	< 0.083 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 U	< 0.083 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 U	< 0.083 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 U	< 0.083 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.085 U	< 0.10 UJ	< 0.10 U	< 0.095 U	< 0.091 U	< 0.089 UJ	< 0.083 U	< 0.10 UJ	< 0.10 U	< 0.089 UJ	< 0.10 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.085 UJ	< 0.10 UJ	< 0.10 UJ	< 0.095 UJ	< 0.091 UJ	< 0.089 UJ	< 0.083 UJ	< 0.10 UJ	< 0.10 U	< 0.089 UJ	< 0.10 U	< 0.10 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

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Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-304-P1 106-116 05-24-2021 FD	MW-304-P1 106-116 08-04-2021 N	MW-304-P2 126-136 05-24-2021 N	MW-304-P2 126-136 08-04-2021 N	MW-304-P3 221-231 05-26-2021 N	MW-304-P3 221-231 08-04-2021 N	MW-304-P3 221-231 08-04-2021 FD	MW-306-P1 25-35 05-13-2021 N	MW-306-P1 25-35 08-16-2021 N	MW-306-P2 80-90 05-13-2021 N	MW-306-P2 80-90 08-16-2021 N	MW-306-P2 80-90 08-16-2021 FD	MW-306-P3 110-120 05-13-2021 N	MW-306-P3 110-120 08-16-2021 N	MW-306-P3 110-120 08-16-2021 FD
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 1,500 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**609 J**	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 1,500 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**609 J**	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 U	< 0.091 UJ	< 0.095 U	< 0.095 UJ	< 0.10 U	< 0.091 UJ	< 0.091 UJ	< 0.095 U	< 0.083 UJ	< 0.095 U	< 0.091 UJ	< 0.083 UJ	< 0.095 U	< 0.083 UJ	< 0.083 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.083 U	< 0.095 U	< 0.083 U	< 0.083 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.083 U	< 0.095 U	< 0.083 U	< 0.083 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.083 U	< 0.095 U	< 0.083 U	< 0.083 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.083 U	< 0.095 U	< 0.083 U	< 0.083 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.083 U	< 0.095 U	< 0.083 U	< 0.083 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.095 UJ	< 0.083 U	< 0.095 UJ	< 0.091 U	< 0.083 U	< 0.095 UJ	< 0.083 U	< 0.083 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 U	< 0.091 UJ	< 0.095 U	< 0.095 UJ	< 0.10 U	< 0.091 UJ	< 0.091 UJ	< 0.095 UJ	< 0.083 UJ	< 0.095 UJ	< 0.091 UJ	< 0.083 UJ	< 0.095 UJ	< 0.083 UJ	< 0.083 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

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NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-400-P1	MW-400-P1	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2	MW-401-P3
				Sample Depth (ft BGS)	20-30	20-30	55-65	55-65	90-100	90-100	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72	92-102
				Sample Date	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021	05-07-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.091 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.095 U	< 0.095 U	< 0.089 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 UJ

Notes:

ft BGS = feet below ground surface

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2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3	MW-407R-P1	MW-407R-P2
				Sample Depth (ft BGS)	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100	53.6-63.6	73.6-83.6
				Sample Date	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021	08-12-2021	08-12-2021
				Sample Type	N	FD	N	N	N	N	N	N	FD	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Petroleum Hydrocarbons,Total																		
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls, Total																		
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.10 U	< 0.091 UJ	< 0.091 UJ	< 0.083 UJ	< 0.091 U	< 0.087 UJ	< 0.091 U	< 0.091 U	< 0.087 UJ	< 0.091 U	< 0.083 UJ	< 0.083 UJ	< 0.087 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.083 U	< 0.083 U	< 0.087 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.083 U	< 0.083 U	< 0.087 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.083 U	< 0.083 U	< 0.087 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.083 U	< 0.083 U	< 0.087 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.091 U	< 0.087 U	< 0.091 U	< 0.083 U	< 0.083 U	< 0.087 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.083 U	< 0.091 UJ	< 0.087 U	< 0.091 UJ	< 0.091 UJ	< 0.087 U	< 0.091 UJ	< 0.083 U	< 0.083 U	< 0.087 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.10 U	< 0.10 U	< 0.091 UJ	< 0.091 UJ	< 0.083 UJ	< 0.091 UJ	< 0.087 UJ	< 0.091 UJ	< 0.091 UJ	< 0.087 UJ	< 0.091 UJ	< 0.083 UJ	< 0.083 UJ	< 0.087 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	MW-407R-P3	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2	MW-505-P2	MW-505-P3	MW-505-P3	PZ-304-AI	PZ-304-AI
				Sample Depth (ft BGS)	103.6-113.6	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50	40-50	65-75	65-75	39-48.8	39-48.8
				Sample Date	08-12-2021	03-15-2021	05-12-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	05-25-2021	08-05-2021	03-01-2021	05-17-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.087 UJ	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.087 UJ	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.089 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-304-AI	PZ-304-AS	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8	S-8	S-10	S-10	S-10	S-82	S-82
				Sample Depth (ft BGS)	39-48.8	17.1-26.9	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5
				Sample Date	08-18-2021	03-10-2021	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	**832 J**	**1,350**	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 927 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 927 UJ	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 927 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	**805 J**	< 900 U	< 927 UJ	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 927 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	**805 J**	< 900 U	**832 J**	**1,350**	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 927 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,500 UJ	NA	< 1,000 U	< 1,490 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,570 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 UJ	NA	< 1,000 U	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 UJ	NA	< 2,000 U	< 2,060 UJ	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	< 2,040 U	NA	NA	< 2,060 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 UJ	NA	< 2,000 U	< 2,060 U	**1,240 J**	< 2,000 U	< 2,000 U	< 2,000 U	NA	< 2,040 U	NA	NA	< 2,060 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,020 U	NA	NA	< 1,030 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.087 UJ	< 0.10 U	< 0.095 U	< 0.091 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.088 U	< 0.087 UJ	< 0.17 U	< 0.091 U	< 0.083 UJ	< 0.10 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.087 U	< 0.17 U	< 0.091 U	< 0.083 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.087 U	< 0.17 U	< 0.091 U	< 0.083 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.091 U	**0.16**	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.087 U	< 0.17 U	< 0.091 U	< 0.083 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.087 U	< 0.17 U	< 0.091 U	< 0.083 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.087 U	< 0.17 U	< 0.091 U	< 0.083 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 UJ	< 0.091 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.088 UJ	< 0.087 U	< 0.17 U	< 0.091 UJ	< 0.083 U	< 0.10 U	< 0.10 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.087 UJ	< 0.10 U	< 0.095 UJ	< 0.091 UJ	**0.16**	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.088 UJ	< 0.087 UJ	< 0.17 U	< 0.091 UJ	< 0.083 UJ	< 0.10 U	< 0.10 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS
					Sample Depth (ft BGS)	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7
					Sample Date	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Petroleum Hydrocarbons,Total																				
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,470 UJ	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 UJ	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 UJ	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																				
Aroclor 1016	SW8082A	ug/L	0.5	0.14		< 0.091 UJ	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047		< 0.091 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047		< 0.091 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.089 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.11 U	< 0.11 UJ	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.095 U	< 0.11 UJ	< 0.091 U	< 0.10 U	< 0.089 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE		< 0.091 UJ	< 0.11 U	< 0.11 UJ	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.095 U	< 0.11 UJ	< 0.091 U	< 0.10 U	< 0.089 UJ

Notes:

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ug/L = micrograms per liter

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS	PZ-102-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-103-SS	PZ-104-KS	PZ-104-KS
				Sample Depth (ft BGS)	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5	79.7-89.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	134.7-144.5	397.37-407.17	397.37-407.17
				Sample Date	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021	08-04-2021	03-12-2021	03-12-2021	05-20-2021	05-20-2021	08-24-2021	02-24-2021	05-05-2021
				Sample Type	N	N	N	N	N	N	N	N	FD	N	FD	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Petroleum Hydrocarbons,Total																		
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**782 J**	**807 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**1,760**	**1,830**	**1,870**	**1,810**	**2,560**	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**2,540**	**2,640**	**1,870**	**1,810**	**2,560**	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	**1,340 J+**	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	**611 J+**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
Polychlorinated Biphenyls, Total																		
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 UJ	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.095 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.095 U	< 0.088 UJ	< 0.10 U	< 0.095 U	< 0.11 UJ	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 UJ	< 0.095 UJ	< 0.10 U	< 0.095 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 UJ	< 0.095 U	< 0.088 UJ	< 0.10 U	< 0.095 U	< 0.11 UJ	< 0.10 U	< 0.091 U	< 0.095 U	< 0.10 UJ	< 0.095 UJ	< 0.10 UJ	< 0.095 U	< 0.10 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

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***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

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2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-104-KS	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SD	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS
				Sample Depth (ft BGS)	397.37-407.17	235.2-245	235.2-245	235.2-245	235.2-245	134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57
				Sample Date	08-04-2021	03-03-2021	05-13-2021	08-23-2021	08-23-2021	02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021
				Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Petroleum Hydrocarbons,Total																		
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,290 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,290 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,020 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,020 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,010 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA
Polychlorinated Biphenyls, Total																		
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 UJ	< 0.10 UJ	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 UJ	< 0.091 U	< 0.10 U	< 0.10 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.095 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 UJ	< 0.095 U	< 0.091 U	< 0.10 UJ	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.095 UJ	< 0.10 UJ	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.095 UJ	< 0.095 UJ	< 0.091 U	< 0.10 UJ	< 0.10 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-106-SD	PZ-106-SD	PZ-106-SD	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS
				Sample Depth (ft BGS)	190.79-200.59	190.79-200.59	190.79-200.59	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96
				Sample Date	03-03-2021	05-06-2021	08-11-2021	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Petroleum Hydrocarbons,Total																		
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 945 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,240 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,040 U	NA	NA	< 2,000 U	NA	NA	< 2,100 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,040 U	NA	NA	< 2,000 U	NA	NA	< 2,100 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	NA	NA	< 1,000 U	NA	NA	< 1,050 U	NA
Polychlorinated Biphenyls, Total																		
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.095 U	< 0.11 UJ	< 0.091 U	< 0.10 U	< 0.11 UJ	< 0.14 U	< 0.095 U	< 0.087 UJ	< 0.095 U	< 0.10 U	< 0.095 UJ	< 0.095 U	< 0.088 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 UJ	< 0.11 U	< 0.091 U	< 0.10 UJ	< 0.11 U	< 0.14 U	< 0.095 U	< 0.087 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.088 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.10 U	< 0.095 UJ	< 0.11 UJ	< 0.091 U	< 0.10 UJ	< 0.11 UJ	< 0.14 U	< 0.095 U	< 0.087 UJ	< 0.095 U	< 0.10 U	< 0.095 UJ	< 0.095 U	< 0.088 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-111-KS	PZ-111-SD	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD
				Sample Depth (ft BGS)	357.15-366.96	199.4-209.2	199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4
				Sample Date	08-03-2021	02-23-2021	05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021	08-18-2021
				Sample Type	N	N	N	N	N	FD	N	FD	N	N	FD	N	FD	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	**614 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	**614 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 U	< 2,000 U	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	NA	NA	NA	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.095 UJ	< 0.10 U	< 0.11 U	< 0.095 UJ	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.10 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.095 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.11 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.095 UJ	< 0.10 U	< 0.11 U	< 0.095 UJ	< 0.11 U	< 0.11 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.10 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS	PZ-116-SS
				Sample Depth (ft BGS)	28.9-38.7	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161	151.4-161
				Sample Date	03-01-2021	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021	05-10-2021
				Sample Type	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,080 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	NA	NA	NA	< 2,000 U	NA	NA	< 2,080 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	NA	NA	NA	< 1,000 U	NA	NA	< 1,040 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 U	< 0.091 U	< 0.11 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.091 UJ	< 0.11 U	< 0.095 U	< 0.091 UJ	< 0.095 U	< 0.089 U	< 0.10 UJ	< 0.091 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 U	< 0.10 U	< 0.091 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 U	< 0.10 U	< 0.091 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 U	< 0.10 U	< 0.091 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 U	< 0.10 U	< 0.091 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 U	< 0.10 U	< 0.091 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 UJ	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.11 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.089 UJ	< 0.10 U	< 0.091 U	< 0.091 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 U	< 0.091 UJ	< 0.11 UJ	< 0.10 UJ	< 0.10 U	< 0.10 UJ	< 0.091 UJ	< 0.11 U	< 0.095 U	< 0.091 UJ	< 0.095 U	< 0.089 UJ	< 0.10 UJ	< 0.091 U	< 0.091 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS	PZ-204A-SS	PZ-204A-SS
				Sample Depth (ft BGS)	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4	79.5-89.1	79.5-89.1
				Sample Date	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021	03-10-2021	05-19-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**661 J**
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**710 J**
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**3,400**	**2,820**	**3,220**	< 900 U	< 900 U	< 900 U	< 900 U	**894 J**
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**3,400**	**3,440 J+**	**3,220 J+**	< 900 U	< 900 U	< 900 U	< 900 U	**2,270**
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	**1,600 J+**	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 UJ	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	**572 J+**	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 UJ	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 UJ	< 0.10 U	< 0.089 U	< 0.085 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.095 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 U	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.089 UJ	< 0.085 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.095 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.10 U	< 0.10 U	< 0.088 U	< 0.095 U	< 0.091 U	< 0.088 U	< 0.10 UJ	< 0.10 U	< 0.089 UJ	< 0.085 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.095 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS	PZ-206-SS	PZ-206-SS	PZ-207-AS	PZ-207-AS
					Sample Depth (ft BGS)	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8	115-124.8	115-124.8	34.9-39.7	34.9-39.7
					Sample Date	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021	05-17-2021	08-06-2021	03-09-2021	05-17-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Petroleum Hydrocarbons,Total																				
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	**1,680**	< 900 U	**1,950**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**751 J**	< 909 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	**844 J**	< 900 U	< 900 U	< 900 U	< 918 U	< 909 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	**8,280**	**6,260**	**10,100**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 918 U	< 909 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE		< 900 U	< 900 U	< 900 U	< 900 U	**9,960**	**6,260**	**12,100**	< 900 U	< 900 U	**844 J**	< 900 U	< 900 U	< 900 U	**751 J**	< 909 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,370 UJ	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,210 U	< 1,010 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 UJ	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 UJ	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 UJ	< 2,000 UJ	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,040 U	< 2,020 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 2,000 UJ	< 2,000 UJ	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,040 U	< 2,020 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE		< 1,000 UJ	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,020 U	< 1,010 U
Polychlorinated Biphenyls, Total																				
Aroclor 1016	SW8082A	ug/L	0.5	0.14		< 0.091 UJ	< 0.10 U	< 0.095 U	< 0.095 UJ	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047		< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047		< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.14 U	< 0.089 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078		< 0.091 U	< 0.10 U	< 0.095 UJ	< 0.095 U	< 0.095 U	< 0.11 UJ	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.14 U	< 0.089 UJ
PCBs, Total	SW8082A	ug/L	0.5	NE		< 0.091 UJ	< 0.10 U	< 0.095 UJ	< 0.095 UJ	< 0.095 U	< 0.11 UJ	< 0.10 U	< 0.10 U	< 0.088 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.14 U	< 0.089 UJ

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

Bold *= Detected*

Blue *Font = Exceeds USEPA Primary MCL*

Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-207-AS	PZ-208-SS	PZ-208-SS	PZ-208-SS	PZ-209-SD	PZ-209-SD	PZ-209-SD	PZ-209-SS	PZ-209-SS	PZ-209-SS	PZ-210-SD	PZ-210-SD	PZ-210-SD	PZ-210-SS	PZ-210-SS
				Sample Depth (ft BGS)	34.9-39.7	88.7-98.5	88.7-98.5	88.7-98.5	240-250	240-250	240-250	140-150	140-150	140-150	238-248	238-248	238-248	138-148	138-148
				Sample Date	08-20-2021	02-24-2021	05-07-2021	08-11-2021	02-24-2021	05-05-2021	08-05-2021	02-25-2021	05-10-2021	08-05-2021	03-05-2021	05-12-2021	08-12-2021	03-05-2021	05-12-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,390 U	NA	NA	< 1,140 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 UJ	< 0.091 U	< 0.088 U	< 0.083 UJ	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.11 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.088 U	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.088 U	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.088 U	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.088 U	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.088 U	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.088 UJ	< 0.083 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.11 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 UJ	< 0.091 U	< 0.088 UJ	< 0.083 UJ	< 0.091 U	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.091 U	< 0.10 U	< 0.10 UJ	< 0.091 U	< 0.11 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-210-SS	PZ-211-SD	PZ-211-SD	PZ-211-SD	PZ-211-SS	PZ-211-SS	PZ-211-SS	PZ-212-SD	PZ-212-SD	PZ-212-SD	PZ-212-SS	PZ-212-SS	PZ-212-SS	PZ-302-AI	PZ-302-AI
				Sample Depth (ft BGS)	138-148	237-247	237-247	237-247	137-147	137-147	137-147	234-244	234-244	234-244	134-144	134-144	134-144	32.6-42.4	32.6-42.4
				Sample Date	08-16-2021	03-04-2021	05-13-2021	08-17-2021	02-24-2021	05-05-2021	08-04-2021	02-25-2021	05-11-2021	08-10-2021	02-26-2021	05-11-2021	08-10-2021	03-12-2021	05-18-2021
				Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1															
Petroleum Hydrocarbons,Total																			
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,130 UJ	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,130 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 UJ	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 UJ	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	NA	NA	< 2,000 U	NA	NA	< 2,000 UJ	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U	NA	NA	< 1,000 U	NA
Polychlorinated Biphenyls, Total																			
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.091 UJ	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.095 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.091 U	< 0.091 U	< 0.091 UJ	< 0.10 U	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.095 UJ	< 0.095 U	< 0.095 U	< 0.091 U
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.091 UJ	< 0.091 U	< 0.091 UJ	< 0.10 UJ	< 0.091 U	< 0.088 U	< 0.10 U	< 0.095 U	< 0.10 UJ	< 0.095 U	< 0.095 U	< 0.095 UJ	< 0.095 U	< 0.095 U	< 0.091 U

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

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Table 12g: Validated Groundwater Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-302-AI	PZ-302-AS	PZ-302-AS	PZ-302-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
				Sample Depth (ft BGS)	32.6-42.4	12.2-22	12.2-22	12.2-22	16-25.8	16-25.8	16-25.8	16-25.8	16-25.8
				Sample Date	08-23-2021	03-09-2021	05-18-2021	08-23-2021	03-15-2021	03-15-2021	05-20-2021	05-20-2021	08-24-2021
				Sample Type	N	N	N	N	N	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1									
Petroleum Hydrocarbons,Total													
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 927 U	< 900 U	< 900 U	**7,910**	**7,040**	**3,930**	**4,550**	**12,000**
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 927 U	< 900 U	< 900 U	**714 J**	**634 J**	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 927 U	< 900 U	< 900 U	**2,140**	**1,910**	**1,620**	**1,890**	**3,130**
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	< 900 U	< 927 U	< 900 U	< 900 U	**10,800**	**9,580**	**5,550**	**6,440**	**15,100**
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	**515 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,460 U	NA	NA	**559 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	**748 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	**534 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,060 U	NA	NA	**2,130 J+**	< 2,000 U	< 2,000 U	< 2,000 U	**1,050 J**
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 2,060 U	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	NA	< 1,030 U	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Polychlorinated Biphenyls, Total													
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.087 UJ	< 0.10 U	< 0.095 U	< 0.083 UJ	< 0.095 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	< 0.095 U	< 0.091 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	**0.87 J**	**0.55 J**	**0.26**	**0.31**	**0.70**
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	**0.35 J**	< 0.091 UJ	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.087 U	< 0.10 U	< 0.095 U	< 0.083 U	**0.22**	**0.14**	< 0.10 U	< 0.091 U	**0.14**
PCBs, Total	SW8082A	ug/L	0.5	NE	< 0.087 UJ	< 0.10 U	< 0.095 U	< 0.083 UJ	**1.4 J**	**0.69 J**	**0.26**	**0.31**	**0.84**

Notes:

ft BGS = feet below ground surface

ug/L = micrograms per liter

USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).

USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP

***Bold** = Detected*

***Blue** Font = Exceeds USEPA Primary MCL*

***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*

Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1

NE = Not Established

NA = Not Available

Qualifier Definition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.

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

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	D-3	D-3	D-3	D-6	D-6	D-6	D-6	D-12	D-12	D-12	D-12	D-13	D-13	D-13
					Sample Depth (ft BGS)	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	96.5-106.5	133.7-143.7	133.7-143.7	133.7-143.7	133.7-143.7	123-133	123-133	123-133
					Sample Date	03-08-2021	05-12-2021	08-17-2021	03-03-2021	05-07-2021	08-12-2021	08-12-2021	03-02-2021	05-11-2021	08-10-2021	08-10-2021	02-26-2021	05-05-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**86,400**	**151,000**	**301,000**	**69,600**	**78,800**	**106,000**	**94,100**	**78,200**	**80,700**	**177,000**	**170,000**	**32,300**	**30,400**	**61,400**
Methane	RSK-175	ug/L	NE	NE		**4,600**	**2,400**	**4,700**	**300**	**270**	**140**	**120**	**90**	**64.5**	**80**	**69**	**30**	**24 J**	**47**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**5.4**	**5.6**	**5.7**	**1.2**	**1.1**	**0.95**	**0.96**	**1.0**	**1.0**	**0.91**	**0.90**	**0.039 J**	**0.065**	**0.070**
Chloride	SW9056A	mg/L	NE	NE		**282**	**318**	**293**	**123**	**120**	**117**	**116**	**136**	**136**	**125**	**124**	**141**	**185**	**135**
Fluoride	SW9056A	mg/L	4	0.08		**0.10**	**0.19**	**0.068 J**	**3.5**	**3.1**	**3.6**	**3.6**	**13.3**	**12.4**	**13.0**	**13.0**	**0.12**	**0.14**	**0.15**
Iodide	SW9056A	mg/L	NE	0.02		**0.32 J**	**0.34 J**	**0.24 J**	**0.14 J**	**0.12 J**	**0.092 J**	**0.11 J**	**0.13 J**	**0.14 J**	**0.11 J**	**0.12 J**	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**0.61**	**0.30**	**0.39 J+**	**2.0**	**1.3**	**7.3**	**7.3**	**293**	**289**	**264**	**259**	**30.4**	**24.6**	**28.2**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.72**	**0.60**	**0.71**	**0.40**	**0.39**	**0.33**	**0.32**	**0.31**	**0.30**	**0.32**	**0.27**	**0.23**	**0.25**	**0.22**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**91.0**	**88.2**	**97.4**	**33.9**	**22.8**	**24.0 J+**	**33.0 J+**	**40.9**	**32.0**	**37.9 J+**	**40.6**	**7.2 J**	**7.1 J**	**14.5 J+**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**1,000**	**972**	**1,010**	**664**	**707**	**662**	**657**	**689**	**712**	**652**	**702**	**337**	**346**	**355**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**1,000**	**972**	**1,010**	**664**	**707**	**662**	**657**	**689**	**712**	**652**	**702**	**337**	**346**	**355**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**1,300**	**1,350**	**1,350**	**830**	**894**	**856**	**816**	**1,460**	**1,490**	**1,370**	**1,400**	**618**	**634**	**647**
Total suspended solids	SM2540D	mg/L	NE	NE		**77**	**62**	**68.0**	**30**	**30**	**14.5**	**14.6**	**26**	**30**	**22.0**	**26.2**	**22 J-**	**21**	**19.7**
pH, Lab	SM4500-H-B	pH units	NE	NE		**6.9 J**	**6.9 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.1 J**	**7.0 J**	**6.9 J**	**7.1 J**	**7.1 J**	**7.0 J**	**7.1 J**	**7.2 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**53.5**	**58.4**	**56.6**	**7.3**	**6.9**	**6.8**	**6.9**	**1.9**	**1.9**	**1.9**	**1.9**	**0.16**	**0.14**	**0.13**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**32.8**	**26.6**	**29.6**	**10.3**	**10.4**	**10.2**	**10.2**	**11.9**	**11.7**	**13.3**	**13.5**	**1.9**	**1.1**	**2.1**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**29.2**	**27.4**	**33.2**	**10.9**	**9.8**	**9.9**	**9.9**	**12.7**	**11.4**	**13.3**	**13.4**	**1.9**	**2.1**	**2.1**
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.96 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 10.0 U	< 0.91 U	< 1.0 U	< 0.99 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.96 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 UJ	< 1.0 U	< 10.0 U	< 0.91 U	< 1.0 U	< 0.99 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.96 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 10.0 U	< 0.91 U	< 1.0 U	< 0.99 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.96 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 10.0 U	< 0.91 U	< 1.0 U	< 0.99 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
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			Sample Location		D-81	D-81	D-81	D-83	D-83	D-83	D-85	D-85	D-85	D-85	D-87	D-87	D-87	D-87
			Sample Depth (ft BGS)		45-60	45-60	45-60	77-97	77-97	77-97	62-82	62-82	62-82	62-82	91-111	91-111	91-111	91-111
			Sample Date		03-09-2021	05-05-2021	08-09-2021	03-02-2021	05-10-2021	08-10-2021	02-26-2021	05-19-2021	08-18-2021	08-18-2021	03-10-2021	05-14-2021	08-13-2021	08-13-2021
			Sample Type		N	N	N	N	N	N	N	N	N	FD	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1														
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE	**174,000**	**149,000**	**112,000**	**32,900**	**42,300**	**71,500**	**84,400**	**86,800**	**175,000 J**	**191,000 J**	**73,000**	**85,100**	**148,000 J**	**209,000 J**
Methane	RSK-175	ug/L	NE	NE	**81**	**20 J**	**66**	**16**	**27**	**22**	**140**	**90**	NA	NA	**470**	**460**	**590**	**800**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	**133 J**	**157 J**	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	**0.12**	**0.092**	**0.071**	**0.065**	**0.078**	**0.090**	**0.18**	**0.24**	**0.25**	**0.25**	**2.1**	**2.5**	**3.4**	**3.4**
Chloride	SW9056A	mg/L	NE	NE	**7.1**	**9.8**	**10.5**	**89.9**	**71.1**	**55.7**	**480**	**431 J+**	**530**	**538**	**244**	**227**	**298**	**305**
Fluoride	SW9056A	mg/L	4	0.08	**0.15**	**0.14**	**0.19**	**0.29**	**0.33**	**0.37**	**0.12**	**0.080 J**	**0.11**	**0.13**	**0.12**	**0.10**	**0.095 J**	**0.093 J**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.088 J**	**0.094 J**	**0.084 J**	**0.095 J**	**0.19 J**	**0.22 J**	**0.25 J**	**0.28 J**
Sulfate	SW9056A	mg/L	NE	NE	**15.6**	**19.1**	**23.9**	**40.7**	**38.4**	**33.2**	**48.4**	**41.6 J+**	**45.2**	**45.9**	**17.6**	**15.4**	**12.5**	**12.6**
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	**0.032 J**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.22**	**0.25**	**0.20**	**0.48**	**0.52**	**0.50**	**0.40**	**0.47**	**0.46**	**0.47**	**0.49**	**0.51**	**0.49**	**0.48**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**4.9 J**	**9.3 J**	**47.1**	**17.8**	**10.4**	**21.9 J+**	**12.6**	**11.8**	**12.5**	**10.6**	**45.6 J-**	**41.4**	**56.3**	**60.5**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**666**	**606**	**563**	**330**	**366**	**363**	**432**	**426**	**436**	**445**	**713**	**736**	**782**	**771**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**666**	**606**	**563**	**330**	**366**	**363**	**432**	**426**	**436**	**445**	**713**	**736**	**782**	**771**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**692**	**659**	**606**	**477**	**458**	**462**	**1,280**	**1,520**	**1,450**	**1,560**	**1,110**	**1,180**	**1,240**	**1,230**
Total suspended solids	SM2540D	mg/L	NE	NE	**35**	**22**	**31.7**	**24**	**24**	**15.7**	**98 J-**	**97**	**89.0**	**80.5**	**56**	**59**	**58.5**	**60.0**
pH, Lab	SM4500-H-B	pH units	NE	NE	**6.8 J**	**6.8 J**	**6.8 J**	**7.0 J**	**7.8 J**	**7.2 J**	**6.8 J**	**7.6 J**	**6.8 J**	**6.8 J**	**7.0 J**	**7.2 J**	**7.0 J**	**7.0 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.28**	**0.27 J+**	**0.25**	**29.1**	**24.3**	**16.4**	**2.4**	**2.4**	**2.2**	**2.2**	**14.2**	**16.5**	**16.4**	**16.2**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.036 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**2.7**	**2.6**	**3.4**	**5.1**	**4.4**	**4.7**	**2.6 J**	**1.4**	**2.7**	**2.7**	**15.7**	**15.6**	**19.9**	**19.2**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**2.9**	**3.7**	**2.8**	**5.7**	**4.2**	**4.9**	**2.4**	**1.2**	**3.0**	**3.2**	**15.3**	**15.1**	**18.3**	**18.7**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.97 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.97 U
Dinoseb	SW8151A	ug/L	7	1.5	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.97 UJ
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 1.1 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.97 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
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R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	D-89	D-89	D-89	D-89	D-89	D-93	D-93	D-93	D-93	D-93	I-9	I-9	I-9	I-9
			Sample Depth (ft BGS)	33-48	33-48	33-48	33-48	33-48	92-112	92-112	92-112	92-112	92-112	43.1-53.1	43.1-53.1	43.1-53.1	43.1-53.1
			Sample Date	03-10-2021	03-10-2021	05-19-2021	05-19-2021	08-24-2021	03-08-2021	03-08-2021	05-13-2021	05-13-2021	08-16-2021	03-08-2021	05-13-2021	08-16-2021	08-16-2021
			Sample Type	N	FD	N	FD	N	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1													
Dissolved Permanent Gases, Total																	
Carbon dioxide	RSK-175	ug/L	NE	NE	**319,000**	**307,000**	**321,000**	**323,000**	**494,000**	**84,400**	**88,000**	**110,000**	**97,900**	**150,000**	**159,000**	**196,000**	**254,000**	**218,000**
Methane	RSK-175	ug/L	NE	NE	**16,000**	**16,000**	**12,000**	**12,000**	NA	**2,400**	**2,200**	**826**	**666**	**2,000**	**9,400**	**2,570**	**5,400**	**4,500**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	**31,100**	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	< 0.050 U	< 0.050 U	**6.4**	**6.3**	**7.6**	**5.0**	**5.1**	**5.0**	**4.9**	**6.1**	**3.9**	**3.9**	**4.1**	**4.1**
Chloride	SW9056A	mg/L	NE	NE	**1,140**	**1,030**	**923**	**920**	**1,150**	**296**	**294**	**272**	**295**	**349**	**303**	**308**	**337**	**336**
Fluoride	SW9056A	mg/L	4	0.08	**0.36**	**0.34**	**0.21**	**0.22**	**0.26**	**2.1**	**2.1**	**1.9**	**1.9**	**1.6**	**0.10**	**0.056 J**	**0.10**	**0.099 J**
Iodide	SW9056A	mg/L	NE	0.02	**3.8**	**3.8**	**4.0**	**4.0**	**3.9**	**0.45 J**	**0.45 J**	**0.42 J**	**0.44 J**	**0.45 J**	**0.49 J**	**0.48 J**	**0.46 J**	**0.44 J**
Sulfate	SW9056A	mg/L	NE	NE	**0.35**	**0.60**	**0.19 J**	**0.19 J**	**0.52**	**3.1**	**3.2**	**5.1**	**5.2**	**0.45**	**0.13 J**	**0.30**	**0.18 J**	**0.30**
Nitrate as N	9056A	mg/L	10	NE	**1.1**	**1.1**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 UJ	< 0.050 UJ
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.78**	**0.75**	**0.69**	**0.71**	**0.73 J+**	**0.81 J**	**0.49 J**	**0.48**	**0.51**	**0.44**	**0.79**	**0.82**	**0.74 J+**	**0.75 J+**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**544**	**692**	**534**	**523**	**594**	**63.8**	**66.0**	**61.8**	**62.6**	**65.4**	**99.0**	**99.1**	**96.4**	**101**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**1,650**	**1,640**	**1,670**	**1,690**	**1,480**	**967**	**898**	**828**	**797**	**947**	**1,080**	**1,030**	**1,130**	**1,120**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**1,650**	**1,640**	**1,670**	**1,690**	**1,480**	**967**	**898**	**822**	**797**	**947**	**1,080**	**1,020**	**1,130**	**1,120**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**6.0**	< 2.0 U	< 2.0 U	< 2.0 U	**8.8**	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**3,450**	**3,440**	**3,690**	**3,700**	**3,700**	**1,440**	**1,420**	**1,380**	**1,410**	**1,460**	**1,510**	**1,550**	**1,650**	**1,600**
Total suspended solids	SM2540D	mg/L	NE	NE	**111 J**	**138**	**168**	**165**	**114**	**42**	**41**	**44**	**44**	**41.5**	**86**	**72**	**86.5 J**	**35.5 J**
pH, Lab	SM4500-H-B	pH units	NE	NE	**6.7 J**	**6.7 J**	**6.6 J**	**6.7 J**	**6.6 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**6.8 J**	**6.8 J**	**6.8 J**	**6.9 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**75.1**	**74.1**	**84.5**	**83.4**	**92.3**	**7.6**	**7.6**	**7.0**	**6.9**	**7.8**	**17.7**	**16.4**	**14.9**	**15.1**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**175**	**171**	**305**	**309**	**175**	**22.2**	**22.3**	**18.6**	**19.1**	**22.1**	**34.7**	**28.0**	**30.2**	**30.2**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**154**	**157**	**157**	**154**	**190**	**20.7 J**	**38.4 J**	**19.7**	**19.7**	**23.5**	**58.8**	**30.3**	**32.6**	**32.2**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.95 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.95 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.95 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.99 UJ	< 1.0 UJ
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.95 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-11	I-11	I-11	I-62	I-62	I-62	I-65	I-65	I-65	I-65	I-66	I-66	I-66	I-67
					Sample Depth (ft BGS)	80.5-90.5	80.5-90.5	80.5-90.5	34-44	34-44	34-44	26-36	26-36	26-36	26-36	26.9-36.9	26.9-36.9	26.9-36.9	25.4-35.4
					Sample Date	03-02-2021	05-11-2021	08-12-2021	03-02-2021	05-10-2021	08-10-2021	02-23-2021	05-05-2021	05-26-2021	08-03-2021	02-23-2021	05-04-2021	08-03-2021	02-23-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**67,600**	**70,800**	**375,000**	**21,500**	**30,000**	**48,800**	**22,700**	**20,200**	NA	**43,800**	**54,900**	**62,600**	**128,000**	**61,700**
Methane	RSK-175	ug/L	NE	NE		**120**	**58.1**	**110**	**91**	**8.6 J+**	< 5.0 U	**34**	< 5.0 UJ	NA	**120**	**3.6 J-**	< 5.0 UJ	**6.6**	**9.6**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**1.6**	**1.7**	**1.8**	**0.034 J**	**0.033 J**	< 0.050 U	< 0.050 U	**0.049 J**	NA	**0.055**	**0.10**	**0.13**	**0.13**	**0.11**
Chloride	SW9056A	mg/L	NE	NE		**165**	**163**	**166**	**52.3**	**50.9**	**49.8**	**223**	**238**	NA	**262**	**143**	**207 J-**	**120**	**123**
Fluoride	SW9056A	mg/L	4	0.08		**3.4**	**3.1**	**3.4**	**0.45**	**0.48**	**0.50**	**0.26**	**0.29**	NA	**0.33**	**0.27**	**0.32**	**0.34**	**0.13**
Iodide	SW9056A	mg/L	NE	0.02		**0.20 J**	**0.18 J**	**0.20 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	NA	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**1.2**	**1.3**	**1.9**	**21.2**	**17.6**	**24.9**	**46.6**	**37.3**	NA	**38.8**	**86.1**	**79.9 J+**	**77.7**	**108**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	NA	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	NA	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	**0.022 J-**	< 0.10 U	< 0.10 UJ	**0.018 J**	< 0.10 U	NA	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Phosphorus	E365.1	mg/L	NE	NE		**0.26**	**0.25**	**0.23**	**0.29**	**0.34**	**0.26**	**0.085**	**0.065**	NA	< 0.050 U	< 0.050 U	< 0.050 U	**0.079 J+**	**0.37**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**38.3 J-**	**33.0**	**39.8**	**10.7**	< 10.0 U	< 10.0 UJ	< 10.0 U	**4.9 J**	NA	**16.9 J+**	< 10.0 U	< 10.0 U	**12.0 J+**	**13.2**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**647**	**662**	**644**	**300**	**319**	**296**	**308**	**305**	NA	**286**	**393**	**438**	**437**	**484**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**647**	**662**	**644**	**300**	**295**	**296**	**308**	**305**	NA	**286**	**393**	**438**	**437**	**484**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**23.6**	< 2.0 U	< 2.0 U	< 2.0 U	NA	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**892**	**966**	**908**	**419**	**431**	**438**	**784**	**784**	NA	**906**	**824**	**728**	**736**	**856**
Total suspended solids	SM2540D	mg/L	NE	NE		**35**	**36**	**33.5**	**19**	**17**	**8.8**	< 2.5 U	< 2.5 U	NA	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	**29**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.0 J**	**7.7 J**	**7.0 J**	**7.2 J**	**7.3 J**	**7.2 J**	**7.1 J**	**7.4 J**	NA	**7.4 J**	**6.9 J**	**7.0 J**	**6.9 J**	**6.9 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**11.0**	**9.9**	**10.1**	**0.29**	**0.28 J+**	**0.30**	< 0.10 U	< 0.10 U	NA	< 0.10 U	**0.11**	**0.14**	**0.16**	**0.49**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	NA	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**11.2**	**10.8**	**13.3**	**2.2**	**1.4**	**2.8**	**1.6 J**	**1.0**	NA	**1.9**	**1.1**	**0.62 J**	**1.9**	**3.9**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**12.0**	**10.6**	**12.6**	**2.4**	**1.2**	**2.8**	**1.9**	**2.1**	NA	**2.1**	**1.4**	**1.8**	**1.6**	**4.2**
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.97 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	NA	< 0.95 U	< 0.95 U	< 0.91 U	< 0.96 U	< 0.95 U	< 0.91 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.97 U	< 0.99 UJ	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	NA	< 0.95 U	< 0.95 U	< 0.91 U	< 0.96 U	< 0.95 U	< 0.91 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.97 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	NA	< 0.95 U	< 0.95 U	< 0.91 U	< 0.96 U	< 0.95 U	< 0.91 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.97 U	< 0.99 U	< 1.0 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.91 U	NA	< 0.95 U	< 0.95 U	< 0.91 U	< 0.96 U	< 0.95 U	< 0.91 U

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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	I-67	I-67	I-68	I-68	I-68	I-73	I-73	I-73	I-73	I-73	LR-100	LR-100	LR-100	MO-1-SDR
					Sample Depth (ft BGS)	25.4-35.4	25.4-35.4	21.2-31.2	21.2-31.2	21.2-31.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	43.2-46.2	19.7-24.5	19.7-24.5	19.7-24.5	234.82-254.82
					Sample Date	05-04-2021	08-04-2021	02-23-2021	05-04-2021	08-05-2021	03-15-2021	03-15-2021	05-21-2021	05-21-2021	08-25-2021	03-09-2021	05-19-2021	08-24-2021	05-17-2021
					Sample Type	N	N	N	N	N	N	FD	N	FD	N	N	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**79,000**	**196,000**	**43,500**	**36,700**	**68,100**	**212,000**	**217,000**	**245,000**	**279,000**	**377,000**	**211,000**	**203,000**	**410,000**	**20,400**
Methane	RSK-175	ug/L	NE	NE		**4.9 J**	**10**	< 5.0 u	**2.1 J**	**5.7**	**33,000**	**29,000**	**20,000**	**20,000**	NA	**18,000**	**10,000**	NA	**26**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	**69,900**	NA	NA	**31,200**	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**0.16**	**0.14**	**0.057**	**0.14**	**0.12**	< 0.050 U	< 0.050 U	**8.1**	**8.1**	**8.3**	< 0.050 U	**1.6**	**1.3**	**0.034 J**
Chloride	SW9056A	mg/L	NE	NE		**102**	**110**	**419**	**1,080**	**541**	**1,150**	**1,160**	**1,350**	**1,270**	**1,240**	**119**	**101**	**118**	**12.4**
Fluoride	SW9056A	mg/L	4	0.08		**0.18**	**0.15**	**0.11**	**0.15**	**0.11**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.66 J**	**0.11**	**0.021 J**	**0.12**	**0.53**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**3.0**	**3.1**	**3.3**	**3.4**	**3.2**	**0.43 J**	**0.42 J**	**0.44 J**	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**123**	**118**	**56.9**	**53.4**	**62.6**	**0.71**	**0.69**	**0.43**	**0.47**	< 2.5 U	**0.18 J**	**0.20 J**	**0.16 J**	**37.4**
Nitrate as N	9056A	mg/L	10	NE		**0.020 J**	< 0.050 U	**0.67**	**0.55**	**0.18**	**1.4**	**1.4**	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 UJ	< 0.10 U	**0.78**	**0.61**	**0.25**	< 0.10 U	< 0.10 U	< 0.40 U	< 0.40 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.41**	**0.32**	**0.056**	**0.033 J**	**0.066 J-**	**2.9**	**2.9**	**3.0**	**3.0**	**3.1**	**0.33**	**0.38**	**0.28**	**0.044 J**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**15.0**	**15.9 J+**	**5.8 J**	**7.8 J**	< 10.0 UJ	**1,030**	**1,040**	**1,080**	**1,110**	**1,170**	**81.2**	**86.3**	**84.7**	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**532**	**535**	**320**	**307**	**314**	**1,020**	**1,040**	**1,020**	**1,040**	**949**	**1,010**	**1,070**	**1,020**	**336**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**532**	**535**	**320**	**307**	**314**	**1,020**	**1,040**	**1,020**	**1,040**	**949**	**1,010**	**1,070**	**1,020**	**336**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**840**	**956**	**1,150**	**1,360**	**1,890**	**2,220**	**2,160**	**2,130**	**2,200**	**2,180**	**938**	**1,020**	**946**	**385**
Total suspended solids	SM2540D	mg/L	NE	NE		**47**	**10.8**	< 2.5 U	< 2.5 U	< 2.5 U	**143**	**140**	**116**	**152**	**152**	**38**	**32**	**34.5**	**6**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.5 J**	**6.9 J**	**6.9 J**	**7.1 J**	**7.0 J**	**6.7 J**	**6.7 J**	**6.7 J**	**6.7 J**	**6.6 J**	**6.6 J**	**6.6 J**	**6.7 J**	**7.6 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.45**	**0.36**	**0.040 J**	< 0.10 U	< 0.10 U	**503**	**475**	**463**	**456**	**458**	**89.5**	**92.8**	**86.9**	**0.22**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	**0.036 J**	**0.038 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**3.7**	**4.9**	**1.2 J**	**0.46 J**	**1.5**	**282**	**286**	**302**	**305**	**314**	**27.1**	**26.9**	**27.8**	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**4.8**	**4.6**	**1.5**	**1.5**	**1.5**	**306**	**303**	**350**	**310**	**316**	**25.8**	**28.5**	**28.0**	< 1.0 U
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.96 U	< 0.96 U	< 5.2 U	< 5.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.98 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.96 U	< 0.96 U	< 5.2 UJ	< 5.0 UJ	< 1.1 U	< 0.95 U	< 0.99 U	< 0.98 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.99 R	< 0.96 U	< 0.96 U	< 5.2 U	< 5.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.98 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.99 U	**7.6 J+**	**8.3 J+**	< 5.2 U	< 5.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.98 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2
Sample Location					MO-1-SDR	MO-3-SDR	MO-3-SDR	MO-3-SS	MO-3-SS	MW-111-P1	MW-111-P1	MW-111-P2	MW-111-P2	MW-111-P3	MW-111-P3	MW-112-P1	MW-112-P2
Sample Depth (ft BGS)					234.82-254.82	-	-	-	-	39-49	39-49	54-64	54-64	79-89	79-89	45-55	70-80
Sample Date					08-16-2021	05-28-2021	08-12-2021	05-28-2021	08-05-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	05-06-2021	08-13-2021	08-17-2021	08-17-2021
Sample Type					N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																	
Carbon dioxide	RSK-175	ug/L	NE	NE	**39,600**	**40,100**	**140,000**	**34,800**	**75,400**	**139,000**	**168,000**	**14,100**	**242,000**	**7,290**	**266,000**	**247,000**	**212,000**
Methane	RSK-175	ug/L	NE	NE	**4.7 J**	**730**	**2,000**	**5.5 J+**	**59**	**1,900**	**3,200**	**1,500**	**2,600**	**2,300**	**9,400**	**2,200**	**4,500**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																	
Bromide	SW9056A	mg/L	NE	NE	**0.040 J**	**0.30**	**1.6**	**0.054**	**0.045 J**	**0.46**	**2.0**	**0.84**	**1.7**	**6.7**	**13.6**	**1.5**	**2.6**
Chloride	SW9056A	mg/L	NE	NE	**13.2**	**83.2**	**339**	**12.2**	**13.2**	**85.3**	**152**	**121**	**165**	**446**	**609**	**150**	**175**
Fluoride	SW9056A	mg/L	4	0.08	**0.68**	**1.4**	**1.4**	**2.2**	**2.6**	**0.30**	**0.28**	**0.20**	**0.25**	**0.41**	**0.27**	**0.087 J**	**0.061 J**
Iodide	SW9056A	mg/L	NE	0.02	**0.91**	**0.088 J**	**0.36 J**	< 0.50 U	< 0.50 U	**0.084 J**	**0.18 J**	**0.16 J**	**0.19 J**	**0.33 J**	**0.58**	**0.26 J**	**0.27 J**
Sulfate	SW9056A	mg/L	NE	NE	**43.7**	**53.3**	**43.3**	**36.0**	**34.5**	**43.6**	**14.6**	**3.8**	**6.5**	**74.2**	**30.3**	**0.35 J+**	**31.2**
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.092**	< 0.050 UJ	< 0.050 U	< 0.050 UJ	< 0.050 U	**0.042 J**	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 UJ	< 0.50 U	< 0.050 UJ	< 0.50 U	< 0.050 UJ	< 0.50 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.14 J+**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.054**	< 0.050 U	**0.044 J**	< 0.050 U	**0.050 J**	**0.098**	**0.15**	**0.17**	**0.13**	**0.15**	**0.20**	**0.16**	**0.27**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	**42.4**	**184**	**8.6 J**	**4.4 J**	**28.1 J+**	**58.2**	**42.5**	**58.7**	**113**	**170**	**39.7**	**70.9**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**346**	**431**	**527**	**396**	**396**	**733**	**837**	**843**	**877**	**644**	**953**	**763**	**959**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**346**	**431**	**527**	**396**	**396**	**733**	**837**	**843**	**877**	**644**	**953**	**763**	**959**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**409**	**669**	**1,200**	**464**	**450**	**876**	**1,100**	**972**	**1,160**	**1,300**	**1,930**	**972**	**1,240**
Total suspended solids	SM2540D	mg/L	NE	NE	**8.1**	**29**	**21.2**	**9**	**4.7**	**42**	**61.5**	**81**	**65.0**	**41**	**54.0**	**50.0**	**51.0**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.4 J**	**7.3 J**	**7.0 J**	**7.3 J**	**6.6 J**	**6.7 J**	**6.8 J**	**6.8 J**	**6.9 J**	**7.0 J**	**6.9 J**	**6.9 J**	**7.0 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.40**	**0.84**	**6.3**	**0.26**	**0.15**	**0.72**	**2.1**	**1.0**	**1.8**	**10.5**	**14.1**	**14.8**	**17.3**
Sulfide	SM4500-S2-D	mg/L	NE	NE	**0.51 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**0.70 J**	**13.1**	**67.6**	**0.80 J**	**1.3**	**12.0**	**20.9**	**14.1**	**19.8**	**36.6**	**54.6**	**12.8**	**21.8**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	< 1.0 U	**13.4**	**62.4**	**0.50 J**	< 1.0 U	**10.4**	**20.0**	**13.1**	**19.2**	**35.8**	**51.5**	**13.0**	**24.4**
Herbicides, Total																	
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 1.6 U	< 0.97 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 UJ	< 1.0 U	< 0.99 UJ	< 0.97 U	< 0.97 UJ	< 0.97 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 1.6 U	< 0.97 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 UJ	< 1.0 U	< 0.99 UJ	< 0.97 U	< 0.97 UJ	< 0.97 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5	< 1.6 UJ	< 0.97 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 U	< 1.0 U	< 0.99 U	< 0.97 UJ	< 0.97 U	< 0.97 UJ	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 1.6 U	< 0.97 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 UJ	< 1.0 U	< 0.99 UJ	< 0.97 U	< 0.97 UJ	< 0.97 U	< 1.0 U	< 1.0 U

Notes:
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ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-112-P3	MW-113	MW-117	MW-117	MW-118	MW-118	MW-118	MW-1204	MW-1204	MW-1204	MW-1204	MW-1204	MW-205	MW-205
					Sample Depth (ft BGS)	90-100	170.2-180.2	25-35	25-35	38-48	38-48	38-48	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	213.5-223.5	160-170	160-170
					Sample Date	08-17-2021	08-24-2021	05-18-2021	08-17-2021	05-19-2021	05-19-2021	08-19-2021	03-05-2021	03-05-2021	05-13-2021	05-13-2021	08-23-2021	05-20-2021	08-19-2021
					Sample Type	N	N	N	N	N	FD	N	N	FD	N	FD	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**261,000**	**37,700**	**142,000**	**214,000**	**95,700**	**80,800**	**52,300 J**	**179,000**	**171,000**	**344,000**	**325,000**	**365,000**	**38,700**	**259,000 J**
Methane	RSK-175	ug/L	NE	NE		**5,200**	NA	**5,300**	**5,600**	**2,100**	**2,100**	NA	**12,000**	**13,000**	**3,390**	**4,410**	NA	**130**	NA
Methane	RSK-175 MOD	ug/L	NE	NE		NA	**426**	NA	NA	NA	NA	**4,880**	NA	NA	NA	NA	**19,300**	NA	**1,680**
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**10.0**	**0.52**	**0.48**	**0.49**	**0.98**	**0.98**	**1.0**	**2.6**	**2.6**	**2.7**	**2.7**	**0.32**	**0.26**	**0.27**
Chloride	SW9056A	mg/L	NE	NE		**483**	**39.2**	**224**	**268**	**102**	**103**	**132**	**446**	**498**	**393**	**391**	**27.8**	**44.0**	**45.7**
Fluoride	SW9056A	mg/L	4	0.08		< 0.10 U	**2.0**	**0.18**	**0.25**	**0.17**	**0.17**	**0.18**	**1.8**	**1.8**	**1.6**	**1.6**	**0.70**	**1.5**	**1.9**
Iodide	SW9056A	mg/L	NE	0.02		**0.49 J**	**0.50 J**	**0.32 J**	**0.31 J**	**0.37 J**	**0.38 J**	**0.51**	**1.3**	**1.3**	**1.3**	**1.3**	**1.3**	< 0.50 U	**0.077 J**
Sulfate	SW9056A	mg/L	NE	NE		< 0.25 U	**4.2**	**0.24 J**	**0.33**	**55.0**	**54.6**	**2.3**	**0.13 J**	**0.12 J**	**0.42**	**0.30**	**1.8**	**118**	**90.6**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 UJ	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Phosphorus	E365.1	mg/L	NE	NE		**0.35**	< 0.050 U	**1.2**	**1.2 J-**	**0.20 J-**	**0.16 J-**	**0.18**	**0.059 J+**	**0.072 J+**	**0.093**	**0.064**	**0.069**	**0.056**	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**197**	**26.6**	**44.4**	**27.6 J+**	**37.9**	**34.5**	**27.8**	**323**	**333**	**337**	**323**	**332**	**33.5**	**29.6**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**1,120**	**400**	**639**	**636**	**824**	**807**	**926**	**1,060**	**1,070**	**1,060**	**1,050**	**1,090**	**429**	**449**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**1,120**	**400**	**639**	**636**	**824**	**807**	**926**	**1,060**	**1,070**	**1,060**	**1,050**	**1,090**	**429**	**431**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**17.6**
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**1,830**	**452**	**1,070**	**1,150**	**1,120**	**1,130**	**1,160**	**1,700**	**1,720**	**1,720**	**1,680**	**1,810**	**638**	**628**
Total suspended solids	SM2540D	mg/L	NE	NE		**68.5**	**17.2**	**50**	**75.5**	**70**	**67**	**27.0**	**30**	**30**	**30**	**32**	**31.6**	**30**	**14.2**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.0 J**	**7.3 J**	**6.7 J**	**6.9 J**	**7.0 J**	**7.0 J**	**6.8 J**	**6.8 J**	**6.7 J**	**6.6 J**	**6.6 J**	**6.6 J**	**7.2 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**56.9**	**0.057 J**	**6.7**	**6.0**	**0.82**	**0.81**	**0.68**	**48.1**	**50.8**	**51.1**	**51.1**	**49.8**	**1.3**	**1.7**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	**0.55 J**	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.063 J**	**0.068 J**	< 1.0 U	< 1.0 U	**0.030 J**
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**49.2**	**10.6**	**13.6**	**9.9**	**11.8**	**11.7**	**10.0**	**117**	**120**	**96.1**	**98.8**	**103**	**7.9**	**9.5**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**54.9**	**10.7**	**13.0**	**10.6**	**11.3**	**11.4**	**9.6**	**101**	**105**	**103**	**105**	**109**	**7.7**	**9.3**
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	**1.5**	< 0.99 U	< 1.1 U	< 0.96 U	< 1.0 U	< 0.95 U	**2.0 J**	< 0.95 U	< 1.0 U	**1.4 J**	**1.4**	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 1.0 U	< 0.99 U	< 1.1 U	< 0.96 U	< 1.0 U	< 0.95 U	< 0.91 U	< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 1.0 U	< 0.99 U	< 1.1 U	< 0.96 U	< 1.0 U	< 0.95 U	< 0.91 U	< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 1.0 U	< 0.99 U	< 1.1 U	< 0.96 U	< 1.0 U	< 0.95 U	< 0.91 U	< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2
Sample Location					MW-213-P1	MW-213-P2	MW-302	MW-302	MW-303-P1	MW-303-P1	MW-303-P2	MW-303-P2	MW-304-P1	MW-304-P1	MW-304-P1	MW-304-P2	MW-304-P2
Sample Depth (ft BGS)					50-60	75-85	68-78	68-78	68-78	68-78	93-103	93-103	106-116	106-116	106-116	126-136	126-136
Sample Date					08-19-2021	08-19-2021	05-17-2021	08-23-2021	05-14-2021	08-09-2021	05-14-2021	08-09-2021	05-24-2021	05-24-2021	08-04-2021	05-24-2021	08-04-2021
Sample Type					N	N	N	N	N	N	N	N	N	FD	N	N	N
Dissolved Permanent Gases, Total																	
Carbon dioxide	RSK-175	ug/L	NE	NE	< 900 UJ	**300,000 J**	**303,000**	**443,000**	**119,000**	**241,000**	**280,000**	**474,000**	**187,000**	**177,000**	**439,000**	**117,000**	**197,000**
Methane	RSK-175	ug/L	NE	NE	NA	NA	**11,000**	NA	**430**	**810**	**4,800**	**6,700**	**2,000 J**	**2,000 J**	**4,200**	**1,800 J**	**1,400**
Methane	RSK-175 MOD	ug/L	NE	NE	< 10.0 U	**302**	NA	**22,600**	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																	
Bromide	SW9056A	mg/L	NE	NE	**0.11**	**0.10**	**1.9**	**0.67**	**1.4**	**1.2**	**5.3**	**4.8**	**4.6**	**4.6**	**4.9**	**2.6**	**2.3**
Chloride	SW9056A	mg/L	NE	NE	**40.9**	**83.4**	**261**	**155**	**109**	**101 J+**	**780 J-**	**648**	**449**	**463**	**507**	**235**	**193**
Fluoride	SW9056A	mg/L	4	0.08	**0.14**	**0.18**	**0.089 J**	**1.1**	**0.14**	**0.20**	**0.067 J**	**0.20**	**0.077 J**	**0.081 J**	**0.083 J**	**0.30**	**0.40**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	**3.6**	**3.0**	**0.34 J**	**0.28 J**	**2.1**	**1.8**	**1.1**	**1.1**	**1.2**	**0.49 J**	**0.31 J**
Sulfate	SW9056A	mg/L	NE	NE	**70.9**	**43.3**	**0.12 J**	**46.0**	**43.6**	**67.6**	**0.31 J+**	**0.18 J**	**3.9**	**3.7**	**4.2**	**27.4**	**46.8**
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.082**	**0.058**	**0.12**	**0.21**	**0.47**	**0.52**	**0.18**	**0.28 J-**	**0.33**	**0.29**	**0.26**	**0.12**	**0.15 J+**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**15.0**	**9.0 J**	**541**	**407**	**32.1**	**42.5**	**229**	**220**	**96.8**	**93.2**	**92.5**	**55.8**	**50.8**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**482**	**443**	**1,140**	**1,110**	**726**	**734**	**1,100**	**1,110**	**1,050**	**1,030**	**1,020**	**724**	**649**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**482**	**443**	**1,140**	**1,110**	**726**	**734**	**1,100**	**1,110**	**1,050**	**1,030**	**1,020**	**724**	**649**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**679**	**653**	**3,630**	**3,370**	**896**	**976**	**2,660**	**2,530**	**1,920**	**1,970**	**2,030**	**1,230**	**1,130**
Total suspended solids	SM2540D	mg/L	NE	NE	**34.0**	**30.5**	**172**	**53.2**	**90**	**99.7**	**116**	**63.7**	**53**	**63**	**39.0**	**37**	**19.8**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.0 J**	**7.1 J**	**6.6 J**	**6.5 J**	**6.9 J**	**6.8 J**	**6.6 J**	**6.6 J**	**6.8 J**	**6.9 J**	**6.8 J**	**6.8 J**	**7.0 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.082 J**	**0.061 J**	**1.1**	**1.4**	**0.44**	**0.45**	**3.5**	**3.1**	**2.0**	**2.0**	**2.1**	**1.1**	**0.84**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**4.1**	**5.1**	**158**	**136**	**11.2**	**7.2**	**68.4**	**71.6**	**31.0**	**31.3**	**27.7**	**17.1**	**14.1**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**3.9**	**5.0**	**166**	**145**	**10.5**	**6.6**	**71.6**	**63.2**	**30.6**	**30.7**	**28.9**	**17.2**	**15.2**
Herbicides, Total																	
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.97 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.97 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.97 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.97 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.99 U	< 0.97 U	< 0.99 U

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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-304-P3	MW-304-P3	MW-304-P3	MW-306-P1	MW-306-P1	MW-306-P2	MW-306-P2	MW-306-P2	MW-306-P3	MW-306-P3	MW-306-P3	MW-400-P1	MW-400-P1
					Sample Depth (ft BGS)	221-231	221-231	221-231	25-35	25-35	80-90	80-90	80-90	110-120	110-120	110-120	20-30	20-30
					Sample Date	05-26-2021	08-04-2021	08-04-2021	05-13-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-13-2021	08-16-2021	08-16-2021	05-12-2021	08-10-2021
					Sample Type	N	N	FD	N	N	N	N	FD	N	N	FD	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**32,600**	**25,500**	**25,400**	**72,600**	**128,000**	**101,000**	**269,000 J**	**195,000 J**	**122,000**	**189,000**	**212,000**	**49,800**	**81,500**
Methane	RSK-175	ug/L	NE	NE		**260**	**1,300 J**	**320 J**	**1,300**	**3,900**	**945**	**4,000 J**	**2,600 J**	**1,510**	**9,200**	**9,100**	**800**	**4,200**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**2.2**	**1.6**	**1.6**	**2.6**	**3.3**	**3.3**	**3.9**	**3.9**	**4.2**	**4.6**	**4.6**	**1.2**	**0.62**
Chloride	SW9056A	mg/L	NE	NE		**245**	**194**	**196**	**310**	**410**	**362**	**394**	**383**	**431**	**511**	**505**	**97.5**	**77.8**
Fluoride	SW9056A	mg/L	4	0.08		**0.66**	**0.80**	**0.78**	**0.21**	**0.38**	**0.11**	**0.14**	**0.14**	**0.059 J**	**0.15**	**0.15**	**1.3**	**1.1**
Iodide	SW9056A	mg/L	NE	0.02		**0.42 J**	**0.26 J**	**0.27 J**	**0.56**	**0.77**	**0.51**	**0.50 J**	**0.48 J**	**0.62**	**0.64**	**0.64**	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**117**	**78.1**	**77.4**	**39.3**	**2.6**	**186**	**3.5**	**3.6**	**0.29 J+**	< 0.25 U	< 0.25 U	**7.5**	**10.4**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		< 0.050 U	< 0.050 U	< 0.050 U	**0.28**	**0.38**	**0.23**	**0.33**	**0.32**	**0.16**	**0.13**	**0.13**	**0.23**	**0.14**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**116**	**87.9**	**87.6**	**106**	**89.0**	**121**	**94.0**	**99.6**	**128**	**86.6**	**81.5**	**60.6**	**59.7**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**486**	**469**	**462**	**803**	**958**	**886**	**990**	**984**	**816**	**1,010**	**1,000**	**610**	**528**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**486**	**469**	**462**	**803**	**958**	**878**	**990**	**984**	**816**	**1,010**	**1,000**	**610**	**528**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**8.4**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**1,060**	**940**	**886**	**1,390**	**1,490**	**1,780**	**1,540**	**1,620**	**1,680**	**1,810**	**1,840**	**726**	**615**
Total suspended solids	SM2540D	mg/L	NE	NE		**24**	**29.2**	**38.8**	**51**	**60.5**	**45**	**49.0**	**49.0**	**51**	**51.0**	**52.0**	**38**	**30.1**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.2 J**	**7.2 J**	**7.2 J**	**7.0 J**	**7.0 J**	**6.9 J**	**6.9 J**	**6.9 J**	**6.9 J**	**6.9 J**	**6.9 J**	**7.3 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.91**	**0.76**	**0.78**	**29.7**	**43.7**	**5.3 J-**	**2.6**	**2.6**	**1.1**	**0.67**	**0.67**	**23.2 J-**	**17.0**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**39.3**	**29.0**	**28.4**	**36.9**	**28.1**	**39.0**	**23.8**	**23.9**	**45.1**	**26.6**	**25.9**	**22.7**	**11.8**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**39.5**	**30.8**	**30.8**	**40.0**	**30.2**	**41.3**	**25.3**	**25.5**	**49.0**	**28.0**	**28.0**	**23.1**	**11.4**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.95 U	**1.3**
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.95 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 0.97 UJ	< 0.95 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.95 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.97 U	< 0.95 U	< 1.0 U

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mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
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R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-400-P2	MW-400-P2	MW-400-P3	MW-400-P3	MW-400-P4	MW-400-P4	MW-400-P4	MW-400-P5	MW-400-P5	MW-401-P1	MW-401-P1	MW-401-P2	MW-401-P2
					Sample Depth (ft BGS)	55-65	55-65	90-100	90-100	145-155	145-155	145-155	195-205	195-205	32-42	32-42	62-72	62-72
					Sample Date	05-12-2021	08-10-2021	05-12-2021	08-10-2021	05-12-2021	05-14-2021	08-10-2021	05-12-2021	08-10-2021	05-07-2021	08-06-2021	05-07-2021	08-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**79,200**	**19,100**	**97,300**	**166,000**	**68,900**	NA	**170,000**	**37,900**	**19,900**	**5,880**	**35,900**	**19,400 J-**	**43,000**
Methane	RSK-175	ug/L	NE	NE		**660**	**1,900**	**770**	**630**	**580**	NA	**340**	**580**	**530**	**83**	**83**	**280**	**91**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**1.4**	**1.3**	**1.7**	**2.3**	NA	**1.0**	**0.98**	**1.6**	**1.3**	**0.066**	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	NE	NE		**111**	**164**	**115**	**121**	NA	**73.6**	**76.2**	**117**	**135**	**88.3**	**78.9**	**62.2 J+**	**79.1**
Fluoride	SW9056A	mg/L	4	0.08		**2.3**	**0.93**	**3.4**	**3.4**	NA	**2.5**	**3.0**	**2.0**	**2.9**	**0.28**	**0.28**	**0.21**	**0.27**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	NA	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.084 J**	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		< 0.25 U	**0.59**	< 0.25 U	**0.043 J**	NA	**29.4**	**36.1**	**42.3**	**199**	**99.4**	**25.6**	**5.2**	**36.6**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	NA	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.050 U	< 0.50 U	< 0.050 U	NA	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	NA	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.39**	**0.39**	**0.47**	**0.54**	NA	**0.11**	**0.069**	**0.047 J**	**0.11**	**0.31**	**0.081**	**0.26**	**0.28**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**37.9**	**70.5**	**45.7**	**43.1**	NA	**32.1**	**46.5**	**55.8**	**76.0**	**40.9**	**15.7 J+**	< 10.0 U	**11.7 J+**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**764**	**750**	**793**	**819**	NA	**428**	**434**	**600**	**541**	**381**	**359**	**312**	**350**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**764**	**750**	**793**	**819**	NA	**428**	**434**	**600**	**541**	**371**	**359**	**312**	**350**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	NA	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**9.2**	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**838**	**838**	**870**	**882**	NA	**548**	**616**	**846**	**1,090**	**646**	**539**	**398**	**532**
Total suspended solids	SM2540D	mg/L	NE	NE		**52**	**33.7**	**55**	**38.8**	NA	**16**	**8.0**	**23**	< 2.5 U	**7**	**12.3**	**25**	**17.0**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.0 J**	**7.1 J**	**7.0 J**	**7.0 J**	NA	**7.2 J**	**7.5 J**	**7.2 J**	**7.6 J**	**7.7 J**	**7.4 J**	**7.3 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**54.9**	**57.8**	**47.1**	**35.4**	NA	**14.2**	**9.0**	**19.0**	**7.0**	**3.2**	**1.6**	**2.7**	**1.1**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	**0.032 J**	< 1.0 U	< 1.0 U	**0.25 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**13.3**	**16.3**	**12.8**	**15.4**	NA	**14.8**	**17.3**	**19.1**	**27.6**	**15.8**	**2.5**	**2.9**	**3.3**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**14.2**	**16.5**	**13.7**	**15.1**	NA	**13.8**	**17.9**	**19.8**	**27.0**	**16.8**	**2.7**	**3.0**	**3.6**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.96 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.98 U	NA	< 0.99 U	< 0.97 U	< 0.99 U	< 0.95 U	< 0.99 U	< 0.95 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.96 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.98 U	NA	< 0.99 U	< 0.97 U	< 0.99 U	< 0.95 U	< 0.99 U	< 0.95 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.96 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.98 U	NA	< 0.99 U	< 0.97 U	< 0.99 U	< 0.95 U	< 0.99 U	< 0.95 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.96 U	< 0.99 U	< 0.97 U	< 0.99 U	< 0.98 U	NA	< 0.99 U	< 0.97 U	< 0.99 U	< 0.95 U	< 0.99 U	< 0.95 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-401-P3	MW-401-P3	MW-401-P3	MW-404-P1	MW-404-P2	MW-404-P3	MW-405-P1	MW-405-P1	MW-405-P2	MW-405-P2	MW-405-P2	MW-405-P3	MW-405-P3
					Sample Depth (ft BGS)	92-102	92-102	92-102	48-58	73-83	103-113	30-40	30-40	70-80	70-80	70-80	90-100	90-100
					Sample Date	05-07-2021	08-06-2021	08-06-2021	08-18-2021	08-18-2021	08-18-2021	05-11-2021	08-11-2021	05-11-2021	05-11-2021	08-11-2021	05-11-2021	08-11-2021
					Sample Type	N	N	FD	N	N	N	N	N	N	FD	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**47,600**	**95,800**	**109,000**	**91,100 J**	**191,000 J**	**203,000 J**	**89,200**	**229,000**	**90,500**	**82,500**	**275,000**	**78,700**	**208,000**
Methane	RSK-175	ug/L	NE	NE		**220**	**190**	**170**	NA	NA	NA	**30.7**	**47**	**1,010**	**793**	**1,600**	**145**	**160**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	**42,300 J**	**4,520 J**	**5,630 J**	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**0.13**	**0.23**	**0.24**	**5.1**	**4.1**	**5.7**	**0.69**	**0.20**	**4.0**	**4.0**	**3.4**	**2.1**	**1.9**
Chloride	SW9056A	mg/L	NE	NE		**121**	**123**	**123**	**458**	**370**	**396**	**51.9**	**34.4**	**289**	**287**	**269**	**179**	**186**
Fluoride	SW9056A	mg/L	4	0.08		**0.16**	**0.25**	**0.25**	**0.37**	**0.22**	**0.29**	**0.97**	**0.46**	**1.5**	**1.5**	**2.1**	**5.8**	**6.4**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	**0.64**	**0.52**	**0.55**	< 0.50 U	< 0.50 U	**0.50**	**0.46 J**	**0.39 J**	**0.23 J**	**0.25 J**
Sulfate	SW9056A	mg/L	NE	NE		**29.9**	**35.7**	**35.6**	**0.34 J+**	**3.9**	< 0.25 U	**474**	**694**	**0.45**	< 0.25 U	**1.7**	**48.0**	**97.1**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.012 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Phosphorus	E365.1	mg/L	NE	NE		**0.41**	**0.43**	**0.45**	**0.13**	**0.21**	**0.32**	**0.20**	**0.13**	**0.43**	**0.43**	**0.44**	**0.44**	**0.39**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**16.5**	**32.0**	**39.5**	**101**	**71.6**	**78.2**	**40.5**	**38.0**	**78.4**	**70.6**	**96.3**	**49.9**	**48.4**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**439**	**449**	**440**	**779**	**789**	**969**	**847**	**726**	**981**	**1,000**	**986**	**813**	**785**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**439**	**449**	**440**	**779**	**789**	**969**	**847**	**726**	**981**	**1,000**	**986**	**813**	**785**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**596**	**642**	**634**	**1,570**	**1,480**	**1,670**	**1,620**	**1,740**	**1,440**	**1,520**	**1,320**	**1,100**	**1,090**
Total suspended solids	SM2540D	mg/L	NE	NE		**43**	**36.0**	**35.0**	**48.0**	**44.5**	**40.5**	**64**	**28.0**	**46**	**47**	**39.0**	**34**	**28.2**
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.0 J**	**7.1 J**	**7.2 J**	**7.1 J**	**7.0 J**	**7.0 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**19.0**	**25.8**	**25.8**	**4.1**	**1.4**	**4.6**	**14.1**	**8.2**	**32.4**	**30.5**	**32.2**	**43.9**	**43.8 J-**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 UJ	**0.033 J**	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**7.1**	**8.2**	**8.3**	**33.7**	**22.8**	**24.5**	**14.4**	**12.6**	**24.6**	**25.1**	**24.6**	**15.6**	**16.6**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**6.9**	**9.2**	**9.2**	**34.4**	**23.4**	**25.2**	**14.6**	**11.0**	**23.1**	**23.1**	**22.8**	**15.2**	**15.7**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 UJ	< 1.0 U	< 0.99 UJ	< 0.99 UJ	< 0.99 U	< 1.0 UJ	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.95 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.99 U	< 1.0 U	< 1.0 U

Notes:
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-407R-P1	MW-407R-P2	MW-407R-P3	MW-408	MW-408	MW-408	MW-408	MW-409	MW-409	MW-409	MW-505-P1	MW-505-P1	MW-505-P2
					Sample Depth (ft BGS)	53.6-63.6	73.6-83.6	103.6-113.6	109-119	109-119	109-119	109-119	23-33	23-33	23-33	15-25	15-25	40-50
					Sample Date	08-12-2021	08-12-2021	08-12-2021	03-15-2021	05-12-2021	05-26-2021	08-06-2021	03-15-2021	05-05-2021	08-06-2021	05-25-2021	08-05-2021	05-25-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**151,000**	**247,000**	**189,000**	**70,500**	**85,500**	NA	**137,000**	**8,860**	**13,900**	**33,600**	**22,400**	**55,400**	**17,500 J-**
Methane	RSK-175	ug/L	NE	NE		**73**	**250**	**57**	**510**	**370**	NA	**340**	< 11 U	< 5.0 UJ	**2.8 J**	**14 J+**	**63**	**5.4 J+**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**0.44**	**2.1**	**1.2**	**1.3**	NA	**1.1**	**1.3**	**0.032 J**	< 0.050 U	< 0.050 U	**0.039 J**	< 0.050 U	**0.042 J**
Chloride	SW9056A	mg/L	NE	NE		**37.5**	**172**	**129**	**117**	NA	**115**	**136**	**7.5**	**3.0**	**5.6**	**38.8**	**25.4**	**38.5**
Fluoride	SW9056A	mg/L	4	0.08		**0.95**	**3.2**	**13.2**	**11.3**	NA	**11.3**	**11.1**	**0.49**	**0.46**	**0.44**	**0.25**	**0.30**	**0.29**
Iodide	SW9056A	mg/L	NE	0.02		**0.14 J**	**0.32 J**	**0.15 J**	**0.12 J**	NA	**0.11 J**	**0.11 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**209**	**38.5**	**160**	**37.7**	NA	**55.8**	**58.0**	**170**	**165**	**157**	**20.1**	**25.7**	**19.6**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	NA	< 0.050 U	< 0.050 U	**0.086**	**0.13**	**0.19**	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	NA	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.027 J**	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	NA	< 0.10 U	< 0.10 U	< 0.10 U	**0.16**	**0.19**	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.11**	**0.31**	**0.25**	**0.31**	NA	**0.25**	**0.34**	< 0.050 U	< 0.050 U	< 0.050 U	**0.21**	**0.092 J-**	**0.097 J**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**23.5**	**60.7**	**35.4**	**20.5**	NA	**40.3**	**63.9**	**54.6 J-**	**20.2**	< 10.0 U	< 10.0 U	**16.4 J+**	< 10.0 UJ
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**596**	**834**	**676**	**669**	NA	**650**	**667**	**294**	**323**	**315**	**150**	**188**	**173**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**596**	**834**	**676**	**669**	NA	**650**	**667**	**294**	**323**	**315**	**150**	**188**	**173**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	NA	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**912**	**1,110**	**1,090**	**914**	NA	**916**	**1,030**	**604**	**592**	**585**	**183**	**290**	**221**
Total suspended solids	SM2540D	mg/L	NE	NE		**68.0**	**42.8**	**36.8**	**39**	NA	**33**	**30.5**	**4**	**2**	**4.1**	< 2.5 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.0 J**	**7.0 J**	**6.9 J**	**7.1 J**	NA	**7.2 J**	**7.1 J**	**7.6 J**	**7.4 J**	**7.5 J**	**7.0 J**	**6.9 J**	**7.1 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**7.1**	**29.8**	**12.0**	**4.9**	NA	**4.8**	**5.1**	< 0.10 U	< 0.10 U	< 0.10 U	**0.070 J**	**0.10**	**0.044 J**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 1.0 U	**0.025 J**	**0.18 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**6.3**	**20.9**	**12.8**	**9.9**	NA	**10.3**	**10.2**	**18.9**	**4.3**	**1.4**	**1.6**	**2.4**	**2.4**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**6.2**	**20.4**	**12.3**	**9.2**	NA	**10.0**	**11.0**	**16.7**	**5.5**	**1.3**	**1.8**	**2.5**	**2.8**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.96 U	NA	< 1.0 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.96 U	NA	< 1.0 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.96 U	NA	< 1.0 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.96 U	NA	< 1.0 U	< 0.97 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	MW-505-P2	MW-505-P3	MW-505-P3	PZ-304-AI	PZ-304-AI	PZ-304-AI	PZ-304-AS	PZ-304-AS	PZ-304-AS	S-5	S-5	S-5	S-8	S-8
					Sample Depth (ft BGS)	40-50	65-75	65-75	39-48.8	39-48.8	39-48.8	17.1-26.9	17.1-26.9	17.1-26.9	30-40	30-40	30-40	6.8-26.8	6.8-26.8
					Sample Date	08-05-2021	05-25-2021	08-05-2021	03-01-2021	05-17-2021	08-18-2021	03-10-2021	05-20-2021	08-23-2021	03-08-2021	05-12-2021	08-17-2021	02-24-2021	05-07-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**30,900**	**10,800**	**51,700**	**110,000**	**133,000**	**248,000 J**	**225,000**	**292,000**	**324,000**	**173,000**	**238,000**	**310,000**	**32,900**	**41,900**
Methane	RSK-175	ug/L	NE	NE		**20**	**12 J+**	**4,100**	**4,800**	**5,200**	NA	**14,000**	**9,000**	NA	**12,000**	**8,100**	**14,000**	**9.8**	**2.4 J**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	**14,800 J**	NA	NA	**27,700 J**	NA	NA	NA	NA	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**0.053**	**0.045 J**	**0.10**	**2.9**	**0.67**	**3.0**	< 0.050 U	**2.2**	**0.67**	< 0.050 U	**5.7**	**7.4**	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	NE	NE		**46.8**	**38.1**	**43.0**	**349**	**107**	**379**	**222**	**230**	**155**	**282**	**267**	**327**	**63.0**	**58.6**
Fluoride	SW9056A	mg/L	4	0.08		**0.32**	**0.27**	**0.20**	**0.22**	**1.7**	**0.26**	**0.47**	**0.33**	**1.1**	< 0.10 U	**0.14**	< 0.10 U	**0.50**	**0.41**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	**0.60**	**0.60**	**0.66**	**0.54**	**0.63**	**0.59**	**0.23 J**	**0.20 J**	**0.23 J**	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**62.0**	**21.4**	**10.1**	**0.14 J**	**40.7**	< 0.25 U	**0.16 J**	< 0.25 U	**46.0**	**0.47**	**0.12 J**	**0.27 J+**	**37.1**	**48.2**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**1.1**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	**0.018 J**	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.24**	**0.19**	**0.23**	**0.22**	**0.23**	**0.29**	**3.0**	**3.0 J+**	**3.0**	**3.2**	**3.8**	**4.2**	**0.036 J**	**0.19 J-**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**24.4**	**28.2 J+**	**28.3**	**70.4**	**94.3**	**142**	**149**	**180**	**191**	**337**	**338**	**351**	< 10.0 U	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**224**	**184**	**309**	**787**	**1,050**	**1,090**	**1,330**	**1,340**	**1,300**	**2,300**	**1,910**	**2,020**	**345**	**295**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**224**	**184**	**309**	**787**	**1,050**	**1,090**	**1,330**	**1,340**	**1,300**	**2,300**	**1,910**	**2,020**	**345**	**295**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**405**	**231**	**418**	**1,360**	**1,560**	**1,730**	**1,420**	**1,330**	**1,560**	**2,160**	**1,850**	**4,060**	**523**	**468**
Total suspended solids	SM2540D	mg/L	NE	NE		< 2.5 U	**5**	**3.3**	**50**	**57**	**38.0**	**54**	**53**	**29.2**	**24**	**52**	**60.0**	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.5 J**	**7.1 J**	**6.5 J**	**6.8 J**	**6.9 J**	**6.8 J**	**6.7 J**	**6.7 J**	**6.7 J**	**7.1 J**	**7.0 J**	**7.1 J**	**7.1 J**	**7.1 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.092 J**	< 0.10 U	**0.13**	**4.2**	**4.8**	**20.8**	**123**	**127**	**132**	**241**	**221**	**243**	**0.13**	**0.14 J+**
Sulfide	SM4500-S2-D	mg/L	NE	NE		**0.087 J**	< 1.0 U	**0.043 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**7.4**	**3.8**	**8.1**	**20.5**	**28.6**	**43.7**	**69.3**	**63.7**	**69.6**	**99.7**	**79.9**	**89.4**	**2.0**	**1.5**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**7.7**	**4.6**	**8.2**	**21.0**	**29.4**	**44.9**	**63.2**	**59.9**	**71.7**	**92.7**	**81.7**	**97.5**	**2.0**	**1.2**
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.99 U	< 0.97 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U	< 1.0 U	< 0.99 U	< 0.96 U	< 0.96 U	< 0.99 U	< 0.98 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.99 U	< 0.97 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U	< 1.0 U	< 0.99 U	< 0.96 U	< 0.96 U	< 0.99 U	< 0.98 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.99 U	< 0.97 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U	< 1.0 U	< 0.99 U	< 0.96 U	< 0.96 U	< 0.99 U	< 0.98 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.99 U	< 0.97 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U	< 1.0 U	< 0.99 U	< 0.96 U	< 0.96 U	< 0.99 U	< 0.98 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	S-8	S-10	S-10	S-10	S-82	S-82	S-82	PZ-100-KS	PZ-100-KS	PZ-100-KS	S-84	S-84	S-84	PZ-100-SD
					Sample Depth (ft BGS)	6.8-26.8	32-52	32-52	32-52	15.5-25.5	15.5-25.5	15.5-25.5	374-383.8	374-383.8	374-383.8	20.9-30.9	20.9-30.9	20.9-30.9	234.8-244.6
					Sample Date	08-11-2021	03-08-2021	05-11-2021	08-12-2021	03-08-2021	05-13-2021	08-16-2021	03-03-2021	05-07-2021	08-05-2021	02-26-2021	05-10-2021	08-17-2021	03-02-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**45,500**	**219,000**	**95,800**	**573,000**	**137,000**	**172,000**	**330,000**	**9,180**	**9,680**	**23,200**	**132,000**	**165,000**	**335,000**	**18,400**
Methane	RSK-175	ug/L	NE	NE		**19**	**750**	**192**	**660**	**440**	**511**	**4,700**	**18**	**12**	**20**	**820**	**930**	NA	**7.3**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,080 J**	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		< 0.050 U	**2.6**	**2.6**	**1.9**	**2.0**	**3.4**	**4.9**	**0.23**	**0.19**	**0.23**	**0.089**	**0.12**	**0.099**	< 0.050 U
Chloride	SW9056A	mg/L	NE	NE		**38.6**	**208**	**204**	**156**	**157**	**274**	**416**	**58.5**	**56.5**	**61.1**	**24.7**	**22.1**	**21.8**	**2.1**
Fluoride	SW9056A	mg/L	4	0.08		**0.59**	**5.7**	**4.2**	**4.9**	**0.30**	**0.21**	**0.25**	**5.8**	**5.9**	**6.2**	**0.13**	**0.16**	**0.13**	**2.1**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	**0.37 J**	**0.35 J**	**0.33 J**	**0.36 J**	**0.45 J**	**0.61**	< 0.50 U	< 0.50 U	**0.19 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**15.5**	**711**	**339**	**543**	**11.7**	**11.8**	**6.4**	**38.0**	**35.4**	**34.8**	**94.9**	**88.8**	**65.3**	**11.0**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.030 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.067**
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.20 U	< 0.10 UJ	< 0.10 U	**0.13 J+**
Phosphorus	E365.1	mg/L	NE	NE		**0.032 J**	**0.54**	**0.76**	**0.88**	**0.90**	**0.88**	**0.93**	< 0.050 U	< 0.050 U	< 0.050 U	**1.1**	**1.3**	**1.2**	**0.044 J**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		< 10.0 U	**72.6**	**60.3**	**63.0**	**56.4**	**80.8**	**115 J-**	< 10.0 U	< 10.0 U	**11.6 J+**	**24.3**	**11.3**	**48.6**	**6.5 J**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**257**	**660**	**752**	**776**	**1,200**	**1,070**	**1,050**	**475**	**476**	**487**	**517**	**598**	**587**	**319**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**257**	**660**	**752**	**776**	**1,200**	**1,060**	**1,050**	**430**	**470**	**487**	**517**	**598**	**587**	**187**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**7.6**	< 2.0 U	**45.6**	**6.6**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**133**
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**357**	**2,040**	**1,560**	**1,690**	**1,470**	**1,580**	**1,640**	**661**	**629**	**686**	**718**	**762**	**746**	**320**
Total suspended solids	SM2540D	mg/L	NE	NE		< 2.5 U	**76**	**54**	**65.0**	**66**	**72**	**70.5**	< 2.5 U	< 2.5 U	< 2.5 U	**99 J-**	**64**	**58.5**	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.3 J**	**6.6 J**	**6.7 J**	**6.6 J**	**6.9 J**	**6.9 J**	**6.8 J**	**7.6 J**	**7.7 J**	**7.0 J**	**6.7 J**	**7.7 J**	**6.8 J**	**7.3 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.11**	**41.6**	**31.2 J-**	**37.1**	**6.5**	**6.9**	**18.9**	**0.31**	**0.35**	**0.35**	**2.2**	**2.3**	**2.5**	**0.27**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.23 J**	**0.99 J**	**0.99 J**	**0.039 J**	**0.036 J**	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**2.5**	**18.1**	**17.2**	**18.9**	**25.9**	**24.9**	**35.5**	**0.38 J**	< 1.0 U	**0.76 J**	**7.0**	**6.9**	**7.4**	**0.67 J**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**2.1**	**33.1 J-**	**16.9**	**18.1**	**22.8**	**27.3**	**39.0**	**0.69 J**	< 1.0 U	< 1.0 U	**7.2**	**6.4**	**7.0**	< 1.0 U
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	< 0.96 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 0.96 U	< 0.99 UJ	< 1.0 U	< 0.96 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 0.96 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 0.96 U	< 0.99 U	< 1.0 U	< 0.96 U	< 1.0 U	< 0.96 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
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R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-100-SD	PZ-100-SD	PZ-100-SS	PZ-100-SS	PZ-100-SS	PZ-101-SS	PZ-101-SS	PZ-101-SS	PZ-102R-SS	PZ-102R-SS	PZ-102R-SS	PZ-102-SS	PZ-102-SS
					Sample Depth (ft BGS)	234.8-244.6	234.8-244.6	73.96-93.6	73.96-93.6	73.96-93.6	145.9-155.7	145.9-155.7	145.9-155.7	79.83-91.04	79.83-91.04	79.83-91.04	79.7-89.5	79.7-89.5
					Sample Date	05-07-2021	08-06-2021	03-02-2021	05-07-2021	08-06-2021	03-12-2021	05-17-2021	08-19-2021	02-25-2021	05-06-2021	08-04-2021	02-25-2021	05-06-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**19,000**	**46,400**	**30,200**	**29,600**	**75,300**	**89,100**	**146,000**	**84,300 J**	**15,200**	**34,900**	**87,800**	**39,800**	**42,900**
Methane	RSK-175	ug/L	NE	NE		**8.6 J+**	**4.9 J**	< 5.0 U	< 5.0 U	< 5.0 U	**2,000**	**2,400**	NA	**17**	< 19 U	**2.4 J**	**4,400**	**3,000**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	**6,900**	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**1.5**	**1.5**	**1.6**	< 0.050 U	**0.034 J**	< 0.050 U	< 0.050 U	**0.033 J**
Chloride	SW9056A	mg/L	NE	NE		**1.5**	**2.6**	**3.9**	**2.4**	**3.4**	**172**	**192**	**208**	**8.2**	**8.4**	**9.7**	**4.7**	**5.5**
Fluoride	SW9056A	mg/L	4	0.08		**2.2**	**2.4**	**0.59**	**0.58**	**0.65**	**1.4**	**1.2**	**1.3**	**0.57**	**0.60**	**0.52**	**0.38**	**0.43**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.85**	**0.84**	**0.97**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**11.1**	**11.5**	**33.5**	**34.9**	**36.8**	**2.1**	**1.7**	**1.7**	**58.9**	**53.2**	**53.2**	**7.9**	**12.6**
Nitrate as N	9056A	mg/L	10	NE		**0.059**	**0.040 J**	**0.052**	**0.038 J**	**0.043 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.0076 J**	**0.031 J**	< 0.050 U	< 0.050 UJ
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.050 U	< 0.050 U	**0.036 J**	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 UJ	< 0.050 U	< 0.050 U	< 0.050 UJ
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	**0.13 J+**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.13 J+**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		< 0.050 U	**0.035 J**	< 0.050 U	< 0.050 U	< 0.050 U	**0.23**	**0.41**	**0.28**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**66.3**	**77.1**	**84.5**	**4.5 J**	< 10.0 U	< 10.0 U	< 10.0 U	**4.9 J**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**323**	**324**	**405**	**404**	**404**	**735**	**801**	**793**	**408**	**412**	**420**	**423**	**420**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**323**	**324**	**285**	**404**	**404**	**735**	**801**	**793**	**408**	**412**	**420**	**423**	**420**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	**120**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**303**	**333**	**412**	**407**	**439**	**1,040**	**1,110**	**1,110**	**498**	**436**	**502**	**428**	**440**
Total suspended solids	SM2540D	mg/L	NE	NE		< 2.5 U	< 2.5 U	**3**	**3**	**3.1**	**4**	**8**	**5.2**	< 2.5 U	< 2.5 U	**2.9**	**3**	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.3 J**	**7.3 J**	**7.2 J**	**7.2 J**	**7.4 J**	**6.9 J**	**7.6 J**	**6.7 J**	**7.2 J**	**7.1 J**	**7.2 J**	**7.1 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.27**	**0.32**	**0.091 J**	< 0.10 U	< 0.10 U	**8.6**	**7.5**	**7.0**	< 0.10 U	< 0.10 U	< 0.10 U	**0.10**	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.80 J**	**0.17 J**
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		< 1.0 U	**0.95 J**	**0.68 J**	< 1.0 U	**0.55 J**	**26.2**	**29.8**	**33.1**	**0.39 J**	< 1.0 U	**0.84 J**	**0.33 J**	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**24.5**	**27.8**	**32.4**	**0.78 J**	< 1.0 U	< 1.0 U	**0.70 J**	< 1.0 U
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.98 U	< 1.1 UJ	< 1.0 U	< 1.0 U	< 1.1 UJ
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.98 U	< 1.1 UJ	< 1.0 U	< 1.0 U	< 1.1 UJ
Dinoseb	SW8151A	ug/L	7	1.5		< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.98 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.1 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.98 U	< 1.1 UJ	< 1.0 U	< 1.0 U	< 1.1 UJ

Notes:
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-102-SS 79.7-89.5 08-04-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 N	PZ-103-SS 134.7-144.5 03-12-2021 FD	PZ-103-SS 134.7-144.5 05-20-2021 N	PZ-103-SS 134.7-144.5 05-20-2021 FD	PZ-103-SS 134.7-144.5 08-24-2021 N	PZ-104-KS 397.37-407.17 02-24-2021 N	PZ-104-KS 397.37-407.17 05-05-2021 N	PZ-104-KS 397.37-407.17 08-04-2021 N	PZ-104-SD 235.2-245 03-03-2021 N	PZ-104-SD 235.2-245 05-13-2021 N	PZ-104-SD 235.2-245 08-23-2021 N	PZ-104-SD 235.2-245 08-23-2021 FD
Dissolved Permanent Gases, Total																	
Carbon dioxide	RSK-175	ug/L	NE	NE	**88,900**	**199,000**	**216,000**	**243,000**	**235,000**	**335,000**	**83,300**	**24,000**	**52,700**	**37,000**	**43,000**	**67,800**	**67,900**
Methane	RSK-175	ug/L	NE	NE	**3,400**	**16,000**	**17,000**	**9,300**	**6,700**	NA	**110**	**120**	**150**	**3,700**	**2,020**	NA	NA
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	**23,800**	NA	NA	NA	NA	NA	**6,740**	**6,960**
General Chemistry Parameters																	
Bromide	SW9056A	mg/L	NE	NE	< 0.050 U	**4.4**	**4.3**	**4.9**	**4.9**	**5.4**	**0.087**	**0.11**	**0.11**	**0.59**	**0.63**	**5.5 J**	**2.5 J**
Chloride	SW9056A	mg/L	NE	NE	**6.1**	**791**	**775 J+**	**949**	**900**	**802**	**59.5**	**53.4**	**65.8**	**134**	**126**	**978 J**	**291 J**
Fluoride	SW9056A	mg/L	4	0.08	**0.40**	**0.59**	**0.60**	**0.40**	**0.39**	**0.59**	**1.8**	**1.8**	**1.7**	**0.98**	**0.91**	**0.19 J**	**0.45 J**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	**0.72**	**0.74**	**0.82**	**0.89**	**0.89**	< 0.50 U	< 0.50 U	< 0.50 U	**0.62**	**0.67**	**0.67**	**0.70**
Sulfate	SW9056A	mg/L	NE	NE	**10.3**	**0.36**	**0.41**	**0.46**	**0.27 J+**	< 0.25 U	**29.0**	**26.0**	**31.0**	**41.7**	**40.7**	**0.52**	**0.21 J**
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.40 U	< 0.40 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.060**	**0.35**	**0.33**	**0.31**	**0.32**	**0.32**	< 0.050 U	**0.059**	< 0.050 U	**0.18**	**0.090**	**0.087**	**0.083**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	**449**	**477**	**489**	**501**	**536**	< 10.0 U	< 10.0 U	**9.8 J**	**68.8**	**71.7**	**73.1**	**67.1**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**440**	**616**	**630**	**600**	**593**	**563**	**334**	**334**	**330**	**443**	**462**	**452**	**448**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**440**	**616**	**630**	**600**	**593**	**563**	**334**	**334**	**330**	**430**	**451**	**452**	**448**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**13.6**	**10.8**	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**455**	**2,380**	**2,300**	**2,970**	**2,960**	**3,350**	**463**	**475**	**482**	**686**	**778**	**750**	**806**
Total suspended solids	SM2540D	mg/L	NE	NE	**11.0**	**37**	**30**	**51**	**52**	**34.5**	**6**	**2**	< 2.5 U	**14**	**11**	**10.9**	**10.5**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.1 J**	**6.5 J**	**6.5 J**	**6.4 J**	**6.4 J**	**6.4 J**	**7.3 J**	**7.4 J**	**7.3 J**	**7.1 J**	**7.0 J**	**7.1 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.26**	**1.3**	**1.3**	**1.3**	**1.3**	**1.4**	**0.22**	**0.17**	**0.17**	**17.5**	**16.6**	**16.7**	**16.2**
Sulfide	SM4500-S2-D	mg/L	NE	NE	**0.70 J**	< 1.0 U	**0.025 J**	< 10.0 U	**0.14 J**	**0.44 J**	**0.13 J**	**0.29 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**1.2**	**168**	**170**	**157**	**157**	**172**	**0.41 J**	< 1.0 U	**0.91 J**	**20.5**	**21.1**	**24.1**	**23.9**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**1.2**	**149**	**141**	**154**	**155**	**174**	**0.41 J**	**0.72 J**	< 1.0 U	**21.1**	**21.9**	**23.0**	**23.4**
Herbicides, Total																	
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.99 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	**3.0**	< 0.98 U	< 1.0 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.1 U	< 1.1 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.99 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.1 U	< 1.1 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.99 U	< 0.96 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.98 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.1 U	< 1.1 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.99 U	< 0.96 U	< 0.96 U	**1.0 J**	**0.93 J**	< 0.98 U	< 0.98 U	< 1.0 U	< 1.0 U	< 0.98 U	< 1.0 U	< 1.1 U	< 1.1 U

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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD
Sample Location					PZ-104-SS	PZ-104-SS	PZ-104-SS	PZ-105-SS	PZ-105-SS	PZ-105-SS	PZ-106-KS	PZ-106-KS	PZ-106-KS	PZ-106-SD	PZ-106-SD	PZ-106-SD
Sample Depth (ft BGS)					134.5-144.3	134.5-144.3	134.5-144.3	138.5-148.3	138.5-148.3	138.5-148.3	363.75-373.57	363.75-373.57	363.75-373.57	190.79-200.59	190.79-200.59	190.79-200.59
Sample Date					02-24-2021	05-05-2021	08-04-2021	03-05-2021	05-14-2021	08-18-2021	03-04-2021	05-06-2021	08-11-2021	03-03-2021	05-06-2021	08-11-2021
Sample Type					N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																
Carbon dioxide	RSK-175	ug/L	NE	NE	**42,800**	**41,100**	**87,000**	**137,000**	**42,600**	**51,000 J**	**20,900**	**20,300**	**37,200**	**30,100 J-**	**33,600 J-**	**65,100**
Methane	RSK-175	ug/L	NE	NE	**82**	< 19 U	**22**	**45**	**15**	NA	**29**	**35**	**38**	**100**	**54**	**110**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	**17.3 J**	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																
Bromide	SW9056A	mg/L	NE	NE	< 0.050 U	**0.034 J**	< 0.050 U	**0.31**	**0.35**	**0.39**	**0.069**	**0.071**	**0.073**	**0.23**	**0.21**	**0.16**
Chloride	SW9056A	mg/L	NE	NE	**3.0**	**3.6**	**3.9**	**114**	**112**	**113**	**13.1**	**12.9**	**13.5**	**76.6**	**68.7 J+**	**70.6**
Fluoride	SW9056A	mg/L	4	0.08	**0.78**	**0.79**	**0.76**	**0.52**	**0.54**	**0.60**	**3.0**	**3.1**	**3.1**	**1.2**	**1.3**	**1.3**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	< 0.50 U	**0.27 J**	**0.26 J**	**0.23 J**	< 0.50 U	< 0.50 U	< 0.50 U	**0.23 J**	**0.20 J**	**0.12 J**
Sulfate	SW9056A	mg/L	NE	NE	**29.1**	**26.6**	**24.1**	**31.2**	**29.7**	**31.7**	**10.9**	**11.2**	**11.2**	**65.0**	**67.6**	**64.6**
Nitrate as N	9056A	mg/L	10	NE	**0.064**	**0.045 J**	**0.024 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 UJ	< 0.050 U	< 0.050 U	< 0.050 UJ	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 UJ	< 0.50 U	< 0.050 U	< 0.050 UJ	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	< 0.050 U	< 0.050 U	**0.036 J**	**0.050 J+**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 UJ	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	**26.0**	**29.6**	**24.5**	< 10.0 U	< 10.0 U	< 10.0 U	**10 J-**	**13.1 J-**	**10.4**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**402**	**392**	**391**	**439**	**447**	**432**	**377**	**372**	**375**	**377**	**379**	**380**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**402**	**392**	**391**	**439**	**447**	**432**	**377**	**372**	**375**	**348**	**379**	**380**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**29.2**	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**426**	**416**	**411**	**661**	**710**	**686**	**400**	**368**	**392**	**587**	**578**	**595**
Total suspended solids	SM2540D	mg/L	NE	NE	< 2.5 U	< 2.5 U	< 2.5 U	**8**	**4**	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	**2**	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.2 J**	**7.2 J**	**7.2 J**	**7.1 J**	**7.1 J**	**7.0 J**	**7.4 J**	**7.4 J**	**7.4 J**	**7.1 J**	**7.2 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	**0.14**	**0.17**	**0.16**	**0.15**	**0.14 J+**	**0.16**	**1.5**	**1.4**	**0.93**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.052 J**	**0.059 J**	**0.053 J**	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**0.39 J**	< 1.0 U	**0.81 J**	**9.5**	**8.9**	**9.4**	< 1.0 U	< 1.0 U	< 1.0 U	**2.9**	**1.5**	**2.1**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**0.44 J**	**0.82 J**	< 1.0 U	**9.3**	**8.8**	**9.3**	**0.45 J**	< 1.0 U	< 1.0 U	**3.2**	**1.7**	**1.9**
Herbicides, Total																
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.99 U	< 1.0 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.95 U	< 0.96 UJ	< 1.0 U	< 1.0 U	< 0.98 UJ	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.99 U	< 1.0 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.95 U	< 0.96 UJ	< 1.0 U	< 1.0 U	< 0.98 UJ	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.99 U	< 1.0 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.95 U	< 0.96 U	< 1.0 U	< 1.0 U	< 0.98 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.99 U	< 1.0 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 0.95 U	< 0.96 UJ	< 1.0 U	< 1.0 U	< 0.98 UJ	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-106-SS	PZ-106-SS	PZ-106-SS	PZ-107-SS	PZ-107-SS	PZ-107-SS	PZ-109-SS	PZ-109-SS	PZ-109-SS	PZ-111-KS	PZ-111-KS	PZ-111-KS	PZ-111-SD
					Sample Depth (ft BGS)	155.3-165.1	155.3-165.1	155.3-165.1	92.6-102.4	92.6-102.4	92.6-102.4	125.7-135.5	125.7-135.5	125.7-135.5	357.15-366.96	357.15-366.96	357.15-366.96	199.4-209.2
					Sample Date	03-04-2021	05-06-2021	08-11-2021	03-09-2021	05-18-2021	08-23-2021	02-24-2021	05-04-2021	08-03-2021	02-22-2021	05-04-2021	08-03-2021	02-23-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**123,000**	**100,000**	**146,000**	**173,000**	**195,000**	**374,000**	**32,100**	**32,000**	**68,800**	**5,540**	**5,950**	**7,890**	**31,600**
Methane	RSK-175	ug/L	NE	NE		**1,100**	**720**	**530**	**5,800**	**4,500**	NA	**9.0**	< 5.0 U	**19**	**18**	**7.4 J+**	**15**	**40**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	**8,350**	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**0.83**	**0.78**	**0.66**	< 0.050 U	**3.8**	**0.32**	< 0.050 U	**0.050**	**0.043 J**	**0.51**	**0.55**	**0.56**	**0.072**
Chloride	SW9056A	mg/L	NE	NE		**127**	**119**	**111**	**462**	**540**	**27.6**	**3.6**	**4.4**	**4.4**	**144**	**184**	**143**	**10.7**
Fluoride	SW9056A	mg/L	4	0.08		**1.8**	**1.9**	**1.8**	**0.48**	**0.36**	**0.15**	**2.6**	**2.7**	**2.5**	**14.4**	**14.8**	**14.3**	**2.2**
Iodide	SW9056A	mg/L	NE	0.02		**1.5**	**1.4**	**1.3**	**1.4**	**2.0**	**2.2**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**15.3**	**15.2**	**18.6**	**11.7**	**6.1**	**17.8**	**23.2**	**22.6**	**21.2**	**71.2**	**69.0**	**67.3**	**46.3**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 UJ	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.16**	**0.20**	**0.17**	< 0.050 U	< 0.050 R	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	< 0.050 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.050 R	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	**0.15**	**0.23**	**0.19**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		< 0.050 U	**0.055**	< 0.050 U	**0.19**	**0.25**	**0.25**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**53.0**	**43.7**	**38.3**	**202**	**221**	**306**	< 10.0 U	< 10.0 U	**5.1 J**	< 10.0 U	< 10.0 U	**12.9 J+**	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**597**	**564**	**561**	**927**	**1,040**	**1,060**	**426**	**411**	**412**	**522**	**570**	**580**	**407**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**597**	**564**	**561**	**927**	**1,040**	**1,060**	**426**	**411**	**412**	**504**	**545**	**567**	**407**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**17.6**	**24.8**	**13.6**	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**784**	**744**	**708**	**1,660**	**1,950**	**2,250**	**436**	**405**	**426**	**972**	**960**	**956**	**452**
Total suspended solids	SM2540D	mg/L	NE	NE		**5**	**6**	**3.9**	**9**	**13**	**15.8**	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**6.9 J**	**7.8 J**	**7.0 J**	**6.7 J**	**6.7 J**	**6.7 J**	**7.3 J**	**7.4 J**	**7.2 J**	**8.0 J**	**8.1 J**	**8.0 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**1.4**	**1.4**	**1.3**	**29.7**	**39.3**	**43.8**	< 0.10 U	< 0.10 U	< 0.10 U	**0.55**	**0.53**	**0.53**	**0.065 J**
Sulfide	SM4500-S2-D	mg/L	NE	NE		**0.58 J**	< 1.0 U	< 1.0 U	**0.033 J**	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**16.4**	**15.0**	**13.1**	**68.5**	**77.1**	**95.4**	**0.67 J**	< 1.0 U	**0.78 J**	**0.11 J**	< 1.0 U	**0.36 J**	**0.69 J**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**16.2**	**13.7**	**12.0**	**59.5**	**74.7**	**95.3**	**0.65 J**	**0.99 J**	< 1.0 U	< 1.0 U	**0.73 J**	< 1.0 U	**0.77 J**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.95 U	< 0.96 UJ	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.98 U	< 0.96 U	< 0.97 U	< 0.91 U	< 0.99 U	< 0.97 U	< 1.1 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.95 U	< 0.96 UJ	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.98 U	< 0.96 U	< 0.97 U	< 0.91 U	< 0.99 U	< 0.97 U	< 1.1 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.95 U	< 0.96 U	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.98 U	< 0.96 U	< 0.97 U	< 0.91 U	< 0.99 U	< 0.97 U	< 1.1 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.95 U	< 0.96 UJ	< 1.0 U	< 0.95 U	< 0.95 U	< 0.99 U	< 0.98 U	< 0.96 U	< 0.97 U	< 0.91 U	< 0.99 U	< 0.97 U	< 1.1 U

Notes:
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS
Sample Location					PZ-111-SD	PZ-111-SD	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-111-SS	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AD	PZ-113-AS
Sample Depth (ft BGS)					199.4-209.2	199.4-209.2	105.5-115.5	105.5-115.5	105.5-115.5	105.5-115.5	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	98.6-108.4	28.9-38.7
Sample Date					05-04-2021	08-03-2021	03-05-2021	03-05-2021	05-14-2021	05-14-2021	08-20-2021	03-01-2021	03-01-2021	05-18-2021	05-18-2021	08-18-2021	03-01-2021
Sample Type					N	N	N	FD	N	FD	N	N	FD	N	FD	N	N
Dissolved Permanent Gases, Total																	
Carbon dioxide	RSK-175	ug/L	NE	NE	**29,100**	**64,900**	**109,000**	**95,000**	**133,000**	**140,000**	**301,000**	**124,000**	**130,000**	**129,000**	**134,000**	**196,000 J**	**164,000 J**	**115,000**
Methane	RSK-175	ug/L	NE	NE	**10 J+**	< 5.0 U	**7,500**	**7,900**	**4,900**	**4,900**	NA	**3,800**	**4,200**	**3,000**	**2,800**	NA	NA	**660 J-**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	**11,100**	NA	NA	NA	NA	**3,170 J**	**2,980 J**	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	**0.093**	**0.089**	**13.9**	**13.7**	**14.0**	**14.0**	**14.4**	**5.9**	**5.9**	**5.4**	**5.4**	**4.7**	**4.7**	**1.3**
Chloride	SW9056A	mg/L	NE	NE	**11.2**	**10.3**	**626**	**656**	**569**	**623**	**613**	**366**	**366**	**404**	**410**	**403**	**409**	**121**
Fluoride	SW9056A	mg/L	4	0.08	**2.3**	**2.2**	**0.50**	**0.53**	**0.42**	**0.42**	**0.49**	**0.13**	**0.13**	**0.082 J**	**0.082 J**	**0.12**	**0.12**	**0.28**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	**0.60**	**0.60**	**0.63**	**0.59**	**0.57**	**0.35 J**	**0.37 J**	**0.33 J**	**0.34 J**	**0.30 J**	**0.31 J**	**0.99**
Sulfate	SW9056A	mg/L	NE	NE	**42.3**	**46.1**	**14.1**	**14.1**	**12.2**	**12.7**	**13.9**	**5.2**	**5.1**	**5.5**	**5.3**	**8.3**	**8.4**	**4.3**
Nitrate as N	9056A	mg/L	10	NE	**0.065 J**	**0.18**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.050 R	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	**0.19**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
Phosphorus	E365.1	mg/L	NE	NE	**0.040 J**	< 0.050 U	**0.15**	**0.13**	**0.25**	**0.14**	**0.12**	**0.46**	**0.48**	**0.48**	**0.47**	**0.42 J-**	**0.50**	**0.16**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	< 10.0 U	**180**	**185**	**120**	**119**	**114**	**80.2**	**72.9**	**70.8**	**70.9**	**69.0**	**65.5**	**23.1 J-**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**390**	**390**	**856**	**839**	**868**	**880**	**760**	**878**	**893**	**811**	**826**	**802**	**810**	**625**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**390**	**390**	**856**	**839**	**868**	**880**	**760**	**878**	**893**	**811**	**826**	**802**	**810**	**625**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**447**	**429**	**1,850**	**1,860**	**2,040**	**2,120**	**1,860**	**1,300**	**1,290**	**1,410**	**1,440**	**1,410**	**1,360**	**804**
Total suspended solids	SM2540D	mg/L	NE	NE	< 2.5 U	< 2.5 U	**8**	**8**	**10**	**10**	**5.7**	**61**	**68**	**68**	**69**	**62.0**	**64.0**	**14**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.4 J**	**7.5 J**	**6.8 J**	**6.8 J**	**7.1 J**	**6.8 J**	**6.9 J**	**6.9 J**	**6.9 J**	**7.0 J**	**7.1 J**	**6.8 J**	**6.9 J**	**6.8 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	< 0.10 U	< 0.10 U	**3.6**	**3.8**	**4.5**	**4.6**	**3.2**	**34.1**	**34.7**	**31.1**	**30.6**	**27.3**	**26.9**	**4.2**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	**0.029 J**	**0.096 J**	< 1.0 U	**0.025 J**	< 1.0 U	**0.034 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	< 1.0 U	**0.86 J**	**45.2**	**46.6**	**38.7**	**38.0**	**40.2**	**24.4**	**24.5**	**23.1**	**22.6**	**21.0**	**20.9**	**6.8**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**0.99 J**	**1.2**	**39.5**	**39.2**	**41.6**	**41.7**	**40.4**	**25.2**	**25.0**	**20.6**	**19.9**	**19.8**	**21.7**	**7.2**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 1.0 U	< 0.98 U	< 0.95 U	**1.5 J**	< 1.0 U	< 1.0 U	< 0.99 U	< 0.91 U	< 0.91 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.91 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 1.0 U	< 0.98 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.91 U	< 0.91 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.91 U
Dinoseb	SW8151A	ug/L	7	1.5	< 1.0 U	< 0.98 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.91 U	< 0.91 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.91 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 1.0 U	< 0.98 U	< 0.95 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.99 U	< 0.91 U	< 0.91 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.91 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
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R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-113-AS	PZ-113-AS	PZ-113-AS	PZ-113-SS	PZ-113-SS	PZ-113-SS	PZ-114-AS	PZ-114-AS	PZ-114-AS	PZ-115-SS	PZ-115-SS	PZ-115-SS	PZ-116-SS
					Sample Depth (ft BGS)	28.9-38.7	28.9-38.7	28.9-38.7	148.57-158.37	148.57-158.37	148.57-158.37	19.9-29.7	19.9-29.7	19.9-29.7	74.68-84.48	74.68-84.48	74.68-84.48	151.4-161
					Sample Date	05-17-2021	08-13-2021	08-13-2021	02-25-2021	05-10-2021	08-13-2021	03-09-2021	05-18-2021	08-18-2021	02-26-2021	05-14-2021	08-13-2021	02-25-2021
					Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**129,000**	**191,000**	**254,000**	**9,930**	**12,300**	**7,870**	**178,000**	**145,000**	**331,000 J**	**149,000**	**163,000**	**319,000**	**12,100**
Methane	RSK-175	ug/L	NE	NE		**660**	**260 J**	**370 J**	**8.7 J+**	**5.7 J+**	< 5.0 U	**5,500**	**1,600**	NA	**3,200**	**3,200**	**5,300**	**22**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	**12,000 J**	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**1.1**	**1.1**	**1.1**	**0.043 J**	**0.054**	**0.060**	**0.21**	**0.16**	**0.22**	**0.66**	**0.70**	**0.73**	< 0.050 U
Chloride	SW9056A	mg/L	NE	NE		**135**	**145**	**148**	**11.7**	**11.6**	**11.7**	**475**	**447**	**588**	**465 J+**	**508**	**542**	**3.4**
Fluoride	SW9056A	mg/L	4	0.08		**0.27**	**0.30**	**0.30**	**2.8**	**2.9**	**2.9**	**0.20**	**0.16**	**0.19**	**0.50**	**0.42**	**0.44**	**2.9**
Iodide	SW9056A	mg/L	NE	0.02		**0.85**	**0.74**	**0.76**	< 0.50 U	< 0.50 U	< 0.50 U	**0.069 J**	< 0.50 U	< 0.50 U	**0.26 J**	**0.23 J**	**0.29 J**	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**4.5**	**4.7**	**4.6**	**18.6**	**19.4**	**20.2**	**0.084 J**	**3.1**	< 0.25 U	**1.7**	**1.9**	**2.0**	**26.1**
Nitrate as N	9056A	mg/L	10	NE		< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.10**	**0.12**	**0.11**	< 0.050 U	**0.038 J**	< 0.050 U	**1.7**	**1.6**	**1.8**	**0.30**	**0.26**	**0.24**	**0.085**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**3.9 J**	**22.0**	**30.9**	< 10.0 U	< 10.0 U	< 10.0 U	**22.0 J+**	**15.4**	**27.8**	**45.0**	**25.6**	**28.6 J+**	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**642**	**673**	**655**	**253**	**261**	**267**	**528**	**451**	**513**	**688**	**703**	**723**	**291**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**642**	**673**	**655**	**253**	**256**	**267**	**528**	**451**	**513**	**688**	**703**	**723**	**291**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**5.0**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**926**	**940**	**938**	**298**	**290**	**309**	**1,360**	**1,300**	**1,680**	**1,400**	**1,570**	**1,600**	**329**
Total suspended solids	SM2540D	mg/L	NE	NE		**13**	**15.7**	**15.9**	< 2.5 U	< 2.5 U	< 2.5 U	**106**	**52**	**46.0**	**8 J-**	**7**	**5.6**	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**7.8 J**	**6.8 J**	**7.0 J**	**7.5 J**	**8.0 J**	**7.5 J**	**6.6 J**	**6.6 J**	**6.5 J**	**6.7 J**	**6.8 J**	**6.7 J**	**7.5 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**2.5**	**1.2**	**1.2**	< 0.10 U	< 0.10 U	< 0.10 U	**5.3**	**4.7**	**4.9**	**2.7**	**2.5**	**2.6**	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	**0.16 J**	**0.15 J**	**0.097 J-**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**6.0**	**7.6**	**7.5**	**0.32 J**	< 1.0 U	**0.50 J**	**5.3**	**2.9**	**5.9**	**8.9**	**7.1**	**9.4**	**0.25 J**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**5.3**	**7.2**	**7.2**	**0.57 J**	< 1.0 U	< 1.0 U	**5.4**	**2.8**	**7.0**	**8.8**	**7.7**	**9.3**	**0.47 J**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.97 U	< 0.91 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.97 U	< 0.91 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 1.1 UJ	< 1.0 UJ	< 1.1 U	< 1.0 U	< 1.1 UJ	< 0.95 U	< 0.99 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.97 UJ	< 0.91 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	< 0.99 U	< 0.91 U	< 0.95 U	< 0.97 U	< 0.91 U

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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-116-SS	PZ-116-SS	PZ-200-SS	PZ-200-SS	PZ-200-SS	PZ-201A-SS	PZ-201A-SS	PZ-201A-SS	PZ-202-SS	PZ-202-SS	PZ-202-SS	PZ-203-SS	PZ-203-SS	PZ-203-SS
					Sample Depth (ft BGS)	151.4-161	151.4-161	9.62-97.64	9.62-97.64	9.62-97.64	80-89.8	80-89.8	80-89.8	40.2-89.1	40.2-89.1	40.2-89.1	99.6-109.4	99.6-109.4	99.6-109.4
					Sample Date	05-10-2021	08-10-2021	02-23-2021	05-05-2021	08-05-2021	03-04-2021	05-05-2021	08-13-2021	03-10-2021	05-19-2021	08-24-2021	03-04-2021	05-12-2021	08-12-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																			
Carbon dioxide	RSK-175	ug/L	NE	NE		**12,400**	**14,800**	**124,000**	**109,000**	**256,000**	**31,000**	**28,200**	**59,100**	**518,000**	**332,000**	**418,000**	**32,700**	**33,500**	**54,900**
Methane	RSK-175	ug/L	NE	NE		**18**	**5.1 J+**	**330**	**20**	**1,600**	< 5.0 U	< 19 U	< 5.0 U	**22,000**	**12,000**	NA	**2,800**	**798**	**2,000**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**44,800 J**	NA	NA	NA
General Chemistry Parameters																			
Bromide	SW9056A	mg/L	NE	NE		**0.035 J**	< 0.050 U	**0.22**	**0.27**	**0.24**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**5.4**	**5.1**	**0.10**	**0.091**	**0.14**
Chloride	SW9056A	mg/L	NE	NE		**3.7**	**3.9**	**588**	**664**	**552**	**3.7**	**3.8**	**4.3**	**1,220**	**738**	**1,080**	**17.2**	**17.3**	**23.9**
Fluoride	SW9056A	mg/L	4	0.08		**2.9**	**2.8**	**0.060 J**	**0.019 J**	< 0.10 U	**0.30**	**0.30**	**0.30**	**0.18**	**0.074 J**	**0.12**	**0.51**	**0.51**	**0.52**
Iodide	SW9056A	mg/L	NE	0.02		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.12 J**	< 0.50 U	< 0.50 U	< 0.50 U	**2.6**	**2.4**	**2.1**	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE		**24.6**	**25.8**	**67.1**	**60.4**	**59.1**	**61.8**	**61.8**	**66.6**	**0.30**	< 0.25 U	**0.17 J**	**43.3**	**41.8**	**42.2**
Nitrate as N	9056A	mg/L	10	NE		**0.032 J**	**0.088**	< 0.050 U	< 0.050 U	< 0.050 U	**0.42**	**0.40**	**0.70**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.050 U	**0.040 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	**0.14 J+**	< 0.10 U	< 0.10 U	< 0.10 U	**0.47**	**0.45 J+**	**0.64**	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.071**	**0.077**	**0.16**	**0.14 J+**	**0.11**	< 0.050 U	**0.046 J**	< 0.050 U	**0.20**	**0.17**	**0.13**	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**732**	**444**	**399**	**51.1**	**39.9**	**37.9 J+**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**293**	**300**	**455**	**455**	**460**	**380**	**385**	**371**	**1,070**	**997**	**903**	**388**	**383**	**384**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**288**	**300**	**455**	**455**	**460**	**380**	**385**	**371**	**1,070**	**997**	**903**	**388**	**383**	**384**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**4.4**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**321**	**330**	**1,510**	**1,530**	**1,850**	**482**	**470**	**479**	**3,550**	**2,970**	**2,740**	**492**	**481**	**483**
Total suspended solids	SM2540D	mg/L	NE	NE		< 2.5 U	< 2.5 U	**6**	**3**	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	**97**	**82**	**61.0**	**6**	**4**	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**8.0 J**	**7.6 J**	**6.6 J**	**6.8 J**	**6.7 J**	**7.2 J**	**7.4 J**	**7.5 J**	**6.6 J**	**6.5 J**	**6.7 J**	**7.4 J**	**7.3 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		< 0.10 U	< 0.10 U	**0.13**	< 0.10 U	**0.057 J**	< 0.10 U	< 0.10 U	< 0.10 U	**0.73**	**0.61**	**0.61**	**0.068 J**	**0.066 J**	**0.072 J**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	**0.053 J**	**0.032 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	**0.12 J**	< 1.0 U	**0.059 J-**
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		< 1.0 U	< 1.0 U	**0.66 J**	**0.26 J**	**1.4**	**0.41 J**	< 1.0 U	**0.68 J**	**210**	**133**	**127**	**14.4**	**12.6**	**13.4**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		< 1.0 U	< 1.0 U	**1.1**	**1.4**	< 1.0 U	**0.58 J**	**0.66 J**	< 1.0 U	**205**	**140**	**128**	**14.6**	**13.1**	**12.9**
Herbicides, Total																			
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 1.0 U	< 1.1 U	< 0.91 U	< 1.0 U	< 0.99 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 0.95 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 1.0 U	< 1.1 U	< 0.91 U	< 1.0 U	< 0.99 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 0.95 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5		< 1.0 U	< 1.1 U	< 0.91 U	< 1.0 U	< 0.99 U	< 0.95 U	< 0.99 U	< 1.0 UJ	< 0.95 U	< 0.97 U	< 1.0 U	< 0.95 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 1.0 U	< 1.1 U	< 0.91 U	< 1.0 U	< 0.99 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 0.95 U	< 1.0 U	< 1.0 U

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Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
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NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	PZ-204A-SS	PZ-204A-SS	PZ-204A-SS	PZ-204-SS	PZ-204-SS	PZ-204-SS	PZ-205-AS	PZ-205-AS	PZ-205-AS	PZ-205-SS	PZ-205-SS	PZ-205-SS	PZ-206-SS
					Sample Depth (ft BGS)	79.5-89.1	79.5-89.1	79.5-89.1	10.95-89.35	10.95-89.35	10.95-89.35	38.55-48.35	38.55-48.35	38.55-48.35	88.57-98.37	88.57-98.37	88.57-98.37	115-124.8
					Sample Date	03-10-2021	05-19-2021	08-19-2021	03-10-2021	05-19-2021	08-19-2021	03-15-2021	05-20-2021	08-25-2021	02-24-2021	05-05-2021	08-09-2021	03-04-2021
					Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE		**143,000**	**173,000**	**228,000 J**	**27,500**	**26,700**	**53,600 J**	**268,000**	**308,000**	**448,000**	**32,100**	**41,200**	**76,300**	**61,500**
Methane	RSK-175	ug/L	NE	NE		**4,600**	**3,400**	NA	**8.9 J+**	**13**	NA	**17,000**	**9,600**	NA	**9.4**	< 19 U	**17**	**320**
Methane	RSK-175 MOD	ug/L	NE	NE		NA	NA	**1,850**	NA	NA	< 10.0 U	NA	NA	**37,700**	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE		**2.6**	**3.1**	**1.4**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**16.3**	**17.2**	**0.23**	**0.34**	**0.37**	**0.67**
Chloride	SW9056A	mg/L	NE	NE		**701**	**905**	**430**	**3.7**	**3.8**	**4.2**	**2,730**	**2,800**	**2,840**	**34.6**	**46.0**	**51.8**	**101**
Fluoride	SW9056A	mg/L	4	0.08		**0.13**	**0.061 J**	**0.19**	**0.37**	**0.32**	**0.38**	**0.016 J**	< 0.10 UJ	**0.25 J**	**0.38**	**0.40**	**0.42**	**1.7**
Iodide	SW9056A	mg/L	NE	0.02		**0.69**	**0.83**	**0.33 J**	< 0.50 U	< 0.50 U	< 0.50 U	**6.8**	**7.1**	**7.3**	< 0.50 U	< 0.50 U	< 0.50 U	**0.30 J**
Sulfate	SW9056A	mg/L	NE	NE		**148**	**162**	**165**	**24.9**	**20.8**	**25.1**	**0.37**	**0.30 J+**	**0.46 J**	**54.4**	**56.8**	**59.8**	**40.6**
Nitrate as N	9056A	mg/L	10	NE		**0.043 J**	< 0.050 U	< 0.050 U	**0.055**	**0.12**	**0.12**	**3.0**	**3.0 J-**	< 0.50 U	**0.096**	**0.046 J**	**0.058**	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE		< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.11 J+**	**0.17**	< 0.10 U	< 0.40 U	< 1.0 U	**0.11 J+**	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE		**0.081 J+**	**0.078**	**0.060 J-**	< 0.050 U	**0.097 J+**	< 0.050 U	**0.80**	**0.92**	**0.75**	< 0.050 U	**0.034 J**	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE		**216**	**187**	**81.0**	< 10.0 U	< 10.0 U	**4.6 J**	**116**	**861**	**1,230**	< 10.0 U	< 10.0 U	**12.8 J+**	**50.1**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE		**600**	**636**	**535**	**412**	**401**	**406**	**1,010**	**1,020**	**1,010**	**353**	**398**	**414**	**492**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		**600**	**636**	**535**	**412**	**401**	**406**	**1,010**	**1,020**	**1,010**	**353**	**398**	**414**	**492**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE		**2,300**	**2,790**	**1,630**	**401**	**406**	**398**	**8,540**	**7,330**	**9,360**	**468**	**536**	**580**	**702**
Total suspended solids	SM2540D	mg/L	NE	NE		**27**	**32**	**18.2**	< 2.5 U	< 2.5 U	< 2.5 U	**270**	**158**	**196**	**4**	< 2.5 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	NE	NE		**6.8 J**	**6.7 J**	**6.7 J**	**7.4 J**	**7.9 J**	**7.2 J**	**6.5 J**	**6.5 J**	**6.6 J**	**7.4 J**	**7.3 J**	**7.4 J**	**7.1 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE		**0.49**	**0.56**	**0.34**	< 0.10 U	< 0.10 U	< 0.10 U	**25.4**	**27.2**	**49.6**	< 0.10 U	< 0.10 U	< 0.10 U	**0.20**
Sulfide	SM4500-S2-D	mg/L	NE	NE		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.036 J**	< 1.0 R	< 1.0 R	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE		**64.3**	**65.9**	**29.1**	**0.12 J**	< 1.0 U	< 1.0 U	**248**	**285**	**328**	**0.82 J**	**1.4**	**2.8**	**15.4**
Organic Carbon, Total	SM5310C	mg/L	NE	NE		**58.9**	**67.1**	**28.4**	**0.38 J**	< 1.0 U	< 1.0 U	**263**	**261**	**329**	**0.76 J**	**2.5**	**2.4**	**15.6**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11		< 0.95 U	< 0.99 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 1.1 U	< 1.2 U	< 1.2 U	< 1.0 U	< 0.99 U	< 0.99 U	**1.1 J**
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17		< 0.95 U	< 0.99 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 1.1 U	< 1.2 U	< 1.2 U	**2.7**	< 0.99 U	< 0.99 U	< 0.95 U
Dinoseb	SW8151A	ug/L	7	1.5		< 0.95 U	< 0.99 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	< 1.1 U	< 1.2 U	< 1.2 U	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16		< 0.95 U	< 0.99 U	< 1.0 U	< 0.91 U	< 0.95 U	< 0.99 U	**3.6 J+**	< 1.2 U	**9.5 J**	< 1.0 U	< 0.99 U	< 0.99 U	< 0.95 U

Notes:
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ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
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West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-206-SS 115-124.8 05-17-2021 N	PZ-206-SS 115-124.8 08-06-2021 N	PZ-207-AS 34.9-39.7 03-09-2021 N	PZ-207-AS 34.9-39.7 05-17-2021 N	PZ-207-AS 34.9-39.7 08-20-2021 N	PZ-208-SS 88.7-98.5 02-24-2021 N	PZ-208-SS 88.7-98.5 05-07-2021 N	PZ-208-SS 88.7-98.5 08-11-2021 N	PZ-209-SD 240-250 02-24-2021 N	PZ-209-SD 240-250 05-05-2021 N	PZ-209-SD 240-250 08-05-2021 N	PZ-209-SS 140-150 02-25-2021 N	PZ-209-SS 140-150 05-10-2021 N	PZ-209-SS 140-150 08-05-2021 N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE	**53,900**	**124,000**	**268,000**	**287,000**	**393,000**	**16,900**	**26,000**	**47,400**	**17,700**	**26,500**	**43,300**	**22,200**	**26,700**	**41,300**
Methane	RSK-175	ug/L	NE	NE	**730**	**940 J-**	**13,000**	**11,000**	NA	**3.8 J**	**8.9**	**3.3 J**	**3.0 J**	< 19 U	**7.4**	**6.2 J+**	< 5.0 U	**38**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	**32,600**	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	**2.6**	**0.72**	< 0.050 U	**6.2**	**2.0**	**0.098**	**0.082**	**0.12**	**0.036 J**	**0.050**	**0.040 J**	< 0.050 U	**0.027 J**	< 0.050 U
Chloride	SW9056A	mg/L	NE	NE	**327**	**103**	**270**	**1,050**	**270**	**115**	**122**	**118**	**11.6**	**12.3**	**11.3**	**2.8**	**3.7**	**3.6**
Fluoride	SW9056A	mg/L	4	0.08	**0.18**	**1.9**	**0.10**	**0.030 J**	**0.083 J**	**0.37**	**0.31**	**0.38**	**2.5**	**2.4**	**2.5**	**1.8**	**1.9**	**1.9**
Iodide	SW9056A	mg/L	NE	0.02	**0.30 J**	**0.29 J**	**0.22 J**	**0.19 J**	**0.21 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	NE	NE	**0.16 J**	**41.6**	**0.15 J**	**4.8**	**0.18 J**	**29.6**	**32.5**	**32.7**	**43.9**	**36.3**	**33.3**	**24.6**	**25.5**	**25.4**
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	**0.33**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.014 J**	**0.16**	**0.014 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.50 U	< 0.050 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.50 U	**0.035 J**	**0.049 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	**0.18 J+**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	< 0.050 U	< 0.050 U	**0.59**	**0.54 J+**	**0.92**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.13**	**0.033 J**	< 0.050 U	**0.027 J**	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**36.4**	**52.8**	**114**	**110**	**111**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**10.4 J+**	**9.3 J**	< 10.0 U	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**505**	**490**	**1,100**	**1,080**	**1,060**	**365**	**391**	**380**	**403**	**401**	**395**	**425**	**371**	**365**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**505**	**490**	**1,100**	**1,080**	**1,060**	**365**	**391**	**380**	**403**	**401**	**395**	**425**	**371**	**365**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**1,510**	**783**	**1,240**	**1,310**	**1,230**	**579**	**606**	**597**	**501**	**455**	**458**	**370**	**365**	**391**
Total suspended solids	SM2540D	mg/L	NE	NE	**4**	< 2.5 U	**52**	**27**	**54.0**	< 2.5 U	< 2.5 U	< 2.5 U	**46**	< 2.5 U	**4.6**	**4**	< 2.5 U	**6.7**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.1 J**	**7.0 J**	**6.5 J**	**6.5 J**	**6.6 J**	**7.5 J**	**7.5 J**	**7.5 J**	**7.4 J**	**7.5 J**	**7.5 J**	**7.4 J**	**7.5 J**	**7.4 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.24**	**0.20**	**92.0**	**82.1**	**83.1 J-**	< 0.10 U	< 0.10 U	< 0.10 U	**0.28**	**0.15**	**0.040 J**	**0.19**	**0.063 J**	**0.11**
Sulfide	SM4500-S2-D	mg/L	NE	NE	**0.26 J**	**0.88 J-**	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	**0.088 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	**0.064 J**	**0.18 J**
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**15.2**	**16.0**	**39.3**	**38.2**	**40.9**	**0.79 J**	**0.24 J**	**1.1**	**0.20 J**	< 1.0 U	**0.68 J**	**0.30 J**	< 1.0 U	**0.58 J**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**15.0**	**17.4**	**37.9**	**38.0**	**40.6**	**0.84 J**	< 1.0 U	**0.83 J**	**0.19 J**	**0.73 J**	< 1.0 U	**0.61 J**	< 1.0 U	< 1.0 U
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.95 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.95 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.95 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 1.0 U	< 1.0 U	< 0.95 U	< 0.99 U	< 1.0 U	< 0.99 U	< 0.95 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U

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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-210-SD 238-248 03-05-2021 N	PZ-210-SD 238-248 05-12-2021 N	PZ-210-SD 238-248 08-12-2021 N	PZ-210-SS 138-148 03-05-2021 N	PZ-210-SS 138-148 05-12-2021 N	PZ-210-SS 138-148 08-16-2021 N	PZ-211-SD 237-247 03-04-2021 N	PZ-211-SD 237-247 05-13-2021 N	PZ-211-SD 237-247 08-17-2021 N	PZ-211-SS 137-147 02-24-2021 N	PZ-211-SS 137-147 05-05-2021 N	PZ-211-SS 137-147 08-04-2021 N	PZ-212-SD 234-244 02-25-2021 N	PZ-212-SD 234-244 03-19-2021 N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE	**60,600**	**31,000**	**53,700**	**85,500**	**57,100**	**121,000**	**62,400**	**35,400**	**72,700**	**16,500**	**24,200**	**41,200**	**25,900**	NA
Methane	RSK-175	ug/L	NE	NE	**12**	< 5.00 U	< 5.0 U	**6,300**	**2,620**	**7,200**	**260**	**91.3**	NA	**5.1**	< 19 U	**5.3**	< 5.0 U	NA
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	**30.1 J**	NA	NA	NA	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	**0.056**	**0.058**	**0.069**	**0.48**	**0.44**	**0.78**	**0.37**	**0.32**	**0.25**	< 0.050 U	**0.050 J**	< 0.050 U	**0.15**	NA
Chloride	SW9056A	mg/L	NE	NE	**10.7**	**12.2**	**12.1**	**95.7**	**90.9**	**136**	**75.4**	**67.6**	**53.3**	**5.0**	**8.5**	**5.4**	**170**	NA
Fluoride	SW9056A	mg/L	4	0.08	**2.1**	**2.0**	**2.0**	**0.57**	**0.75**	**0.62**	**1.9**	**1.9**	**2.2**	**2.0**	**2.0**	**2.1**	**0.26**	NA
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	< 0.50 U	**0.26 J**	**0.27 J**	**0.35 J**	**0.12 J**	< 0.50 U	**0.078 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	NA
Sulfate	SW9056A	mg/L	NE	NE	**25.8**	**26.3**	**28.5**	**1.7**	**3.4**	**3.3**	**31.9**	**31.4**	**32.3**	**28.9**	**27.2**	**27.8**	**86.1**	NA
Nitrate as N	9056A	mg/L	10	NE	**0.015 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.033 J**	< 0.050 U	**0.062**	**0.48**	NA
Nitrite as N	9056A	mg/L	1	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	NA
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.041 J**	< 0.10 U	< 0.10 U	**0.55**	NA
Phosphorus	E365.1	mg/L	NE	NE	< 0.050 U	< 0.050 U	< 0.050 U	**0.24**	**0.21**	**0.16**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	**0.032 J**	< 0.050 U	**0.17**	NA
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	< 10.0 U	**5.9 J**	**79.6**	**87.6**	**105**	**23.2**	**15.8**	**10.7**	< 10.0 U	< 10.0 U	< 10.0 U	**7.8 J**	NA
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**406**	**424**	**415**	**475**	**482**	**483**	**399**	**393**	**375**	**338**	**335**	**335**	**331**	NA
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**406**	**424**	**415**	**475**	**482**	**483**	**399**	**381**	**375**	**338**	**335**	**335**	**331**	NA
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**11.2**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	NA
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**452**	**489**	**428**	**656**	**643**	**786**	**570**	**552**	**510**	**378**	**363**	**359**	**716**	NA
Total suspended solids	SM2540D	mg/L	NE	NE	**63**	**20**	**52.2**	**10**	**11**	**14.6**	**8**	**5**	**3.6**	< 2.5 U	< 2.5 U	< 2.5 U	**10**	NA
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.2 J**	**7.4 J**	**7.3 J**	**7.0 J**	**7.1 J**	**7.1 J**	**7.2 J**	**7.2 J**	**7.4 J**	**7.3 J**	**7.4 J**	**7.4 J**	**7.3 J**	NA
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.28**	**0.30**	**0.29**	**1.6**	**1.7**	**1.8**	**0.12**	**0.17**	**0.18**	**0.11**	< 0.10 U	< 0.10 U	**0.21**	NA
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	**0.064 J**	**0.047 J**	**0.026 J**	< 1.0 U	< 1.0 U	**0.47 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	NA
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**1.4**	**0.73 J**	**1.6**	**26.0**	**27.8**	**33.9**	**7.1**	**4.8**	**3.9**	**0.28 J**	< 1.0 U	**0.64 J**	**0.45 J**	NA
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**1.7**	**0.98 J**	**1.5**	**24.2**	**27.4**	**37.0**	**7.4**	**4.9**	**3.9**	**0.32 J**	**0.98 J**	< 1.0 U	**0.78 J**	NA
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.95 U	< 1.0 U	< 1.0 U	**1.4 J**	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 1.0 U	NA	< 0.96 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.95 U	< 1.0 U	< 1.0 U	< 0.91 U	< 1.0 U	< 1.1 U	< 0.95 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 1.0 U	NA	< 0.96 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.95 U	< 1.0 U	< 1.0 U	< 0.91 U	< 1.0 U	< 1.1 UJ	< 0.95 U	< 1.0 U	< 0.97 U	< 0.99 U	< 1.0 U	< 1.0 U	NA	< 0.96 UJ
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.95 U	< 1.0 U	< 1.0 U	< 0.91 U	< 1.0 U	< 1.1 U	< 0.95 U	**0.64 J**	< 0.97 U	< 0.99 U	< 1.0 U	< 1.0 U	NA	< 0.96 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds
NE = Not Established
NA = Not Available
Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	PZ-212-SD 234-244 05-11-2021 N	PZ-212-SD 234-244 08-10-2021 N	PZ-212-SS 134-144 02-26-2021 N	PZ-212-SS 134-144 05-11-2021 N	PZ-212-SS 134-144 08-10-2021 N	PZ-302-AI 32.6-42.4 03-12-2021 N	PZ-302-AI 32.6-42.4 05-18-2021 N	PZ-302-AI 32.6-42.4 08-23-2021 N	PZ-302-AS 12.2-22 03-09-2021 N	PZ-302-AS 12.2-22 03-10-2021 N	PZ-302-AS 12.2-22 05-18-2021 N	PZ-302-AS 12.2-22 08-23-2021 N	PZ-302-AS 12.2-22 08-24-2021 N	PZ-303-AS 16-25.8 03-15-2021 N
Dissolved Permanent Gases, Total																		
Carbon dioxide	RSK-175	ug/L	NE	NE	**25,600**	**51,400**	**11,400**	**9,980**	**37,100**	**202,000**	**234,000**	**294,000**	**182,000**	NA	**186,000**	**270,000**	NA	**209,000**
Methane	RSK-175	ug/L	NE	NE	< 5.00 U	< 5.0 U	< 5.0 U	< 5.00 U	< 5.0 U	**98**	**83**	NA	**8,300**	NA	**210**	NA	NA	**18,000**
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	NA	NA	NA	**124 J**	NA	NA	NA	**25,500 J**	NA	NA
General Chemistry Parameters																		
Bromide	SW9056A	mg/L	NE	NE	**0.15**	**0.16**	< 0.050 U	< 0.050 U	< 0.050 U	**0.37**	**0.33**	**4.3**	**0.48**	NA	**0.42**	**2.9**	NA	**2.7**
Chloride	SW9056A	mg/L	NE	NE	**180**	**166**	**5.2**	**4.5**	**10.5**	**36.6**	**32.0**	**634**	**43.4**	NA	**39.9**	**447**	NA	**164**
Fluoride	SW9056A	mg/L	4	0.08	**0.24**	**0.30**	**0.57**	**0.46**	**0.63**	**0.17**	**0.11**	**0.46**	**0.32**	NA	**0.32**	**1.7**	NA	**0.15**
Iodide	SW9056A	mg/L	NE	0.02	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.14 J**	**0.12 J**	**0.14 J**	**0.16 J**	NA	**0.13 J**	**0.085 J**	NA	**0.61**
Sulfate	SW9056A	mg/L	NE	NE	**82.5**	**81.6**	**62.1**	**85.2**	**94.9**	**17.0**	**15.4**	**2.2**	**0.25 J**	NA	**0.74**	**0.15 J**	NA	**0.094 J**
Nitrate as N	9056A	mg/L	10	NE	**0.44**	**0.17**	**0.066**	**0.043 J**	**0.049 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	NA	< 0.050 U	< 0.050 U	NA	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	NA	< 0.50 U	< 0.50 U	NA	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	**0.46**	**0.24**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	NA	< 0.10 U	< 0.10 U	NA	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**0.092**	**0.079 J**	**0.082**	< 0.050 U	**0.032 J**	**0.049 J**	**0.12**	**0.035 J**	**0.99**	NA	**2.4**	**0.49**	NA	**1.6**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	< 10.0 U	< 10.0 U	< 10.0 U	**7.8 J**	**20.6**	**13.5**	**14.7**	**14.2 J+**	**46.3 J-**	NA	**26.5**	**40.1**	NA	**131**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**315**	**319**	**273**	**254**	**256**	**835**	**820**	**841**	**717**	NA	**758**	**746**	NA	**662**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**315**	**319**	**273**	**254**	**256**	**835**	**820**	**841**	**717**	NA	**758**	**746**	NA	**662**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	NA	< 2.0 U	< 2.0 U	NA	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**750**	**815**	**363**	**403**	**413**	**908**	**916**	**898**	**770**	NA	**834**	**810**	NA	**1,130**
Total suspended solids	SM2540D	mg/L	NE	NE	< 2.5 U	< 2.5 U	**6 J-**	**3**	< 2.5 U	**8**	**4**	**8.8**	NA	**106**	**73**	**102**	NA	**52**
pH, Lab	SM4500-H-B	pH units	NE	NE	**7.3 J**	**7.2 J**	**7.3 J**	**7.5 J**	**7.4 J**	**6.9 J**	**6.8 J**	**6.6 J**	**6.6 J**	NA	**6.7 J**	**6.6 J**	NA	**6.6 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.052 J**	**0.061 J**	**0.041 J**	**3.7**	NA	**2.8**	**2.8**	NA	**0.48**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	NA	< 1.0 U	< 1.0 U	NA	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	< 1.0 U	**1.1**	**0.82 J**	< 1.0 U	< 1.0 U	**5.2**	**4.0**	**5.6**	**14.3**	NA	**14.3**	**14.1**	NA	**31.7**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	< 1.0 U	< 1.0 U	**0.88 J**	< 1.0 U	< 1.0 U	**5.3**	**4.2**	**4.9**	**13.0**	NA	**13.4**	**14.0**	NA	**27.4**
Herbicides, Total																		
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.99 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	NA	< 0.95 U	< 1.0 U	NA	< 0.98 U	< 0.95 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.99 UJ	< 1.0 U	< 1.1 U	< 0.99 UJ	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	NA	< 0.95 U	< 1.0 U	NA	< 0.98 U	**4.0 J**
Dinoseb	SW8151A	ug/L	7	1.5	< 0.99 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	NA	< 0.95 U	< 1.0 U	NA	< 0.98 U	< 0.95 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.99 U	< 1.0 U	< 1.1 U	< 0.99 U	< 1.0 U	< 1.1 U	< 0.95 U	< 0.99 U	NA	< 0.95 U	< 1.0 U	NA	< 0.98 U	< 0.95 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
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U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
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Table 12h: Validated Groundwater Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	PZ-303-AS	PZ-303-AS	PZ-303-AS	PZ-303-AS
				Sample Depth (ft BGS)	16-25.8	16-25.8	16-25.8	16-25.8
				Sample Date	03-15-2021	05-20-2021	05-20-2021	08-24-2021
				Sample Type	FD	N	FD	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1				
Dissolved Permanent Gases, Total								
Carbon dioxide	RSK-175	ug/L	NE	NE	**207,000**	**235,000**	**246,000**	**321,000**
Methane	RSK-175	ug/L	NE	NE	**20,000**	**11,000**	**11,000**	NA
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	**37,400**
General Chemistry Parameters								
Bromide	SW9056A	mg/L	NE	NE	**2.7**	**3.4**	**3.4**	**2.9**
Chloride	SW9056A	mg/L	NE	NE	**159**	**194**	**188**	**180**
Fluoride	SW9056A	mg/L	4	0.08	**0.14**	**0.086 J**	**0.087 J**	**0.14**
Iodide	SW9056A	mg/L	NE	0.02	**0.65**	**0.73**	**0.76**	**0.63**
Sulfate	SW9056A	mg/L	NE	NE	**0.31**	< 0.25 U	< 0.25 U	< 0.25 U
Nitrate as N	9056A	mg/L	10	NE	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phosphorus	E365.1	mg/L	NE	NE	**1.8**	**1.9**	**1.8**	**1.7**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**150**	**127**	**115**	**136**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**690**	**641**	**652**	**662**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**690**	**641**	**652**	**662**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**1,150**	**1,090**	**1,130**	**1,190**
Total suspended solids	SM2540D	mg/L	NE	NE	**55**	**107**	**93**	**58.8**
pH, Lab	SM4500-H-B	pH units	NE	NE	**6.6 J**	**6.5 J**	**6.5 J**	**6.5 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**0.46**	**0.43**	**0.43**	**0.62**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 1.0 U	< 2.0 U	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**31.8**	**26.9**	**29.1**	**39.6**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**30.0**	**29.5**	**29.0**	**42.3**
Herbicides, Total								
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 0.96 U	< 0.95 U	< 0.97 U	< 0.98 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 0.96 UJ	< 0.95 U	< 0.97 U	< 0.98 U
Dinoseb	SW8151A	ug/L	7	1.5	< 0.96 U	< 0.95 U	< 0.97 U	< 0.98 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 0.96 U	< 0.95 U	< 0.97 U	< 0.98 U

Notes:
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NE = Not Established
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J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
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Table 13a: Validated Leachate Data—Radiochemistry Analytical Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
			Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
			Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
			Sample Type	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL									
Radiochemistry, Dissolved												
Radium-226	E903.1	pCi/L	5	**17.7 ± 5.15 (0.889) J**	**8.35 ± 3.82 (3.58) J**	**7.87 ± 2.83 (0.646) J-**	**7.47 ± 2.85 (0.698) J-**	**9.96 ± 3.87 (0.964) J**	**7.50 ± 1.75 (0.808)**	**5.61 ± 1.24 (0.525) J-**	**6.34 ± 1.43 (0.626)**	**4.37 ± 1.16 (0.644)**
Radium-228	E904.0	pCi/L	5	**20.4 ± 5.54 (5.97) J**	**13.6 ± 4.60 (6.43) J**	**15.0 ± 4.68 (6.09) J**	**21.7 ± 5.98 (6.86) J**	**16.2 ± 4.58 (5.39) J-**	**2.14 ± 0.638 (0.781)**	**2.63 ± 0.746 (0.896) J+**	**2.32 ± 0.624 (0.649)**	**2.16 ± 0.605 (0.675)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**38.1 ± 10.7 (6.86) J**	**22.0 ± 8.42 (10.0) J**	**22.9 ± 7.51 (6.74) J**	**29.2 ± 8.83 (7.56) J**	**26.2 ± 8.45 (6.35) J**	**9.64 ± 2.39 (1.59)**	**8.24 ± 1.99 (1.42) J**	**8.66 ± 2.05 (1.28)**	**6.53 ± 1.77 (1.32)**
Thorium-228	HASL300	pCi/L	15	0.768 ± 0.640 (0.960) UJ	0.446 ± 0.806 (1.67) UJ	0.392 ± 0.971 (2.22) UJ	**1.73 ± 1.20 (1.52) J-**	0.510 ± 0.530 (0.912) UJ	0.059 ± 0.078 (0.146) U	0.048 ± 0.095 (0.184) U	**0.216 ± 0.144 (0.176) J+**	0.013 ± 0.108 (0.266) U
Thorium-230	HASL300	pCi/L	15	0.091 ± 0.341 (0.246) UJ	0 ± 0.455 (0.328) UJ	-0.080 ± 0.602 (0.994) UJ	0.085 ± 0.589 (0.972) UJ	-0.044 ± 0.224 (0.491) UJ	0.004 ± 0.056 (0.112) UJ	0.014 ± 0.043 (0.067) U	-0.017 ± 0.070 (0.135) U	-0.016 ± 0.066 (0.128) U
Thorium-232	HASL300	pCi/L	15	0.091 ± 0.341 (0.246) UJ	0 ± 0.455 (0.328) UJ	0 ± 0.602 (0.454) UJ	0 ± 0.589 (0.444) UJ	0 ± 0.224 (0.149) UJ	-0.005 ± 0.056 (0.082) U	0.007 ± 0.043 (0.083) U	0 ± 0.070 (0.051) U	0.036 ± 0.066 (0.049) U
Uranium-234	HASL300	pCi/L	NE	**0.433 ± 0.385 (0.235) J**	**0.582 ± 0.518 (0.316) J**	1.05 ± 0.941 (1.13) UJ	0.117 ± 0.685 (1.67) UJ	0.513 ± 0.432 (0.649) UJ	0.059 ± 0.069 (0.113) U	0.020 ± 0.092 (0.200) U	0.181 ± 0.163 (0.203) U	0.019 ± 0.127 (0.214) U
Uranium-235	HASL300	pCi/L	NE	**0.339 ± 0.429 (0.307) J**	0.347 ± 0.575 (1.01) UJ	-0.028 ± 0.895 (1.66) UJ	0 ± 0.894 (0.674) UJ	0.250 ± 0.303 (0.464) UJ	0.013 ± 0.074 (0.108) U	0.092 ± 0.121 (0.167) U	**0.208 ± 0.193 (0.202)**	0.079 ± 0.166 (0.254) U
Uranium-238	HASL300	pCi/L	NE	**0.260 ± 0.328 (0.235) J-**	0.308 ± 0.441 (0.641) UJ	**0.661 ± 0.704 (0.517) J-**	0.370 ± 0.687 (1.13) UJ	0.124 ± 0.347 (0.726) UJ	**0.045 ± 0.057 (0.041)**	0.036 ± 0.092 (0.162) U	0.093 ± 0.117 (0.155) U	0.017 ± 0.127 (0.221) U
Radiochemistry, Total												
Radium-226	E903.1	pCi/L	5	**12.4 ± 4.34 (0.957) J**	**10.4 ± 3.81 (0.883) J**	**14.3 ± 4.37 (0.806) J**	**17.6 ± 4.90 (0.796) J**	**9.20 ± 3.63 (0.924) J-**	**3.63 ± 0.955 (0.719) J**	**5.16 ± 1.17 (0.515) J+**	**7.35 ± 1.74 (0.588)**	**6.42 ± 1.65 (0.238)**
Radium-228	E904.0	pCi/L	5	**9.00 ± 4.64 (8.57) J**	**15.2 ± 6.29 (10.4) J**	**21.0 ± 4.65 (3.06) J-**	**16.2 ± 3.72 (3.01) J-**	**12.5 ± 4.32 (6.26) J-**	**2.58 ± 1.06 (1.70)**	**2.88 ± 0.864 (1.14)**	**2.00 ± 0.616 (0.793)**	**2.00 ± 0.647 (0.904)**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	5	**21.4 ± 8.98 (9.53) J**	**25.6 ± 10.1 (11.3) J**	**35.3 ± 9.02 (3.87) J**	**33.8 ± 8.62 (3.81) J**	**21.7 ± 7.95 (7.18) J-**	**6.21 ± 2.02 (2.42) J**	**8.04 ± 2.03 (1.66) J+**	**9.35 ± 2.36 (1.38)**	**8.42 ± 2.30 (1.14)**
Thorium-228	HASL300	pCi/L	15	0.879 ± 0.724 (1.04) UJ	**1.33 ± 0.891 (1.12) J**	**1.69 ± 1.14 (1.41) J-**	0.441 ± 0.784 (1.67) UJ	-0.199 ± 0.651 (1.43) UJ	0.167 ± 0.125 (0.177) U	0.059 ± 0.170 (0.400) U	0.153 ± 0.171 (0.324) U	0.060 ± 0.245 (0.507) UJ
Thorium-230	HASL300	pCi/L	15	0.002 ± 0.407 (0.293) UJ	0.219 ± 0.431 (0.861) UJ	0.232 ± 0.550 (0.906) UJ	0.086 ± 0.591 (0.976) UJ	0.056 ± 0.228 (0.151) UJ	-0.018 ± 0.061 (0.122) U	0.016 ± 0.108 (0.179) U	0.028 ± 0.075 (0.128) U	-0.026 ± 0.105 (0.230) U
Thorium-232	HASL300	pCi/L	15	0 ± 0.407 (0.293) UJ	0.187 ± 0.430 (0.628) UJ	0 ± 0.549 (0.414) UJ	0 ± 0.591 (0.446) UJ	0 ± 0.227 (0.151) UJ	-0.006 ± 0.061 (0.089) U	0 ± 0.108 (0.082) U	0 ± 0.075 (0.055) U	0 ± 0.105 (0.070) U
Uranium-234	HASL300	pCi/L	NE	**0.899 ± 0.597 (0.513) J-**	0.153 ± 0.371 (0.815) UJ	-0.122 ± 0.647 (1.57) UJ	0.166 ± 0.621 (1.24) UJ	**0.628 ± 0.426 (0.537) J-**	0.059 ± 0.086 (0.162) U	0.014 ± 0.097 (0.160) U	0.018 ± 0.136 (0.237) U	0.111 ± 0.165 (0.305) U
Uranium-235	HASL300	pCi/L	NE	0.122 ± 0.459 (0.330) UJ	0.082 ± 0.483 (0.706) UJ	0.235 ± 0.845 (0.637) UJ	0 ± 0.810 (0.611) UJ	**0.353 ± 0.314 (0.192) J-**	0 ± 0.096 (0.069) U	0.010 ± 0.126 (0.234) U	0.041 ± 0.177 (0.237) U	0.056 ± 0.164 (0.253) U
Uranium-238	HASL300	pCi/L	NE	**0.373 ± 0.370 (0.253) J-**	0.161 ± 0.371 (0.541) UJ	-0.086 ± 0.647 (1.07) UJ	0.007 ± 0.621 (1.26) UJ	**0.455 ± 0.331 (0.342) J-**	0.005 ± 0.074 (0.130) U	0.027 ± 0.097 (0.073) U	0.070 ± 0.136 (0.181) U	**0.116 ± 0.126 (0.083)**
Tritium	E906.0	pCi/L	20,000	**73490 ± 9565 (270)**	**75270 ± 9798 (276)**	**71160 ± 9263 (287)**	**69210 ± 9009 (283)**	**60090 ± 7830 (258)**	**7059 ± 979 (225)**	**6378 ± 893 (241)**	**5566 ± 787 (226)**	**6149 ± 862 (226)**

Notes:
ft BGS = feet below ground surface
pCi/L = picoCuries per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
MCLs are for combined radium 226/228 (5 pCi/L) and gross alpha excluding uranium (15 pCi/L). Radium-226 contributes to both the combined radium-226/228 and gross alpha; the lower of the two MCLs is shown in the table for comparison. There is a total Uranium MCL of 30 ug/L presented in the metals result tables.

Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
NE = Not Established
Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced minimum detectable concentration.
UJ = The analyte was analyzed for, but was not detected. The minimum detectable concentration is approximate and may be inaccurate or imprecise.

Table 13b-i: Validated Leachate Data—Volatile Organic Compounds (#–C)
West Lake Landfill OU-3
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Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	LCS-3D 40-138 03-16-2021 N	LCS-3D 40-138 03-16-2021 FD	LCS-3D 40-138 05-21-2021 N	LCS-3D 40-138 05-21-2021 FD	LCS-3D 40-138 08-25-2021 N	LCS-5A 140-290 03-16-2021 N	LCS-5A 140-290 05-21-2021 N	LCS-5A 140-290 08-20-2021 N	LCS-5A 140-290 08-20-2021 FD
Volatile Organic Compounds, Total (#–C)													
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	NE	0.57	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	200	800	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	NE	0.076	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	NE	1,000	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	5	0.041	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	NE	2.8	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	7	28	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	NE	0.7	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	NE	0.00075	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	70	0.4	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	NE	5.6	**26.1 J**	**26.2 J**	< 250 U	< 250 U	**7.4 J**	**11.6**	**10.2 J**	**16.3**	**16.6**
1,2-Dibromo-3-chloropropane	SW8011	ug/L	0.2	0.00033	< 0.036 U	< 0.034 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.037 U	< 0.036 U	< 0.037 U	< 0.036 U
1,2-Dichlorobenzene	SW8260C	ug/L	600	30	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	5	0.17	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	5	0.82	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	NE	6	**4.8 J**	< 50.0 U	< 250 U	< 250 U	< 50.0 U	**3.7 J**	**3.1 J**	**5.1**	**5.3**
1,3-Dichlorobenzene	SW8260C	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	NE	37	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	75	0.48	< 10.0 UJ	**38.2 J**	< 50.0 U	< 50.0 U	< 10.0 U	**20.5**	**14.6**	**18.7**	**18.4**
1,4-Dioxane	SW8260B_SIM	ug/L	NE	0.46	NA	NA	NA	NA	**8,280 J-**	NA	NA	**242**	**242**
1,4-Dioxane	SW8260C	ug/L	NE	0.46	**37,300 J**	**39,500 J**	**30,700 J**	**31,900 J**	NA	< 100 UJ	< 500 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	NE	NE	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 UJ	< 1.0 UJ
2-Butanone	SW8260C	ug/L	NE	560	**32,500**	**25,600**	**30,000**	**31,200**	**31,800**	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	NE	3.8	**597**	**580**	**513 J**	**477 J**	**562**	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	NE	25	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	NE	NE	**41.0**	**41.1**	**22.9 J**	< 50.0 U	< 10.0 U	**13.5**	**10.5**	**17.8**	**19.0**
4-Methyl-2-pentanone	SW8260C	ug/L	NE	630	**403**	**408**	**312 J**	**292 J**	**316**	< 20.0 U	< 100 U	**2.0 J**	**1.9 J**
Acetone	SW8260C	ug/L	NE	1,800	**52,400**	**42,900**	**50,400**	**48,900**	**34,300 J**	**9.5 J**	**78.7 J**	**12.2 J**	**9.7 J**
Acetonitrile	SW8260C	ug/L	NE	13	< 1,000 UJ	< 1,000 UJ	< 5,000 U	< 5,000 U	< 1,000 U	< 100 UJ	< 500 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	NE	0.0042	< 200 UJ	< 200 UJ	< 1,000 UJ	< 1,000 UJ	< 200 UJ	< 20.0 UJ	< 100 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	NE	0.052	< 1,000 U	< 1,000 U	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	NE	0.21	< 200 UJ	< 200 UJ	< 1,000 UJ	< 1,000 UJ	< 200 U	< 20.0 UJ	< 100 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	5	0.46	**421**	**422**	**271**	**250**	**225**	**31.8**	**33.3 J-**	**26.5**	**26.4**
beta-Chloroprene	SW8260C	ug/L	NE	0.019	< 1,000 U	< 1,000 U	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	NE	6.2	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	80	0.13	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	80	3.3	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	NE	0.75	< 50.0 U	< 50.0 U	< 250 UJ	< 250 UJ	< 50.0 UJ	< 5.0 U	< 25.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	NE	81	< 50.0 U	< 50.0 U	< 250 U	< 250 U	< 50.0 U	< 5.0 U	< 25.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	5	0.46	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	100	7.8	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**75.4**	**80.2 J-**	**36.7**	**35.6**
Chlorobromomethane	SW8260C	ug/L	NE	8.3	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	NE	830	< 20.0 UJ	< 20.0 UJ	< 100 U	< 100 U	< 20.0 UJ	< 2.0 UJ	< 10.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	80	0.22	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	NE	19	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 UJ	< 2.0 U	< 10.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	70	3.6	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**2.3**	< 5.0 U	**2.6**	**2.5**
cis-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	NE	1,300	< 200 U	< 200 U	< 1,000 U	< 1,000 U	< 200 U	< 20.0 U	< 100 U	< 20.0 U	< 20.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Volatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 12b-i; chemical names starting with letter D through Z are shown on Table 12b-ii.
Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 13b-ii: Validated Leachate Data—Volatile Organic Compounds (D–Z)
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				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1								
Volatile Organic Compounds, Total (D–Z)												
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 U	< 2.0 U	< 10.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	< 200 U	< 200 U	< 1,000 U	< 1,000 U	< 200 U	**8.1 J**	**8.8 J**	**5.6 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 200 U	< 200 U	< 1,000 U	< 1,000 U	< 200 U	< 20.0 U	< 100 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	**61.8**	**58.1**	**29.0 J**	**28.4 J**	**13.6**	**21.7**	**18.2**	**19.9**
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.036 U	< 0.034 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.037 U	< 0.036 U	< 0.037 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	**1,590**	**1,870**	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**3.1**	**3.0 J**	**2.4**
m,p-Xylenes	SW8260C	ug/L	NE	19	**48.8**	**48.1**	**26.1 J**	**26.6 J**	**10.4 J**	**46.3**	**38.1**	**39.2**
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 1,000 U	< 1,000 U	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	**7,950**	**6,140**	**7,060**	**7,530**	< 200 U	< 20.0 U	< 100 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 50.0 UJ	< 50.0 UJ	< 250 UJ	< 250 UJ	< 50.0 R	< 5.0 UJ	< 25.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 200 U	< 200 U	< 1,000 U	< 1,000 U	< 200 U	< 20.0 U	< 100 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	**14.4 J**	**14.3 J**	< 200 U	< 200 U	**13.5 J**	**0.91 J**	< 20.0 U	**0.66 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 200 U	< 200 U	< 1,000 U	< 1,000 U	< 200 U	< 20.0 U	< 100 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 50.0 U	< 50.0 U	< 250 U	< 250 U	< 50.0 U	< 5.0 U	< 25.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 50.0 U	< 50.0 U	< 250 U	< 250 U	< 50.0 U	< 5.0 U	< 25.0 U	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	NE	66	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**2.8**	**2.6 J**	**2.2**
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	**28.8**	**28.7**	**14.5 J**	< 50.0 U	< 10.0 U	**14.6**	**10.9**	**16.3**
Propionitrile	SW8260C	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**0.61 J**	< 5.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 10.0 U	< 10.0 U	< 50.0 UJ	< 50.0 UJ	< 10.0 U	< 1.0 U	< 5.0 UJ	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	**94.9**	**95.6**	**53.1**	**43.6 J**	**29.5**	**23.1**	**17.5**	**30.2**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 1,000 U	< 1,000 U	< 5,000 U	< 5,000 U	< 1,000 U	< 100 U	< 500 U	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	< 1.0 U	< 5.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	NA	NA	**9,400**	**9,300**	**7,460**	NA	**221 J-**	**175**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 20.0 U	< 20.0 U	< 100 U	< 100 U	< 20.0 UJ	< 2.0 U	< 10.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 200 UJ	< 200 UJ	< 1,000 U	< 1,000 U	< 200 U	< 20.0 UJ	< 100 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 10.0 U	< 10.0 U	< 50.0 U	< 50.0 U	< 10.0 U	**1.5**	**1.2 J**	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	**77.6**	**76.8**	**40.5 J**	**26.6 J**	**10.4 J**	**60.9**	**49.0**	**55.5**

Notes and definitions are presented on Page 2

Table 13b-ii: Validated Leachate Data—Volatile Organic Compounds (D–Z)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	LCS-5A
				Sample Depth (ft BGS)	140-290
				Sample Date	08-20-2021
				Sample Type	FD
Analyte	**Analytic Method**	**Unit**	**USEPA Primary MCL**	**USEPA RSL TAPWATER THQ0.1**	
Volatile Organic Compounds, Total (D–Z)					
Dibromochloromethane	SW8260C	ug/L	80	0.87	< 1.0 U
Dibromomethane	SW8260C	ug/L	NE	0.83	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	NE	20	< 2.0 U
Ethyl ether	SW8260C	ug/L	NE	390	**5.0 J**
Ethyl methacrylate	SW8260C	ug/L	NE	63	< 20.0 U
Ethylbenzene	SW8260C	ug/L	700	1.5	**20.6**
Ethylene dibromide	SW8011	ug/L	0.05	0.0075	< 0.036 U
Hexachlorobutadiene	SW8260C	ug/L	NE	0.14	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	NE	590	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	NE	45	**2.6**
m,p-Xylenes	SW8260C	ug/L	NE	19	**40.8**
Methacrylonitrile	SW8260C	ug/L	NE	0.19	< 100 U
Methyl acetate	SW8260C	ug/L	NE	2,000	< 20.0 U
Methyl iodide	SW8260C	ug/L	NE	NE	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	NE	140	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	NE	14	**0.64 J**
Methylcyclohexane	SW8260C	ug/L	NE	NE	< 20.0 U
Methylene chloride	SW8260C	ug/L	5	11	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	NE	100	< 1.0 U
n-Hexane	SW8260C	ug/L	NE	150	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	NE	66	**2.3**
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	NE	24	< 1.0 U
o-Xylene	SW8260C	ug/L	NE	19	**16.7**
Propionitrile	SW8260C	ug/L	NE	NE	< 100 U
sec-Butylbenzene	SW8260C	ug/L	NE	200	< 1.0 U
Styrene	SW8260C	ug/L	100	120	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	NE	69	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	5	4.1	< 1.0 U
Toluene	SW8260C	ug/L	1,000	110	**31.0**
trans-1,2-Dichloroethene	SW8260C	ug/L	100	6.8	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	NE	0.47	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	NE	0.0013	< 100 U
Trichloroethene	SW8260C	ug/L	5	0.28	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NE	340	**172**
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	NE	520	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	NE	41	< 20.0 U
Vinyl chloride	SW8260C	ug/L	2	0.019	< 1.0 U
Xylene, Total	SW8260C	ug/L	10,000	19	**57.4**

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Volatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 12b-i; chemical names starting with letter D through Z are shown on Table 12b-ii.
Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 2

Table 13c-i: Validated Leachate Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1								
Semivolatile Organic Compounds, Total (#–C)												
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 909 U	< 952 U	< 952 U	< 952 U	< 952 UJ	< 20.0 U	< 18.2 U	< 16.7 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 909 U	< 952 U	< 952 U	< 952 U	< 952 U	< 20.0 U	< 18.2 U	< 16.7 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 455 U	< 476 U	< 476 UJ	< 476 UJ	< 476 U	< 10.0 U	< 9.1 UJ	< 8.3 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 455 U	< 476 U	< 476 UJ	< 476 UJ	< 476 U	< 10.0 U	< 9.1 UJ	< 8.3 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 2,270 U	< 2,380 U	< 2,380 U	< 2,380 U	< 2,380 U	< 50.0 U	< 45.5 U	< 41.7 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 909 U	< 952 U	< 952 U	< 952 U	< 952 U	< 20.0 UJ	< 18.2 UJ	< 16.7 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 455 U	< 476 U	< 476 UJ	< 476 UJ	< 476 U	< 10.0 U	< 9.1 UJ	< 8.3 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 2,270 U	< 2,380 U	< 2,380 U	< 2,380 U	< 2,380 U	< 50.0 U	< 45.5 U	< 41.7 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 909 U	< 952 U	< 952 U	< 952 U	< 952 U	< 20.0 U	< 18.2 U	< 16.7 U
Acetophenone	SW8270C	ug/L	NE	190	< 455 U	< 476 U	< 476 U	**235 J**	**248 J**	< 10.0 U	< 9.1 U	< 8.3 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Atrazine	SW8270C	ug/L	3	0.3	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 2,270 U	< 2,380 U	< 2,380 U	< 2,380 U	< 2,380 U	< 50.0 U	< 45.5 U	< 41.7 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 455 U	< 476 U	< 476 UJ	< 476 UJ	< 476 U	< 10.0 U	< 9.1 UJ	< 8.3 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 UJ
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Caprolactam	SW8270C	ug/L	NE	990	< 455 U	**5,870**	**5,360**	**6,000**	**4,750**	**32.9 J**	< 9.1 U	< 8.3 U
Carbazole	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U

Notes and definitions are presented on Page 2

Table 13c-i: Validated Leachate Data—Semivolatile Organic Compounds (#–C)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	LCS-5A
				Sample Depth (ft BGS)	140-290
				Sample Date	08-20-2021
				Sample Type	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	
Semivolatile Organic Compounds, Total (#–C)					
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	NE	0.017	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	NE	59	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	NE	0.2	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	NE	NE	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	NE	71	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	NE	24	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	NE	120	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	NE	1.2	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	NE	4.6	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	NE	36	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	NE	3.9	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	NE	0.24	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	NE	NE	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	NE	0.049	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	NE	0.016	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	NE	75	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	NE	9.1	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	NE	19	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	NE	NE	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	NE	0.13	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	NE	0.0011	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	NE	NE	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	NE	0.003	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	NE	140	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	NE	NE	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	NE	0.005	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	NE	NE	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	NE	8.2	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	NE	0.0001	< 18.2 U
Acetophenone	SW8270C	ug/L	NE	190	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	NE	NE	< 9.1 U
Atrazine	SW8270C	ug/L	3	0.3	< 9.1 U
Benzaldehyde	SW8270C	ug/L	NE	19	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	NE	200	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	NE	16	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	NE	0.039	< 9.1 U
Biphenyl	SW8270C	ug/L	NE	0.083	< 9.1 UJ
Bis(2-chloroethoxy)methane	SW8270C	ug/L	NE	5.9	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	6	5.6	< 9.1 U
Caprolactam	SW8270C	ug/L	NE	990	< 9.1 U
Carbazole	SW8270C	ug/L	NE	NE	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	NE	0.31	< 9.1 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Semivolatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 12c-i; chemical names starting with letter D through Z are shown on Table 12c-ii.
Qualifier Definition
J = Estimated concentration.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 2

Table 13c-ii: Validated Leachate Data—Semivolatile Organic Compounds (D–Z)
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
					Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
					Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
					Sample Type	N	FD	N	FD	N	N	N	N	FD
Semivolatile Organic Compounds, Total (D–Z)														
Diallate	SW8270C	ug/L	NE	0.54	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	NE	0.79	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	NE	90	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	NE	0.014	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	NE	1,500	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dimethoate	SW8270C	ug/L	NE	4.4	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	NE	0.15	< 909 U	< 952 U	< 952 U	< 952 U	< 952 U	< 20.0 U	< 18.2 U	< 16.7 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	NE	20	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	NE	130	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Disulfoton	SW8270C	ug/L	NE	0.05	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Famphur	SW8270C	ug/L	NE	NE	< 9,090 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 200 UJ	< 182 UJ	< 167 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	1	0.0098	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	50	0.041	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 R	< 9.1 R
Hexachloroethane	SW8270C	ug/L	NE	0.33	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 R	< 9.1 R
Hexachlorophene	SW8270C	ug/L	NE	0.6	< 9,090 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 200 UJ	< 182 UJ	< 167 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Isodrin	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Isophorone	SW8270C	ug/L	NE	78	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Isosafrole	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Kepone	SW8270C	ug/L	NE	0.0035	< 9,090 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 9,520 UJ	< 200 UJ	< 182 UJ	< 167 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	NE	93	**5,730**	**6,260**	**6,440**	**6,940**	**5,600**	**6.1 J**	< 9.1 U	< 8.3 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	NE	0.79	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	NE	0.45	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	NE	0.14	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	NE	0.00017	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	NE	0.00011	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	NE	0.0027	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	NE	0.011	< 2,270 U	< 2,380 U	< 2,380 U	< 2,380 U	< 2,380 U	< 50.0 U	< 45.5 U	< 41.7 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	NE	12	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	NE	0.00071	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	NE	0.0082	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	NE	0.037	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
o-Cresol	SW8270C	ug/L	NE	93	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	NE	0.0065	< 909 UJ	< 952 UJ	< 952 UJ	< 952 UJ	< 952 UJ	< 20.0 UJ	< 18.2 UJ	< 16.7 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	NE	4.7	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	**8.4 J**	**11.2**	**14.4**	**13.0**
Parathion	SW8270C	ug/L	NE	8.6	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	NE	0.37	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	NE	0.32	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	NE	0.12	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	1	0.041	< 2,270 U	< 2,380 U	< 2,380 U	< 2,380 U	< 2,380 U	< 50.0 U	< 45.5 U	< 41.7 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	NE	34	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Phenol	SW8270C	ug/L	NE	580	**7,810**	**8,610**	**9,450**	**9,220**	**7,120**	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Phorate	SW8270C	ug/L	NE	0.3	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	NE	3.8	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	NE	2	< 909 UJ	< 952 UJ	< 4,760 UJ	< 4,760 UJ	< 4,760 UJ	< 20.0 UJ	< 90.9 UJ	< 83.3 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	NE	120	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Safrole	SW8270C	ug/L	NE	0.096	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Thionazin	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	NE	NE	< 455 U	< 476 U	< 476 U	< 476 U	< 476 U	< 10.0 U	< 9.1 U	< 8.3 U	< 9.1 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available
Validated Data for Semivolatile Organic Compounds have been split into two tables, alphabetically, to aid in readability. Chemical names starting with number 0–9 through letter C are shown on Table 12c-i; chemical names starting with letter D D through Z are shown on Table 12c-ii.
Qualifier Definition
J = Estimated concentration.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 13d: Validated Leachate Data—Semivolatile Organic Compounds – PAHs
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				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1									
Semivolatile Organic Compounds – PAHs, Total													
1-Methylnaphthalene	SW8270C-SIM	ug/L	NE	1.1	< 10.0 UJ	< 10.0 UJ	< 500 U	< 500 U	< 400 U	**8.2 J**	**7.1**	**8.7 J**	**7.5 J**
2-Methylnaphthalene	SW8270C-SIM	ug/L	NE	3.6	**8.0 J**	**6.4 J**	< 500 U	< 500 U	< 400 U	**6.6 J**	**5.8**	**7.5 J**	**6.4 J**
Acenaphthene	SW8270C-SIM	ug/L	NE	53	**8.7 J**	**10.1 J**	< 500 U	< 500 U	< 400 U	**1.2 J**	**0.94 J**	**1.1 J**	**0.88 J**
Acenaphthylene	SW8270C-SIM	ug/L	NE	NE	< 10.0 UJ	< 10.0 UJ	< 500 U	< 500 U	< 400 U	< 10.0 U	**0.36 J**	< 10.0 U	< 10.0 U
Anthracene	SW8270C-SIM	ug/L	NE	180	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	NE	0.03	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	0.2	0.025	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	NE	0.25	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	NE	NE	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	NE	2.5	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Chrysene	SW8270C-SIM	ug/L	NE	25	**0.54 J**	**0.51 J**	< 250 U	< 250 U	< 200 U	< 5.0 U	< 0.50 U	< 5.0 U	< 5.0 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	NE	0.025	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U
Fluoranthene	SW8270C-SIM	ug/L	NE	80	**2.8 J**	**2.8 J**	< 500 U	< 500 U	< 400 U	< 10.0 U	< 1.0 U	< 10.0 U	< 10.0 U
Fluorene	SW8270C-SIM	ug/L	NE	29	**8.5 J**	**6.6 J**	< 500 U	< 500 U	< 400 U	**0.86 J**	**0.79 J**	**0.78 J**	**0.73 J**
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	NE	0.25	< 1.0 UJ	< 1.0 UJ	< 50.0 U	< 50.0 U	< 40.0 U	< 1.0 U	< 0.10 UJ	< 1.0 U	< 1.0 U
Naphthalene	SW8270C-SIM	ug/L	NE	0.12	**31.0 J**	**30.7 J**	< 500 U	< 500 U	< 400 U	**15.9**	**10.0**	**14.5**	**12.4**
Phenanthrene	SW8270C-SIM	ug/L	NE	NE	**294 J**	**313 J**	**465 J**	**443 J**	< 400 U	**1.1 J**	**0.65 J**	**0.84 J**	**0.81 J**
Pyrene	SW8270C-SIM	ug/L	NE	12	**1.8 J**	**1.7 J**	< 500 U	< 500 U	< 400 U	< 10.0 U	**0.073 J**	< 10.0 U	< 10.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 13e: Validated Leachate Data—Total Metals
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				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1								
Metals, Total												
Aluminum	SW6010B	ug/L	NE	2,000	**1,040**	**1,090**	**1,370 J-**	**1,410**	**524**	< 200 U	**612**	**45.8 J**
Barium	SW6010B	ug/L	2,000	380	**6,280**	**6,470**	**6,100 J-**	**6,000**	**5,630**	**1,550**	**1,510**	**1,530**
Boron	SW6010B	ug/L	NE	400	**18,200**	**18,500**	**16,800 J-**	**16,700**	**16,600**	**3,850**	**3,650**	**3,320**
Calcium	SW6010B	ug/L	NE	NE	**2,380,000**	**2,560,000**	**2,840,000 J-**	**2,820,000**	**2,200,000**	**160,000**	**166,000**	**164,000**
Cobalt	SW6010B	ug/L	NE	0.6	**10.3**	**10.6**	**11.2 J-**	**12.5 J**	**6.3**	**11.8**	**11.1**	**8.9**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**7,330,000**	**7,770,000**	**8,400,000 J-**	**8,290,000**	**6,670,000**	**742,000**	**765,000**	**754,000**
Iron	SW6010B	ug/L	NE	1,400	**298,000**	**301,000**	**221,000 J-**	**216,000**	**180,000**	**7,270**	**7,500**	**7,460**
Lithium	SW6010B	ug/L	NE	4	**482**	**501**	**416 J-**	**416**	**441 J**	**66.8**	**59.3**	**51.2**
Magnesium	SW6010B	ug/L	NE	NE	**336,000**	**337,000**	**314,000 J-**	**305,000**	**285,000**	**82,900**	**85,300**	**83,400**
Manganese	SW6010B	ug/L	NE	43	**29,200**	**31,200**	**32,800 J-**	**32,100**	**28,900**	**218**	**227**	**208**
Molybdenum	SW6010B	ug/L	NE	10	**0.94 J**	**0.93 J**	< 50.0 R	< 50.0 U	< 10.0 U	**1.8 J**	**2.1 J**	**2.2 J**
Nickel	SW6010B	ug/L	NE	39	**33.7**	**32.0**	**28.4 J-**	**28.6 J**	**36.4**	**40.1**	**38.2**	**35.0**
Potassium	SW6010B	ug/L	NE	NE	**385,000**	**413,000**	**447,000 J-**	**438,000**	**383,000**	**126,000**	**109,000**	**111,000**
Silicon	SW6010B	ug/L	NE	NE	**38,700**	**44,800**	**41,200 J**	**60,800 J**	**60,400**	**28,400**	**28,900**	**26,000**
Sodium	SW6010B	ug/L	NE	20,000	**2,060,000**	**2,210,000**	**2,350,000 J-**	**2,300,000**	**2,020,000**	**758,000**	**655,000**	**656,000**
Strontium	SW6010B	ug/L	NE	1,200	**17,600**	**17,600**	**17,100 J-**	**16,800**	**13,700**	**1,480**	**1,470**	**1,460**
Tin	SW6010B	ug/L	NE	1,200	**9.7 J**	**10.1**	< 50.0 R	**8.5 J**	**9.2 J**	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**6.2 J**	**6.0 J**	**13.5 J-**	**15.6 J**	**1.8 J**	**7.3 J**	**6.0 J**	**8.6 J**
Zinc	SW6010B	ug/L	NE	600	**108**	**114**	**142 J-**	**137**	**57.7**	**16.8 J**	**18.9 J**	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	**2.7 J**	**3.0 J**	**3.1 J-**	**3.1 J**	< 5.0 U	**0.70 J**	**0.55 J**	**1.2**
Arsenic	SW6020	ug/L	10	0.052	**328**	**349**	**318 J-**	**336**	**273**	**20.8**	**16.5**	**14.4**
Beryllium	SW6020	ug/L	4	2.5	**0.44 J**	**0.43 J**	**0.59 J-**	**0.50 J**	**0.40 J**	< 0.20 U	< 0.20 U	< 0.20 UJ
Cadmium	SW6020	ug/L	5	0.18	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**75.5**	**83.5**	**66.2 J-**	**66.4**	**43.2**	**16.0**	**14.4**	**13.9**
Chromium (VI)	SW7199	ug/L	100	0.035	**24.7**	**20.4**	< 1.00 U	**0.612 J**	< 1.00 U	**0.212**	**0.0761 J-**	**0.284**
Chromium (III)	CALC	ug/L	100	2,200	**51**	**63**	**66**	**66**	**43**	**16**	**14**	**14**
Copper	SW6020	ug/L	1,300	80	**31.0**	**34.0**	**60.3 J-**	**58.5**	**14.8**	**6.9**	**5.2**	**0.74 J**
Lead	SW6020	ug/L	15	15	**7.8**	**8.8**	**19.1 J-**	**18.7**	**3.8 J**	**0.21 J**	**0.061 J**	< 1.0 U
Selenium	SW6020	ug/L	50	10	**6.2**	**5.0 J**	**4.5 J-**	**3.0 J**	**4.8 J**	**0.56 J**	**0.52 J**	**0.65 J**
Silver	SW6020	ug/L	NE	9.4	< 2.5 U	< 2.5 U	< 2.5 R	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 5.0 U	< 5.0 U	< 5.0 R	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 5.0 U	< 5.0 U	< 5.0 R	< 5.0 U	**0.33 J**	**0.12 J**	< 1.0 U	**0.13 J**
Uranium	SW6020	ug/L	30	0.4	< 5.0 U	< 5.0 U	< 5.0 R	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	**2.6 J**	**4.4 J**	**4.6 J-**	**5.1**	**2.8 J**	**5.1**	**5.1**	**5.0**
Mercury	SW7470A	ug/L	2	0.063	**2.4**	**2.4**	< 0.60 R	**1.0**	**3.1 J-**	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	**8.6 J**	**10**	**7.9 J**	**5.0 J**	**2.8 J-**	**2.6 J-**	< 10 UJ	**4.2 J**

Notes and definitions are presented on Page 2

Table 13e: Validated Leachate Data—Total Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location		LCS-5A
			Sample Depth (ft BGS)		140-290
			Sample Date		08-20-2021
			Sample Type		FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1	
Metals, Total					
Aluminum	SW6010B	ug/L	NE	2,000	< 200 U
Barium	SW6010B	ug/L	2,000	380	**1,550**
Boron	SW6010B	ug/L	NE	400	**3,340**
Calcium	SW6010B	ug/L	NE	NE	**167,000**
Cobalt	SW6010B	ug/L	NE	0.6	**9.2**
Hardness as CaCO3	SW6010B	ug/L	NE	NE	**762,000**
Iron	SW6010B	ug/L	NE	1,400	**7,410**
Lithium	SW6010B	ug/L	NE	4	**54.2**
Magnesium	SW6010B	ug/L	NE	NE	**83,900**
Manganese	SW6010B	ug/L	NE	43	**208**
Molybdenum	SW6010B	ug/L	NE	10	**2.3 J**
Nickel	SW6010B	ug/L	NE	39	**35.2**
Potassium	SW6010B	ug/L	NE	NE	**111,000**
Silicon	SW6010B	ug/L	NE	NE	**26,500**
Sodium	SW6010B	ug/L	NE	20,000	**653,000**
Strontium	SW6010B	ug/L	NE	1,200	**1,480**
Tin	SW6010B	ug/L	NE	1,200	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**4.4 J**
Zinc	SW6010B	ug/L	NE	600	< 20.0 U
Antimony	SW6020	ug/L	6	0.78	**1.1**
Arsenic	SW6020	ug/L	10	0.052	**14.4**
Beryllium	SW6020	ug/L	4	2.5	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**13.9**
Chromium (VI)	SW7199	ug/L	100	0.035	**0.475**
Chromium (III)	CALC	ug/L	100	2,200	**13**
Copper	SW6020	ug/L	1,300	80	**0.77 J**
Lead	SW6020	ug/L	15	15	< 1.0 U
Selenium	SW6020	ug/L	50	10	**0.60 J**
Silver	SW6020	ug/L	NE	9.4	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	< 1.0 U
Uranium	SW6020	ug/L	30	0.4	< 1.0 U
Vanadium	SW6020	ug/L	NE	8.6	**4.9**
Mercury	SW7470A	ug/L	2	0.063	< 0.20 U
Cyanide CN-	SW9012A	ug/L	200	0.15	**9.6**

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 2

Table 13f: Validated Leachate Data—Dissolved Metals
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1									
Metals, Dissolved													
Antimony	SW6020	ug/L	6	0.78	**2.6 J**	**2.6 J**	**3.4 J-**	**3.5 J**	**2.7 J**	**0.64 J**	**0.56 J**	**2.7**	**2.5**
Arsenic	SW6020	ug/L	10	0.052	**308**	**327**	**346 J-**	**362**	**263**	**18.4**	**15.5**	**14.5**	**14.2**
Beryllium	SW6020	ug/L	4	2.5	**0.40 J**	**0.36 J**	**0.74 J-**	**0.58 J**	**0.30 J**	< 0.20 U	< 0.20 U	< 0.20 UJ	< 0.20 U
Cadmium	SW6020	ug/L	5	0.18	< 1.0 U	< 1.0 U	< 1.0 R	< 1.0 U	< 1.0 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	100	NE	**72.5**	**75.7**	**69.6 J-**	**71.3**	**42.1**	**15.0**	**14.6**	**12.8**	**12.4**
Copper	SW6020	ug/L	1,300	80	**4.7 J**	**5.2**	**9.2 J-**	**11.6**	**5.5**	**0.61 J-**	**0.47 J**	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	15	15	< 5.0 U	< 5.0 U	**1.6 J-**	**2.1 J**	< 5.0 U	< 1.0 U	< 1.0 U	**3.0 J**	**0.92 J**
Selenium	SW6020	ug/L	50	10	**4.1 J**	**5.1**	**5.8 J-**	**5.7**	**4.6 J**	**0.41 J**	**0.44 J**	**0.72 J**	**0.68 J**
Silver	SW6020	ug/L	NE	9.4	< 2.5 U	< 2.5 U	< 2.5 R	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	2	0.02	< 5.0 U	< 5.0 U	< 5.0 R	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	NE	NE	**1.1 J**	< 5.0 U	< 5.0 R	< 5.0 U	**0.27 J**	**0.19 J**	< 1.0 U	**0.16 J**	**0.052 J**
Uranium	SW6020	ug/L	30	0.4	< 5.0 U	**0.085 J**	< 5.0 R	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	**0.013 J**
Vanadium	SW6020	ug/L	NE	8.6	**2.3 J**	**3.3 J**	**4.2 J-**	**4.7 J**	**2.4 J**	**5.0**	**4.9**	**4.3**	**4.5**
Aluminum	SW6010B	ug/L	NE	2,000	**931**	**908**	**970 J-**	**996 J**	**434**	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	2,000	380	**6,420**	**6,360**	**6,690 J-**	**6,930**	**5,260**	**1,540**	**1,500**	**1,430**	**1,410**
Boron	SW6010B	ug/L	NE	400	**18,100**	**17,700**	**18,600 J-**	**19,200**	**15,800**	**3,780**	**3,680**	**3,420**	**3,300**
Calcium	SW6010B	ug/L	NE	NE	**2,190,000**	**2,700,000**	**3,120,000 J-**	**3,200,000**	**2,260,000**	**152,000**	**165,000**	**171,000**	**168,000**
Cobalt	SW6010B	ug/L	NE	0.6	**11.2**	**10.6**	**11.7 J-**	**13.0 J**	**6.8**	**11.5**	**11.2**	**9.7**	**9.3**
Iron	SW6010B	ug/L	NE	1,400	**305,000**	**300,000**	**232,000 J-**	**239,000**	**172,000**	**7,050**	**7,200**	**2,560**	**2,310**
Lithium	SW6010B	ug/L	NE	4	**504**	**507**	**453 J-**	**467**	**372 J**	**68.4**	**59.0**	**53.0**	**53.7**
Magnesium	SW6010B	ug/L	NE	NE	**345,000**	**340,000**	**337,000 J-**	**349,000**	**282,000**	**81,900**	**84,600**	**86,600**	**85,300**
Manganese	SW6010B	ug/L	NE	43	**27,300**	**33,900**	**35,600 J-**	**36,600**	**28,800**	**211**	**227**	**208**	**207**
Molybdenum	SW6010B	ug/L	NE	10	**1.2 J**	**2.5 J**	< 50.0 R	< 50.0 U	< 10.0 U	**2.0 J**	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	NE	39	**24.9**	**23.0**	**25.1 J-**	**31.3 J**	**19.4**	**40.3**	**38.6**	**36.4**	**35.5**
Potassium	SW6010B	ug/L	NE	NE	**401,000**	**506,000**	**490,000 J-**	**497,000**	**399,000**	**130,000**	**119,000**	**113,000**	**109,000**
Silicon	SW6010B	ug/L	NE	NE	**18,900 J**	**12,700 J**	**58,300 J-**	**68,100**	**62,900 J**	**27,400**	**28,800**	**27,900**	**24,400**
Sodium	SW6010B	ug/L	NE	20,000	**2,010,000**	**2,550,000**	**2,610,000 J-**	**2,660,000**	**2,120,000**	**730,000**	**713,000**	**671,000**	**646,000**
Strontium	SW6010B	ug/L	NE	1,200	**17,700**	**17,800**	**18,600 J-**	**19,300**	**13,400**	**1,480**	**1,460**	**1,500**	**1,480**
Tin	SW6010B	ug/L	NE	1,200	**10.9**	**9.4 J**	**9.0 J-**	**9.0 J**	**8.7 J**	**1.7 J**	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	NE	NE	**3.5 J**	**3.6 J**	**4.7 J-**	< 50.0 U	< 10.0 U	**6.2 J**	**5.1 J**	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	NE	600	**33.5**	**32.9**	< 100 R	**44.2 J**	**23.5**	< 20.0 U	< 20.0 U	**8.6 J**	< 20.0 U
Mercury	SW7470A	ug/L	2	0.063	**0.18 J**	**0.33**	< 1.2 R	**0.58 J**	< 0.20 UJ	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 13g: Validated Leachate Data—Total Petroleum Hydrocarbons and Polychlorinated Biphenyls
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
				Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
				Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
				Sample Type	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1									
Petroleum Hydrocarbons,Total													
C12-C28-Total	TCEQ-TX-1005	ug/L	NE	NE	**35,100**	**36,100**	**34,000 J**	**41,200 J**	**34,000 J**	**1,820**	**1,490**	**1,100**	**1,390**
C28-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	**954**	**1,030**	< 900 R	**845 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	NE	NE	**119,000**	**129,000**	**111,000 J**	**139,000 J**	**121,000 J**	**994**	**984**	**1,120**	**1,370**
C6-C35-Total	TCEQ-TX-1005	ug/L	NE	NE	**155,000**	**166,000**	**145,000 J**	**181,000 J**	**155,000 J**	**2,810**	**2,470**	**2,220**	**2,760**
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	**640 J**	**666 J**	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	**510 J**	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	< 2,000 R	< 2,000 R	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 2,000 U	< 2,000 U	< 2,000 R	< 2,000 R	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NE	NE	< 1,000 U	< 1,000 U	< 1,000 R	< 1,000 R	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Polychlorinated Biphenyls, Total													
Aroclor 1016	SW8082A	ug/L	0.5	0.14	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.091 UJ
Aroclor 1221	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	0.5	0.0047	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	0.5	0.0078	**0.20**	**0.19**	**0.30**	**0.12**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.12**	< 0.10 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	0.5	0.0078	< 0.10 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.091 U
PCBs, Total	SW8082A	ug/L	0.5	NE	**0.20**	**0.19**	**0.30**	**0.12**	< 0.10 U	< 0.10 U	**0.12**	< 0.10 UJ	< 0.091 UJ

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
Bold *= Detected*
Blue *Font = Exceeds USEPA Primary MCL*
Orange Shaded *= Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 13h: Validated Leachate Data—Gas, General Chemistry, and Herbicides
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample Location	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-3D	LCS-5A	LCS-5A	LCS-5A	LCS-5A
			Sample Depth (ft BGS)	40-138	40-138	40-138	40-138	40-138	140-290	140-290	140-290	140-290
			Sample Date	03-16-2021	03-16-2021	05-21-2021	05-21-2021	08-25-2021	03-16-2021	05-21-2021	08-20-2021	08-20-2021
			Sample Type	N	FD	N	FD	N	N	N	N	FD
Analyte	Analytic Method	Unit	USEPA Primary MCL	USEPA RSL TAPWATER THQ0.1								
Dissolved Permanent Gases												
Carbon dioxide	RSK-175	ug/L	NE	NE	**82,000**	**82,700**	**79,100**	**57,500**	**169,000**	**251,000**	**200,000**	**138,000**	**146,000**
Methane	RSK-175	ug/L	NE	NE	**590**	**570**	**240**	**220**	NA	**4,200 J-**	**1,400 J+**	NA	NA
Methane	RSK-175 MOD	ug/L	NE	NE	NA	NA	NA	NA	**789 J**	NA	NA	**5,740 J**	**3,720 J**
General Chemistry Parameters													
Bromide	SW9056A	mg/L	NE	NE	**52.4 J**	**75.9 J**	**48.7**	**49.8**	**46.6**	**6.8**	**6.6**	**6.8**	**6.4**
Chloride	SW9056A	mg/L	NE	NE	**5,660**	**5,670**	**7,120**	**6,460**	**4,660 J-**	**1,150**	**1,140**	**1,090**	**1,100**
Fluoride	SW9056A	mg/L	4	0.08	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 1.0 R	**0.73 J**	**0.51 J-**	**0.51 J-**	**0.46 J-**
Iodide	SW9056A	mg/L	NE	0.02	**9.1 J**	**26.6 J**	**9.6**	**9.2**	**8.6**	**2.4**	**2.1 J**	**2.0**	**2.0**
Sulfate	SW9056A	mg/L	NE	NE	**227**	**226**	**256**	**333**	**102 J+**	**0.58 J**	**0.20 J**	**0.30**	**0.30**
Nitrate as N	9056A	mg/L	10	NE	< 0.50 U	< 0.50 UJ	< 0.050 U	< 0.050 U	< 0.50 U	< 0.50 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	1	NE	< 5.0 U	< 5.0 UJ	**6.6**	**16.5**	< 0.50 R	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Nitrite + Nitrate as N	E353.2	mg/L	NE	NE	< 2.0 R	< 2.0 R	< 10.0 R	< 10.0 R	< 10.0 R	**0.027 J-**	< 0.40 UJ	< 1.0 U	< 1.0 U
Phosphorus	E365.1	mg/L	NE	NE	< 0.50 R	**0.81 J**	< 2.5 R	< 2.5 R	< 0.50 U	**0.96 J+**	**0.84**	**0.89**	**0.91**
Chemical Oxygen Demand	E410.4	mg/L	NE	NE	**28,300 J**	**28,700 J**	**32,800 J**	**33,000 J**	**31,500 J**	**656**	**609**	**520 J-**	**511 J-**
Alkalinity, Total as CaCO3	SM2320B	mg/L	NE	NE	**3,640**	**3,600**	**3,900**	**3,800**	**1,510**	**1,740**	**1,900**	**1,640**	**1,700**
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	**3,640**	**3,600**	**3,900**	**3,800**	**1,510**	**1,740**	**1,900**	**1,640**	**1,700**
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	NE	NE	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	NE	NE	**29,900**	**30,300**	**27,700**	**30,400**	**23,600**	**3,090**	**3,030**	**2,760**	**2,820**
Total suspended solids	SM2540D	mg/L	NE	NE	**65**	**84**	**83**	**93**	**100**	**14**	**8**	< 5.0 U	< 5.0 U
pH, Lab	SM4500-H-B	pH units	NE	NE	**5.7 J**	**5.7 J**	**5.8 J**	**5.8 J**	**6.2 J**	**6.8 J**	**6.7 J**	**6.2 J**	**7.2 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	NE	NE	**652 J**	**583 J**	**544 J**	**557 J**	**497 J**	**221**	**230 J-**	**204**	**206**
Sulfide	SM4500-S2-D	mg/L	NE	NE	< 5.0 R	< 5.0 R	< 5.0 U	< 5.0 U	< 5.0 R	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U
Dissolved Organic Carbon	SM5310C	mg/L	NE	NE	**10,800 J**	**10,900 J**	**10,700 J**	**10,800 J**	**8,670 J-**	**172**	**193**	**164**	**164**
Organic Carbon, Total	SM5310C	mg/L	NE	NE	**11,600 J**	**11,600 J**	**11,000 J**	**11,200 J**	**8,430 J-**	**176**	**163**	**170**	**172**
Herbicides, Total													
2,4,5-TP (Silvex)	SW8151A	ug/L	50	11	< 99.0 U	< 97.1 U	< 51.0 U	< 51.5 U	< 10.0 UJ	< 0.97 U	< 5.0 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	70	17	< 99.0 U	< 97.1 U	< 51.0 UJ	< 51.5 UJ	< 10.0 U	< 0.97 U	< 5.0 UJ	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L	7	1.5	< 99.0 U	< 97.1 U	< 51.0 U	< 51.5 U	< 10.0 U	< 0.97 U	< 5.0 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	NE	16	< 99.0 U	< 97.1 U	< 51.0 U	< 51.5 U	**7.1 J**	**1.1 J+**	< 5.0 U	< 1.0 U	< 1.0 U

Notes:
ft BGS = feet below ground surface
ug/L = micrograms per liter
mg/L = milligrams per liter
USEPA Primary MCL = USEPA National Primary Drinking Water Regulation (May 2009).
USEPA RSL TAPWATER THQ0.1 = RSL TAPWATER (TR=1E-06, THQ=0.1) Nov 2021, adapted for West Lake QAPP
***Bold** = Detected*
***Blue** Font = Exceeds USEPA Primary MCL*
***Orange Shaded** = Detected value exceeds USEPA RSL TAPWATER THQ0.1*
Gray Shaded = Compound not detected above the reporting detection limit but reporting detection limit exceeds USEPA RSL TAPWATER THQ0.1
NE = Not Established
NA = Not Available

Qualifier Definition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
J- = The result is an estimated concentration, but may be biased low.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Dissolved Permanent Gases, Total								
Carbon dioxide	RSK-175	ug/L	< 900 U	< 900 U	< 900 U	**513 J**	**322 J**	< 900 U
Methane	RSK-175	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	**6.0**	< 5.0 U	**5.5**
Methane	RSK-175 MOD	ug/L	NA	NA	NA	NA	NA	NA
General Chemistry Parameters								
Bromide	SW9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
Fluoride	SW9056A	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Iodide	SW9056A	mg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
Nitrate as N	9056A	mg/L	< 0.050 U	**0.012 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chromium (III)	CALC	mg/L	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Nitrite + Nitrate as N	E353.2	mg/L	< 0.10 U	**0.025 J**	**0.042 J**	**0.067 J**	**0.048 J**	**0.059 J**
Phosphorus	E365.1	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	**0.039 J**	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**4.4 J**	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Total suspended solids	SM2540D	mg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.6 U
pH, Lab	SM4500-H-B	pH units	**7.8 J**	**7.7 J**	**6.9 J**	**6.5 J**	**6.4 J**	**6.0 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Herbicides, Total								
2,4,5-TP (Silvex)	SW8151A	ug/L	< 0.98 U	< 0.99 U	< 1.0 U	< 0.98 U	< 0.95 U	< 1.1 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	< 0.98 U	< 0.99 U	< 1.0 U	< 0.98 U	< 0.95 U	< 1.1 U
Dinoseb	SW8151A	ug/L	< 0.98 U	< 0.99 U	< 1.0 U	< 0.98 U	< 0.95 U	< 1.1 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	< 0.98 U	< 0.99 U	< 1.0 U	< 0.98 U	< 0.95 U	< 1.1 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Metals, Total								
Aluminum	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	**0.69 J**	**0.62 J**	< 10.0 U	**0.66 J**	< 10.0 U	< 10.0 U
Boron	SW6010B	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Cobalt	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Iron	SW6010B	ug/L	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Manganese	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.80 J**
Molybdenum	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	**1.7 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Silicon	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Sodium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	**70.0 J**	< 1,000 U	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U	< 10.0 U	**0.99 J**	< 10.0 U	< 10.0 U	< 10.0 U
Tin	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U	**0.028 J**	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	**0.17 J**	**0.20 J**	**0.20 J**
Copper	SW6020	ug/L	**0.23 J**	**0.21 J**	< 1.0 U	< 1.0 U	**0.38 J**	**0.58 J**
Lead	SW6020	ug/L	< 1.0 U	**0.080 J**	< 1.0 U	< 1.0 U	**0.14 J**	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L	< 0.100 U	**0.0448 J**	**0.0460 J**	< 0.100 U	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	mg/L	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U
Petroleum Hydrocarbons,Total								
C12-C28-Total	TCEQ-TX-1005	ug/L	< 927 U	< 927 U	< 945 U	< 909 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 927 U	< 927 U	< 945 U	< 909 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 927 U	< 927 U	< 945 U	< 909 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 927 U	< 927 U	< 945 U	< 909 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,150 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,040 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,120 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,060 U	< 2,060 U	< 2,100 U	< 2,020 U	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,060 U	< 2,060 U	< 2,100 U	< 2,020 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,030 U	< 1,050 U	< 1,010 U	< 1,000 U	< 1,000 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Polychlorinated Biphenyls, Total								
Aroclor 1016	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1221	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1232	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1242	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1248	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1254	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Aroclor 1260	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
PCBs, Total	SW8082A	ug/L	< 0.091 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.095 U
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	0.164 ± 0.322 (0.588) U	0.0632 ± 0.288 (0.465) U	-0.116 ± 0.266 (0.627) U	0.0620 ± 0.365 (0.744) U	0 ± 0.281 (0.609) U	0.573 ± 0.548 (0.835) U
Radium-228	E904.0	pCi/L	0.539 ± 0.347 (0.653) U	0.508 ± 0.338 (0.637) U	**0.620 ± 0.325 (0.559)**	0.228 ± 0.378 (0.823) U	0.749 ± 0.418 (0.751) U	-0.0490 ± 0.372 (0.870) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.703 ± 0.669 (1.24) U	0.571 ± 0.626 (1.10) U	0.620 ± 0.591 (1.19) U	0.290 ± 0.743 (1.57) U	0.749 ± 0.699 (1.36) U	0.573 ± 0.920 (1.71) U
Thorium-228	HASL300	pCi/L	0.094 ± 0.129 (0.250) U	0.036 ± 0.067 (0.048) U	0.099 ± 0.096 (0.146) U	0.089 ± 0.097 (0.171) U	-0.051 ± 0.069 (0.233) U	-0.055 ± 0.077 (0.243) U
Thorium-230	HASL300	pCi/L	-0.003 ± 0.071 (0.086) U	0.018 ± 0.066 (0.048) U	0.025 ± 0.066 (0.096) U	-0.016 ± 0.057 (0.114) U	-0.019 ± 0.067 (0.133) U	-0.006 ± 0.062 (0.091) U
Thorium-232	HASL300	pCi/L	0 ± 0.071 (0.051) U	0.011 ± 0.066 (0.097) U	-0.006 ± 0.065 (0.096) U	0 ± 0.057 (0.041) U	0 ± 0.066 (0.048) U	0 ± 0.062 (0.045) U
Uranium-234	HASL300	pCi/L	**0.282 ± 0.149 (0.051)**	**0.376 ± 0.170 (0.048)**	**0.353 ± 0.171 (0.104)**	**0.648 ± 0.220 (0.115)**	**0.519 ± 0.193 (0.085)**	0.120 ± 0.106 (0.162) U
Uranium-235	HASL300	pCi/L	**0.147 ± 0.120 (0.066)**	**0.140 ± 0.114 (0.063)**	**0.175 ± 0.136 (0.136)**	**0.363 ± 0.179 (0.132)**	**0.310 ± 0.162 (0.055)**	0.099 ± 0.095 (0.115) U
Uranium-238	HASL300	pCi/L	**0.056 ± 0.071 (0.051)**	0.112 ± 0.096 (0.119) U	**0.095 ± 0.084 (0.051)**	**0.247 ± 0.129 (0.101)**	**0.216 ± 0.118 (0.042)**	0.079 ± 0.081 (0.121) U
Tritium	E906.0	pCi/L	4.99 ± 129 (227) U	17.5 ± 130 (228) U	105 ± 136 (228) U	-25.0 ± 142 (251) U	55.2 ± 137 (235) U	25.0 ± 134 (233) U
Semivolatile Organic Compounds - SIM, Total								
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Semivolatile Organic Compounds, Total								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.5 UJ	< 9.5 UJ	< 9.1 UJ	< 9.5 U	< 9.1 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
Acetophenone	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Atrazine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
beta-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Biphenyl	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 16.0 U	< 14.6 U	< 15.2 U	< 9.5 U	< 9.1 U	< 10.0 U
Caprolactam	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Carbazole	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Diallate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dimethoate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Disulfoton	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Ethyl methanesulfonate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Famphur	SW8270C	ug/L	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Hexachloroethane	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Hexachlorophene	SW8270C	ug/L	< 190 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Isodrin	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Isophorone	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Isosafrole	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Kepone	SW8270C	ug/L	< 190 UJ	< 190 UJ	< 182 UJ	< 190 U	< 182 U	< 200 U
m,p-cresol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Methyl parathion	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
o-Cresol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	< 19.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U
o-Toluidine	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Parathion	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	< 47.6 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U
Phenacetin	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Phenol	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Phorate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	< 19.0 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 20.0 UJ
Propyzamide	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Safrole	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Thionazin	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	< 9.5 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
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		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Volatile Organic Compounds, Total								
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
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		Sample ID	EB-001-WQ-20210222	EB-002-WQ-20210222	EB-003-WQ-20210222	EB-004-WQ-20210303	EB-005-WQ-20210304	EB-006-WQ-20210305
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	02/22/2021	02/22/2021	02/22/2021	03/03/2021	03/04/2021	03/05/2021
Analyte	Analytic Method	Unit						
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U
Tetrahydrofuran	SW8260C	ug/L	NA	NA	NA	NA	NA	NA

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Dissolved Permanent Gases, Total								
Carbon dioxide	RSK-175	ug/L	**402 J**	**280 J**	**233 J**	< 900 U	< 900 U	< 900 U
Methane	RSK-175	ug/L	**14**	**2.2 J**	**2.0 J**	**2.4 J**	< 5.0 U	**2.2 J**
Methane	RSK-175 MOD	ug/L	NA	NA	NA	NA	NA	NA
General Chemistry Parameters								
Bromide	SW9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	**0.049 J**	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
Fluoride	SW9056A	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Iodide	SW9056A	mg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	**0.068 J**
Nitrate as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chromium (III)	CALC	mg/L	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Nitrite + Nitrate as N	E353.2	mg/L	**0.032 J**	**0.024 J**	**0.031 J**	**0.030 J**	**0.023 J**	**0.028 J**
Phosphorus	E365.1	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	< 10.0 U	**12**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Total suspended solids	SM2540D	mg/L	< 2.5 U	< 2.7 U	< 2.6 U	< 2.5 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	**7.8 J**	**6.2 J**	**5.9 J**	**7.6 J**	**7.5 J**	**6.5 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.065 J**	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Herbicides, Total								
2,4,5-TP (Silvex)	SW8151A	ug/L	< 0.96 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.95 U	< 0.94 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	< 0.96 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.95 U	< 0.94 U
Dinoseb	SW8151A	ug/L	< 0.96 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.95 U	< 0.94 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	< 0.96 U	< 1.0 U	< 1.0 U	< 0.96 U	< 0.95 U	< 0.94 U

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Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Metals, Total								
Aluminum	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Boron	SW6010B	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Cobalt	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Iron	SW6010B	ug/L	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Manganese	SW6010B	ug/L	< 5.0 U	< 5.0 U	**1.5 J**	< 5.0 U	< 5.0 U	**1.5 J**
Molybdenum	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Silicon	SW6010B	ug/L	**48.0 J**	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Sodium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Tin	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	< 2.0 U	**0.20 J**	**0.19 J**	**0.22 J**	**0.17 J**	**0.21 J**
Copper	SW6020	ug/L	**0.46 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L	**0.0473 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	mg/L	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U
Petroleum Hydrocarbons,Total								
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Polychlorinated Biphenyls, Total								
Aroclor 1016	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 U	< 0.088 U	< 0.091 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.088 UJ	< 0.091 UJ	< 0.091 U
PCBs, Total	SW8082A	ug/L	< 0.091 U	< 0.091 U	< 0.10 UJ	< 0.088 UJ	< 0.091 UJ	< 0.091 U
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	-0.140 ± 0.460 (0.989) U	-0.0396 ± 0.350 (0.762) U	0.158 ± 0.414 (0.758) U	0.0641 ± 0.293 (0.174) U	0.0708 ± 0.323 (0.657) U	0.0640 ± 0.292 (0.173) U
Radium-228	E904.0	pCi/L	**0.960 ± 0.511 (0.921)**	0.231 ± 0.341 (0.735) U	0.214 ± 0.387 (0.848) U	0.00901 ± 0.426 (0.974) U	**0.931 ± 0.484 (0.882) J+**	0.0257 ± 0.381 (0.872) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.960 ± 0.971 (1.91) U	0.231 ± 0.691 (1.50) U	0.372 ± 0.801 (1.61) U	0.0731 ± 0.719 (1.15) U	1.00 ± 0.807 (1.54) UJ	0.0897 ± 0.673 (1.05) U
Thorium-228	HASL300	pCi/L	-0.003 ± 0.071 (0.180) U	0.033 ± 0.094 (0.175) U	-0.077 ± 0.109 (0.369) U	0.080 ± 0.131 (0.273) U	0.052 ± 0.115 (0.261) U	0.043 ± 0.095 (0.217) U
Thorium-230	HASL300	pCi/L	-0.001 ± 0.070 (0.140) U	0.009 ± 0.092 (0.069) U	-0.012 ± 0.093 (0.153) U	-0.018 ± 0.091 (0.168) U	-0.019 ± 0.097 (0.180) U	-0.006 ± 0.092 (0.128) U
Thorium-232	HASL300	pCi/L	-0.007 ± 0.070 (0.102) U	0 ± 0.092 (0.069) U	-0.006 ± 0.093 (0.128) U	0.025 ± 0.091 (0.068) U	0 ± 0.097 (0.073) U	0 ± 0.092 (0.069) U
Uranium-234	HASL300	pCi/L	**0.452 ± 0.184 (0.132)**	0.047 ± 0.084 (0.063) U	0.054 ± 0.077 (0.127) U	0.008 ± 0.081 (0.196) U	0.042 ± 0.083 (0.181) U	0.007 ± 0.088 (0.163) U
Uranium-235	HASL300	pCi/L	**0.179 ± 0.126 (0.114) J+**	0.023 ± 0.109 (0.152) U	0.021 ± 0.100 (0.139) U	0.059 ± 0.106 (0.080) U	0.053 ± 0.109 (0.151) U	0.017 ± 0.115 (0.190) U
Uranium-238	HASL300	pCi/L	**0.197 ± 0.116 (0.087)**	-0.006 ± 0.084 (0.116) U	0.021 ± 0.077 (0.058) U	0.097 ± 0.099 (0.134) U	0.087 ± 0.092 (0.116) U	0.025 ± 0.088 (0.066) U
Tritium	E906.0	pCi/L	87.5 ± 133 (225) U	-328 ± 151 (283) U	-238 ± 153 (284) U	5.02 ± 124 (219) U	30.0 ± 125 (218) U	-17.4 ± 122 (217) U
Semivolatile Organic Compounds - SIM, Total								
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Semivolatile Organic Compounds, Total								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 18.2 U	< 18.2 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	< 18.2 U	< 18.2 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	< 45.5 U	< 45.5 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 18.2 U	< 18.2 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	< 45.5 U	< 45.5 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 18.2 U	< 18.2 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U
Acetophenone	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Atrazine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	< 45.5 U	< 45.5 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Biphenyl	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Caprolactam	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Carbazole	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Diallate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dimethoate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	< 18.2 U	< 18.2 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Disulfoton	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U

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Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Ethyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Famphur	SW8270C	ug/L	< 182 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	< 182 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Isodrin	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Isophorone	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Isosafrole	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Kepone	SW8270C	ug/L	< 182 UJ	< 182 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 45.5 U	< 45.5 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
o-Cresol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	< 18.2 UJ	< 18.2 UJ	< 20.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Parathion	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	< 45.5 U	< 45.5 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U
Phenacetin	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Phenol	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Phorate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	< 18.2 UJ	< 18.2 UJ	< 20.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ
Propyzamide	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Safrole	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Thionazin	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	< 9.1 U	< 9.1 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U

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Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Volatile Organic Compounds, Total								
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-007-WQ-20210315	EB-001-WQ-20210503	EB-002-WQ-20210503	EB-003-WQ-20210504	EB-004-WQ-20210504	EB-005-WQ-20210504
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	03/15/2021	05/03/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021
Analyte	Analytic Method	Unit						
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.037 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.037 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U
Tetrahydrofuran	SW8260C	ug/L	NA	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Dissolved Permanent Gases, Total								
Carbon dioxide	RSK-175	ug/L	< 900 U	< 900 U	**19,100**	**136 J**	< 900 U	< 900 U
Methane	RSK-175	ug/L	**0.464 J**	**0.647 J**	**12**	**3.6 J**	< 5.1 U	< 5.0 U
Methane	RSK-175 MOD	ug/L	NA	NA	NA	NA	NA	NA
General Chemistry Parameters								
Bromide	SW9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
Fluoride	SW9056A	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Iodide	SW9056A	mg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	< 0.25 U	< 0.25 U	**0.073 J**	< 0.25 U	< 0.25 U	< 0.25 U
Nitrate as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chromium (III)	CALC	mg/L	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Nitrite + Nitrate as N	E353.2	mg/L	**0.033 J**	**0.026 J**	**0.027 J**	**0.036 J**	**0.028 J**	**0.035 J**
Phosphorus	E365.1	mg/L	**0.040 J**	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	**9.2 J**	< 10.0 U	**3.8 J**
Alkalinity, Total as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Total suspended solids	SM2540D	mg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	**6.7 J**	**5.8 J**	**6.3 J**	**6.8 J**	**7.4 J**	**7.1 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Herbicides, Total								
2,4,5-TP (Silvex)	SW8151A	ug/L	< 0.95 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.95 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	< 0.95 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.95 U
Dinoseb	SW8151A	ug/L	< 0.95 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.95 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	< 0.95 U	< 1.0 U	< 0.99 U	< 0.99 U	< 1.0 U	< 0.95 U

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Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Metals, Total								
Aluminum	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	**1.3 J**	< 10.0 U	< 10.0 U
Boron	SW6010B	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	**11.4 J**	**9.8 J**
Calcium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**252 J**
Cobalt	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	**908 J**
Iron	SW6010B	ug/L	< 50.0 U	< 50.0 U	< 50.0 U	**38.6 J**	< 50.0 U	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U	< 20.0 U	**4.5 J**	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**67.5 J**
Manganese	SW6010B	ug/L	< 5.0 U	< 5.0 U	**1.3 J**	< 5.0 U	**0.53 J**	**1.3 J**
Molybdenum	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	**106 J**	< 1,000 U	< 1,000 U
Silicon	SW6010B	ug/L	**33.0 J**	< 200 U	**71.8 J**	**85.3 J**	< 200 U	< 200 U
Sodium	SW6010B	ug/L	**49.3 J**	< 1,000 U	**184 J**	< 1,000 U	< 1,000 U	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	**0.80 J**	< 10.0 U	< 10.0 U
Tin	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	**0.26 J**	**0.25 J**	**0.22 J**	**0.20 J**	**0.34 J**	**0.32 J**
Copper	SW6020	ug/L	< 1.0 U	**0.31 J**	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.034 J**	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L	**0.0406 J**	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	mg/L	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U
Petroleum Hydrocarbons,Total								
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	**656 J**	**922**	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	**859 J**	**1,520**	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	**1,520**	**2,440**	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	**8,670**	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 2,000 U	**1,130 J**	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Polychlorinated Biphenyls, Total								
Aroclor 1016	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 U	< 0.091 U	< 0.095 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 UJ	< 0.091 U	< 0.095 U	< 0.091 U
PCBs, Total	SW8082A	ug/L	< 0.11 U	< 0.10 U	< 0.095 UJ	< 0.091 U	< 0.095 U	< 0.091 U
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	0.0690 ± 0.315 (0.641) U	0.313 ± 0.507 (0.882) U	0.0611 ± 0.279 (0.567) U	0.324 ± 0.475 (0.811) U	0.0502 ± 0.406 (0.797) U	-0.0556 ± 0.361 (0.784) U
Radium-228	E904.0	pCi/L	-0.0530 ± 0.406 (0.939) U	0.349 ± 0.518 (1.12) U	0.324 ± 0.373 (0.785) U	0.123 ± 0.316 (0.707) U	0.312 ± 0.474 (1.02) U	0.467 ± 0.584 (1.24) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.0690 ± 0.721 (1.58) U	0.662 ± 1.03 (2.00) U	0.385 ± 0.652 (1.35) U	0.447 ± 0.791 (1.52) U	0.362 ± 0.880 (1.82) U	0.467 ± 0.945 (2.02) U
Thorium-228	HASL300	pCi/L	-0.013 ± 0.104 (0.241) U	-0.026 ± 0.091 (0.237) U	0.031 ± 0.148 (0.362) U	0.024 ± 0.110 (0.280) U	**0.408 ± 0.240 (0.329)**	0.177 ± 0.168 (0.288) U
Thorium-230	HASL300	pCi/L	0.008 ± 0.101 (0.187) U	-0.012 ± 0.088 (0.146) U	-0.024 ± 0.091 (0.185) U	-0.006 ± 0.090 (0.125) U	-0.012 ± 0.086 (0.142) U	0.013 ± 0.086 (0.143) U
Thorium-232	HASL300	pCi/L	-0.007 ± 0.101 (0.140) U	-0.006 ± 0.088 (0.123) U	-0.012 ± 0.091 (0.150) U	0 ± 0.090 (0.068) U	0.018 ± 0.086 (0.120) U	-0.012 ± 0.086 (0.143) U
Uranium-234	HASL300	pCi/L	**0.157 ± 0.137 (0.143)**	0.091 ± 0.102 (0.164) U	-0.005 ± 0.084 (0.183) U	0.097 ± 0.097 (0.138) U	**0.221 ± 0.141 (0.125)**	0.122 ± 0.114 (0.154) U
Uranium-235	HASL300	pCi/L	-0.009 ± 0.134 (0.187) U	0.022 ± 0.106 (0.147) U	0.054 ± 0.110 (0.153) U	**0.109 ± 0.108 (0.074)**	**0.165 ± 0.134 (0.074)**	0.141 ± 0.134 (0.151) U
Uranium-238	HASL300	pCi/L	0.108 ± 0.114 (0.143) U	**0.130 ± 0.111 (0.113)**	0.009 ± 0.084 (0.149) U	0.068 ± 0.084 (0.138) U	0.055 ± 0.076 (0.116) U	0.008 ± 0.083 (0.181) U
Tritium	E906.0	pCi/L	0 ± 144 (253) U	-40.1 ± 142 (253) U	5.01 ± 136 (238) U	-87.4 ± 132 (241) U	-37.5 ± 132 (237) U	-117 ± 127 (235) U
Semivolatile Organic Compounds - SIM, Total								
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Semivolatile Organic Compounds, Total								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 UJ	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U
Acetophenone	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Atrazine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 UJ	< 9.1 U	< 9.5 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Biphenyl	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	**5.3 J**	< 9.1 U	< 9.5 U	< 9.1 U
Caprolactam	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Carbazole	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Diallate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dimethoate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	< 20.0 U	< 20.0 U	< 19.0 U	< 18.2 U	< 19.0 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Disulfoton	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Ethyl methanesulfonate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Famphur	SW8270C	ug/L	< 200 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Hexachloroethane	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	< 200 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Isodrin	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Isophorone	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Isosafrole	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Kepone	SW8270C	ug/L	< 200 UJ	< 200 UJ	< 190 UJ	< 182 UJ	< 190 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
o-Cresol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	< 20.0 UJ	< 20.0 UJ	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Parathion	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	< 50.0 U	< 50.0 U	< 47.6 U	< 45.5 U	< 47.6 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Phenol	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Phorate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	< 20.0 UJ	< 20.0 UJ	< 19.0 UJ	< 90.9 UJ	< 95.2 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Safrole	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Thionazin	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	< 10.0 U	< 10.0 U	< 9.5 U	< 9.1 U	< 9.5 U	< 9.1 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Volatile Organic Compounds, Total								
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	< 3.00 U	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	**4.3 J**	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-006-WQ-20210512	EB-007-WQ-20210512	EB-008-WQ-20210519	EB-009-WQ-20210524	EB-001-WQ-20210802	EB-002-WQ-20210802
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	05/12/2021	05/12/2021	05/19/2021	05/24/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit						
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U
Ethylene dibromide	SW8011	ug/L	< 0.035 U	< 0.036 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.036 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
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		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Dissolved Permanent Gases, Total								
Carbon dioxide	RSK-175	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 UJ
Methane	RSK-175	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	**2.8 J**	**4.4 J**	NA
Methane	RSK-175 MOD	ug/L	NA	NA	NA	NA	NA	< 10.0 U
General Chemistry Parameters								
Bromide	SW9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chloride	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
Fluoride	SW9056A	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Iodide	SW9056A	mg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Sulfate	SW9056A	mg/L	< 0.25 U	< 0.25 U	< 0.25 U	**0.11 J**	**0.062 J**	< 0.25 U
Nitrate as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Nitrite as N	9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chromium (III)	CALC	mg/L	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Nitrite + Nitrate as N	E353.2	mg/L	**0.029 J**	**0.022 J**	**0.029 J**	**0.021 J**	**0.026 J**	**0.036 J**
Phosphorus	E365.1	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
Chemical Oxygen Demand	E410.4	mg/L	**8.0 J**	**7.9 J**	**3.9 J**	< 10.0 U	< 10.0 U	< 10.0 U
Alkalinity, Total as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Bicarbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbonate Alkalinity as CaCO3	SM2320B	mg/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dissolved Solids, Total	SM2540C	mg/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Total suspended solids	SM2540D	mg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 U	< 2.5 U	< 2.5 U
pH, Lab	SM4500-H-B	pH units	**7.6 J**	**7.6 J**	**7.3 J**	**7.3 J**	**7.5 J**	**7.6 J**
Ammoniacal Nitrogen NH3N	SM4500-NH3G	mg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Sulfide	SM4500-S2-D	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Organic Carbon, Total	SM5310C	mg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Herbicides, Total								
2,4,5-TP (Silvex)	SW8151A	ug/L	< 0.95 U	< 0.96 U	< 0.96 U	< 1.0 U	< 0.99 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	< 0.95 U	< 0.96 U	< 0.96 U	< 1.0 U	< 0.99 U	< 1.0 U
Dinoseb	SW8151A	ug/L	< 0.95 U	< 0.96 U	< 0.96 U	< 1.0 U	< 0.99 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	< 0.95 U	< 0.96 U	< 0.96 U	< 1.0 U	< 0.99 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Metals, Total								
Aluminum	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.92 J**
Boron	SW6010B	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**326 J**
Cobalt	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	**1,020**
Iron	SW6010B	ug/L	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	**50.5 J**
Manganese	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Molybdenum	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**1.4 J**	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U	**122 J**	**95.7 J**	< 1,000 U	< 1,000 U	**124 J**
Silicon	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	**21.4 J**	**55.7 J**
Sodium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	**55.6 J**	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**3.7 J**
Tin	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	**0.35 J**	**0.35 J**	**0.34 J**	**0.32 J**	**0.34 J**	**0.35 J**
Copper	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	**0.26 J**	< 1.0 U	**0.21 J**
Lead	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.22 J**
Chromium (VI)	SW7199	ug/L	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cyanide CN-	SW9012A	mg/L	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	**0.0020 J**
Petroleum Hydrocarbons,Total								
C12-C28-Total	TCEQ-TX-1005	ug/L	**7,620**	< 900 U	**1,500**	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	**7,620**	< 900 U	**1,500**	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	**2,610**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 UJ
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 UJ
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	**Analytic Method**	**Unit**						
Polychlorinated Biphenyls, Total								
Aroclor 1016	SW8082A	ug/L	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.10 UJ	< 0.091 UJ	< 0.10 UJ
Aroclor 1221	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1232	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1242	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1248	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1254	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
Aroclor 1260	SW8082A	ug/L	< 0.095 U	< 0.095 U	< 0.095 U	< 0.10 U	< 0.091 U	< 0.10 U
PCBs, Total	SW8082A	ug/L	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.10 UJ	< 0.091 UJ	< 0.10 UJ
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	0.108 ± 0.333 (0.646) U	-0.338 ± 0.369 (0.876) U	-0.111 ± 0.266 (0.664) U	0 ± 0.328 (0.711) UJ	0 ± 0.290 (0.590) UJ	-0.114 ± 0.316 (0.747) U
Radium-228	E904.0	pCi/L	-0.249 ± 0.424 (1.05) U	0.0585 ± 0.457 (1.05) U	0.0138 ± 0.442 (1.03) U	0.894 ± 0.590 (1.15) U	0.193 ± 0.452 (1.00) U	0.341 ± 0.457 (0.980) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.108 ± 0.757 (1.70) U	0.0585 ± 0.826 (1.93) U	0.0138 ± 0.708 (1.69) U	0.894 ± 0.918 (1.86) UJ	0.193 ± 0.742 (1.59) UJ	0.341 ± 0.773 (1.73) UJ
Thorium-228	HASL300	pCi/L	**0.454 ± 0.245 (0.321)**	0.232 ± 0.204 (0.351) U	0.184 ± 0.168 (0.285) U	-0.035 ± 0.104 (0.282) U	-0.011 ± 0.120 (0.259) U	0.120 ± 0.139 (0.262) U
Thorium-230	HASL300	pCi/L	0.034 ± 0.081 (0.134) U	-0.012 ± 0.089 (0.147) U	0.014 ± 0.083 (0.131) U	0.005 ± 0.065 (0.116) U	-0.005 ± 0.044 (0.084) U	-0.001 ± 0.062 (0.124) U
Thorium-232	HASL300	pCi/L	0 ± 0.081 (0.061) U	0 ± 0.089 (0.067) U	-0.005 ± 0.083 (0.111) U	-0.006 ± 0.065 (0.096) U	-0.006 ± 0.044 (0.068) U	0 ± 0.062 (0.045) U
Uranium-234	HASL300	pCi/L	0.073 ± 0.097 (0.174) U	0.063 ± 0.103 (0.213) U	0.119 ± 0.117 (0.172) U	**0.346 ± 0.215 (0.150)**	**0.120 ± 0.077 (0.088)**	0.068 ± 0.105 (0.198) U
Uranium-235	HASL300	pCi/L	**0.094 ± 0.113 (0.085)**	**0.087 ± 0.106 (0.079)**	0.031 ± 0.111 (0.084) U	-0.008 ± 0.146 (0.196) U	0.018 ± 0.052 (0.081) U	0.110 ± 0.137 (0.182) U
Uranium-238	HASL300	pCi/L	**0.072 ± 0.087 (0.065)**	0.069 ± 0.103 (0.204) U	-0.010 ± 0.085 (0.196) U	**0.154 ± 0.143 (0.150)**	-0.020 ± 0.040 (0.106) U	**0.089 ± 0.105 (0.081)**
Tritium	E906.0	pCi/L	-95.1 ± 129 (237) U	-42.6 ± 132 (237) U	-87.3 ± 129 (236) U	-22.3 ± 133 (236) U	-32.4 ± 144 (256) U	-169 ± 133 (248) U
Semivolatile Organic Compounds - SIM, Total								
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Semivolatile Organic Compounds, Total								
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 18.2 UJ	< 19.0 UJ	< 19.0 UJ	< 19.0 U	< 18.2 UJ	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
1,4-Naphthoquinone	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 UJ	< 18.2 UJ
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 UJ	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2,6-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2-Acetylaminofluorene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2-Chloronaphthalene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2-Chlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
2-Nitrophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 UJ	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
3-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Aminobiphenyl	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
4-Nitrophenol	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 UJ	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 U	< 18.2 UJ	< 18.2 UJ
Acetophenone	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
alpha-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Atrazine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Benzaldehyde	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 U	< 45.5 UJ	< 45.5 UJ
Benzyl alcohol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
beta-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Biphenyl	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Caprolactam	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Carbazole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Chlorobenzilate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Diallate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dibenzofuran	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dibutyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dichloroethyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Diethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dimethoate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dimethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Dinitro-o-cresol	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 19.0 U	< 19.0 UJ	< 18.2 UJ	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Diphenylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Disulfoton	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Ethyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Famphur	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Hexachloroethane	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Hexachlorophene	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Isodrin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Isophorone	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Isosafrole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Kepone	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 190 UJ	< 190 UJ	< 182 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
Methapyrilene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Methyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 UJ	< 9.1 UJ	< 9.1 UJ
Methyl parathion	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Nitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 47.6 U	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosopiperidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
o-Cresol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
o-Tolidine	SW8270C	ug/L	< 18.2 UJ	< 19.0 UJ	< 19.0 UJ	< 19.0 UJ	< 18.2 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Parathion	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
p-Chloroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Pentachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Pentachloronitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Pentachlorophenol	SW8270C	ug/L	< 45.5 UJ	< 47.6 UJ	< 47.6 UJ	< 47.6 UJ	< 45.5 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Phenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 U
Phorate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
p-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
p-Phenylene diamine	SW8270C	ug/L	< 90.9 UJ	< 95.2 UJ	< 95.2 UJ	< 95.2 U	< 90.9 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Safrole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Thionazin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ
Triethylphosphorothioate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.1 UJ	< 9.1 UJ

Notes and definitions are presented on Page 28

Table 14a: Validated Field Quality Control Data—Equipment Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Volatile Organic Compounds, Total								
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

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Table 14a: Validated Field Quality Control Data—Equipment Blanks
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		Sample ID	EB-003-WQ-20210803	EB-004-WQ-20210803	EB-005-WQ-20210803	EB-006-WQ-20210812	EB-007-WQ-20210817	EB-008-WQ-20210819
		Sample Type	EB	EB	EB	EB	EB	EB
		Sample Date	08/03/2021	08/03/2021	08/03/2021	08/12/2021	08/17/2021	08/19/2021
Analyte	Analytic Method	Unit						
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.037 U	< 0.037 U	< 0.042 U	< 0.036 U	< 0.035 U	< 0.036 U
Ethylene dibromide	SW8011	ug/L	< 0.037 U	< 0.037 U	< 0.042 U	< 0.036 U	< 0.035 U	< 0.036 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
pCi/L = picocuries per liter
***Bold** = Detected*
NA = Not Available
Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

QualifierDefinition
J = Estimated concentration.
J+ = The result is an estimated concentration, but may be biased high.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit or minimum detectable concentration.
UJ = The analyte was analyzed for, but was not detected. The reporting limit or minimum detectable concentration is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 28

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
			Sample Type	FB	FB	FB	FB	FB	FB	FB
			Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit								
Dissolved Permanent Gases, Total										
Carbon dioxide	RSK-175	ug/L		**476 J**	< 900 U	**278 J**	**524 J**	**710 J**	< 900 U	**802 J**
Methane	RSK-175	ug/L		< 5.0 U	**3.0 J**	**3.8 J**	**3.9 J**	**9.7**	< 5.0 U	< 5.00 U
Methane	RSK-175 MOD	ug/L		NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters										
Chromium (III)	CALC	mg/L		< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Herbicides, Total										
2,4,5-TP (Silvex)	SW8151A	ug/L		< 0.91 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.96 U	< 1.1 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L		< 0.91 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.96 U	< 1.1 U	< 1.0 UJ
Dinoseb	SW8151A	ug/L		< 0.91 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.96 U	< 1.1 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L		< 0.91 U	< 1.0 U	< 0.95 U	< 1.1 U	< 0.96 U	< 1.1 U	< 1.0 U
Metals, Total										
Aluminum	SW6010B	ug/L		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Boron	SW6010B	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L		< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Cobalt	SW6010B	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Iron	SW6010B	ug/L		< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	**76.8**	< 50.0 U
Lithium	SW6010B	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L		< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Manganese	SW6010B	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Molybdenum	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.63 J**
Nickel	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Silicon	SW6010B	ug/L		< 200 U	< 200 U	< 200 U	**40.3 J**	**22.9 J**	< 200 U	**27.0 J**
Sodium	SW6010B	ug/L		**51.9 J**	< 1,000 U	**57.5 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Strontium	SW6010B	ug/L		< 10.0 U	< 10.0 U	**2.8 J**	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Tin	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L		< 2.0 U	**0.46 J**	**0.16 J**	< 2.0 U	**0.24 J**	**0.20 J**	**0.19 J**
Copper	SW6020	ug/L		**0.27 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.12 J**	< 1.0 U
Selenium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	**0.15 J**	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L		< 0.100 U	< 0.100 U	**0.0506 J**	**0.0596 J**	**0.0434 J**	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit							
Petroleum Hydrocarbons,Total									
C12-C28-Total	TCEQ-TX-1005	ug/L	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,030 UJ	< 1,000 U	< 1,000 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,060 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,060 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,030 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
Polychlorinated Biphenyls, Total									
Aroclor 1016	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1221	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1232	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1242	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1248	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1254	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 U
Aroclor 1260	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 UJ
PCBs, Total	SW8082A	ug/L	< 0.095 U	< 0.11 U	< 0.095 U	< 0.11 U	< 0.091 U	< 0.10 U	< 0.091 UJ
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	0.0582 ± 0.265 (0.540) U	-0.0603 ± 0.275 (0.649) U	-0.0533 ± 0.276 (0.640) U	0 ± 0.247 (0.502) U	0.206 ± 0.487 (0.901) U	-0.219 ± 0.380 (0.958) U	0.141 ± 0.553 (1.06) U
Radium-228	E904.0	pCi/L	0.442 ± 0.353 (0.704) U	0.273 ± 0.328 (0.691) UJ	0.126 ± 0.367 (0.824) U	0.828 ± 0.681 (1.37) U	0.321 ± 0.432 (0.926) U	0.405 ± 0.420 (0.876) U	0.222 ± 0.379 (0.825) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.500 ± 0.618 (1.24) U	0.273 ± 0.603 (1.34) UJ	0.126 ± 0.643 (1.46) U	0.828 ± 0.928 (1.87) U	0.527 ± 0.919 (1.83) U	0.405 ± 0.800 (1.83) U	0.363 ± 0.932 (1.89) U
Thorium-228	HASL300	pCi/L	**0.153 ± 0.121 (0.140)**	0.040 ± 0.087 (0.188) U	0.002 ± 0.067 (0.175) U	0.038 ± 0.072 (0.153) U	0.075 ± 0.130 (0.267) U	-0.002 ± 0.098 (0.282) U	-0.043 ± 0.099 (0.279) U
Thorium-230	HASL300	pCi/L	0 ± 0.078 (0.056) U	0.035 ± 0.066 (0.047) U	0.014 ± 0.054 (0.039) U	-0.024 ± 0.063 (0.139) U	0.021 ± 0.060 (0.107) U	0.007 ± 0.091 (0.169) U	-0.023 ± 0.096 (0.186) U
Thorium-232	HASL300	pCi/L	0 ± 0.078 (0.056) U	0 ± 0.065 (0.047) U	0.014 ± 0.054 (0.039) U	-0.006 ± 0.063 (0.092) U	0 ± 0.060 (0.043) U	-0.006 ± 0.091 (0.126) U	0.007 ± 0.096 (0.133) U
Uranium-234	HASL300	pCi/L	**0.296 ± 0.149 (0.129)**	0.110 ± 0.093 (0.113) U	**0.219 ± 0.117 (0.095)**	**0.125 ± 0.094 (0.048)**	0.083 ± 0.081 (0.123) U	0.125 ± 0.130 (0.204) U	0.069 ± 0.092 (0.164) U
Uranium-235	HASL300	pCi/L	**0.145 ± 0.111 (0.057)**	0.022 ± 0.084 (0.060) U	**0.095 ± 0.084 (0.077)**	0.120 ± 0.110 (0.128) U	0.005 ± 0.073 (0.129) U	0.060 ± 0.123 (0.092) U	-0.007 ± 0.106 (0.147) U
Uranium-238	HASL300	pCi/L	**0.065 ± 0.064 (0.044)**	**0.068 ± 0.067 (0.046)**	0.052 ± 0.057 (0.079) U	0.034 ± 0.067 (0.134) U	**0.068 ± 0.063 (0.040)**	0.107 ± 0.108 (0.130) U	0.057 ± 0.082 (0.134) U
Tritium	E906.0	pCi/L	80.1 ± 134 (228) U	72.8 ± 137 (234) U	-20.1 ± 142 (252) U	122 ± 137 (228) U	150 ± 137 (224) U	82.8 ± 129 (219) U	-65.1 ± 141 (253) U
Semivolatile Organic Compounds - SIM, Total									
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit							
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Semivolatile Organic Compounds, Total									
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
1,4-Naphthoquinone	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,4-Dinitrophenol	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,6-Dichlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Acetylaminofluorene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Chloronaphthalene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Chlorophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
2-Nitrophenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
3-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Aminobiphenyl	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.1 UJ	< 9.5 UJ	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
4-Nitrophenol	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
Acetophenone	SW8270C	ug/L	< 9.1 U	**7.6 J**	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
alpha-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Atrazine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Benzaldehyde	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
Benzyl alcohol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
beta-Naphthylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Biphenyl	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 13.7 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Caprolactam	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Carbazole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Chlorobenzilate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Diallate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dibenzofuran	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dibutyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dichloroethyl ether	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Diethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dimethoate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dimethyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Dinitro-o-cresol	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 U	< 19.0 U	< 19.0 U	< 21.1 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Diphenylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Disulfoton	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Ethyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Famphur	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit							
Hexachloroethane	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Hexachlorophene	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 182 UJ	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
Hexachloropropene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isodrin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isophorone	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Isosafrole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Kepone	SW8270C	ug/L	< 182 UJ	< 190 UJ	< 182 U	< 200 UJ	< 190 UJ	< 190 UJ	< 211 UJ
m,p-cresol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Methapyrilene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Methyl methanesulfonate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Methyl parathion	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Nitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosopiperidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
o-Cresol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
o-Tolidine	SW8270C	ug/L	< 18.2 U	< 19.0 U	< 18.2 U	< 20.0 UJ	< 19.0 UJ	< 19.0 UJ	< 21.1 UJ
o-Toluidine	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Parathion	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Chloroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachlorobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachloronitrobenzene	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Pentachlorophenol	SW8270C	ug/L	< 45.5 U	< 47.6 U	< 45.5 U	< 50.0 U	< 47.6 U	< 47.6 U	< 52.6 U
Phenacetin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Phenol	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Phorate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Nitroaniline	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
p-Phenylene diamine	SW8270C	ug/L	< 18.2 UJ	< 19.0 UJ	< 18.2 UJ	< 20.0 UJ	< 19.0 UJ	< 19.0 UJ	< 21.1 UJ
Propyzamide	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Safrole	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Thionazin	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U
Triethylphosphorothioate	SW8270C	ug/L	< 9.1 U	< 9.5 U	< 9.1 U	< 10.0 U	< 9.5 U	< 9.5 U	< 10.5 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
			Sample Type	FB	FB	FB	FB	FB	FB	FB
			Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit								
Volatile Organic Compounds, Total										
1,1,1,2-Tetrachloroethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L		< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L		NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260C	ug/L		< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ
2,2-Dichloropropane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L		< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L		< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L		< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L		< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Benzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 U
Carbon disulfide	SW8260C	ug/L		< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L		< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L		< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-001-WQ-20210222	FB-002-WQ-20210225	FB-003-WQ-20210304	FB-004-WQ-20210310	FB-005-WQ-20210316	FB-001-WQ-20210504	FB-002-WQ-20210511
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	02/22/2021	02/25/2021	03/04/2021	03/10/2021	03/16/2021	05/04/2021	05/11/2021
Analyte	Analytic Method	Unit							
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.039 U	< 0.034 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.039 U	< 0.034 U	< 0.035 U
Tetrahydrofuran	SW8260C	ug/L	NA	NA	NA	NA	NA	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
			Sample Type	FB	FB	FB	FB	FB	FB	FB
			Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit								
Dissolved Permanent Gases, Total										
Carbon dioxide	RSK-175	ug/L		**504 J**	**478 J**	**757 J**	**256 J**	< 900 U	< 900 U	< 900 U
Methane	RSK-175	ug/L		**2.29 J**	**5.2 J+**	**11**	**5.6 J**	**3.4 J**	**2.9 J**	**2.0 J**
Methane	RSK-175 MOD	ug/L		NA	NA	NA	NA	NA	NA	NA
General Chemistry Parameters										
Chromium (III)	CALC	mg/L		< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Herbicides, Total										
2,4,5-TP (Silvex)	SW8151A	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 1.0 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 1.0 U
Dinoseb	SW8151A	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 1.0 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 0.95 U	< 0.97 U	< 1.0 U	< 1.0 U
Metals, Total										
Aluminum	SW6010B	ug/L		< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	**0.91 J**	< 10.0 U	< 10.0 U	< 10.0 U
Boron	SW6010B	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L		< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Cobalt	SW6010B	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L		< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Iron	SW6010B	ug/L		< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U
Lithium	SW6010B	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L		< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U	< 500 U
Manganese	SW6010B	ug/L		< 5.0 U	**1.2 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Molybdenum	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L		< 1,000 U	**95.4 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Silicon	SW6010B	ug/L		**26.4 J**	< 200 U	**24.6 J**	**46.3 J**	< 200 U	< 200 U	< 200 U
Sodium	SW6010B	ug/L		**72.1 J**	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	**124 J**
Strontium	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	**0.82 J**	**0.96 J**
Tin	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L		< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L		**0.18 J**	**0.37 J**	**0.21 J**	**0.16 J**	**0.17 J**	< 2.0 U	**0.22 J**
Copper	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Lead	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L		< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L		< 0.100 U	< 0.100 U	< 0.100 U	**0.0958 J**	**0.0528 J**	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

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Table 14b: Validated Field Quality Control Data—Field Blanks
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		Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit							
Petroleum Hydrocarbons,Total									
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 927 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 2,000 U	NA	NA	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 2,000 U	NA	NA	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	< 1,000 U	NA	NA	NA	NA
Polychlorinated Biphenyls, Total									
Aroclor 1016	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1221	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1232	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1242	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1248	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1254	SW8082A	ug/L	< 0.10 U	< 0.10 U	< 0.091 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1260	SW8082A	ug/L	< 0.10 UJ	< 0.10 U	< 0.091 UJ	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
PCBs, Total	SW8082A	ug/L	< 0.10 UJ	< 0.10 U	< 0.091 UJ	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Radiochemistry, Total									
Radium-226	E903.1	pCi/L	0.350 ± 0.429 (0.700) U	0.0511 ± 0.233 (0.376) U	-0.0551 ± 0.251 (0.512) U	-0.221 ± 0.307 (0.778) U	0.0698 ± 0.454 (0.915) U	-0.488 ± 0.555 (1.35) U	0.121 ± 0.374 (0.724) U
Radium-228	E904.0	pCi/L	0.243 ± 0.405 (0.882) U	0.492 ± 0.437 (0.893) U	0.397 ± 0.393 (0.811) U	-0.181 ± 0.451 (1.06) U	-0.0162 ± 0.457 (1.05) U	0.254 ± 0.349 (0.748) U	**1.20 ± 0.486 (0.757) J+**
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.593 ± 0.834 (1.58) U	0.543 ± 0.670 (1.27) U	0.397 ± 0.644 (1.32) U	0 ± 0.758 (1.84) U	0.0698 ± 0.911 (1.97) U	0.254 ± 0.904 (2.10) U	1.32 ± 0.860 (1.48) U
Thorium-228	HASL300	pCi/L	-0.026 ± 0.104 (0.318) U	0.121 ± 0.131 (0.225) U	0.064 ± 0.165 (0.380) U	0.004 ± 0.108 (0.296) U	-0.109 ± 0.106 (0.373) U	0.133 ± 0.158 (0.298) U	0.142 ± 0.167 (0.313) U
Thorium-230	HASL300	pCi/L	0.020 ± 0.092 (0.128) U	0.030 ± 0.084 (0.156) U	-0.026 ± 0.096 (0.194) U	-0.006 ± 0.089 (0.124) U	0.043 ± 0.102 (0.167) U	0.013 ± 0.089 (0.148) U	0.047 ± 0.095 (0.205) U
Thorium-232	HASL300	pCi/L	0 ± 0.092 (0.070) U	-0.006 ± 0.084 (0.117) U	-0.013 ± 0.096 (0.158) U	0 ± 0.089 (0.067) U	0.028 ± 0.101 (0.076) U	-0.012 ± 0.089 (0.148) U	0.020 ± 0.094 (0.131) U
Uranium-234	HASL300	pCi/L	0.059 ± 0.103 (0.217) U	0.083 ± 0.088 (0.110) U	0.048 ± 0.085 (0.172) U	0.036 ± 0.082 (0.152) U	0.079 ± 0.095 (0.163) U	0.058 ± 0.092 (0.170) U	0.045 ± 0.104 (0.192) U
Uranium-235	HASL300	pCi/L	0.056 ± 0.112 (0.149) U	0.051 ± 0.103 (0.078) U	0.062 ± 0.112 (0.084) U	**0.089 ± 0.108 (0.081)**	0.048 ± 0.098 (0.136) U	0.054 ± 0.120 (0.167) U	-0.009 ± 0.135 (0.188) U
Uranium-238	HASL300	pCi/L	0.007 ± 0.085 (0.158) U	**0.066 ± 0.080 (0.060)**	**0.137 ± 0.116 (0.118)**	0.017 ± 0.082 (0.114) U	0.008 ± 0.075 (0.132) U	0.020 ± 0.092 (0.200) U	-0.006 ± 0.104 (0.225) U
Tritium	E906.0	pCi/L	-22.4 ± 136 (242) U	-62.7 ± 132 (239) U	-25.0 ± 136 (242) U	-67.5 ± 140 (252) U	-29.9 ± 141 (251) U	-280 ± 152 (284) UJ	-10.0 ± 134 (237) U
Semivolatile Organic Compounds - SIM, Total									
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit							
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Semivolatile Organic Compounds, Total									
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
1,4-Naphthoquinone	SW8270C	ug/L	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 UJ	< 10.0 UJ
2,4-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,4-Dinitrophenol	SW8270C	ug/L	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,6-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2-Acetylaminofluorene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2-Chloronaphthalene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2-Chlorophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
2-Nitrophenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
3-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Aminobiphenyl	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
4-Nitrophenol	SW8270C	ug/L	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U
Acetophenone	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
alpha-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Atrazine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Benzaldehyde	SW8270C	ug/L	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 U	< 50.0 U
Benzyl alcohol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.5 UJ	< 10.0 U	< 9.1 UJ	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
beta-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Biphenyl	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Caprolactam	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 10.0 UJ
Carbazole	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Chlorobenzilate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Diallate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dibenzofuran	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dibutyl phthalate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dichloroethyl ether	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Diethyl phthalate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dimethoate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dimethyl phthalate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Dinitro-o-cresol	SW8270C	ug/L	< 19.0 U	< 20.0 U	< 18.2 U	< 18.2 U	< 18.2 U	< 19.0 U	< 20.0 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Diphenylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Disulfoton	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Ethyl methanesulfonate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Famphur	SW8270C	ug/L	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit							
Hexachloroethane	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Hexachlorophene	SW8270C	ug/L	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ
Hexachloropropene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Isodrin	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Isophorone	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Isosafrole	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Kepone	SW8270C	ug/L	< 190 UJ	< 200 UJ	< 182 UJ	< 182 UJ	< 182 UJ	< 190 UJ	< 200 UJ
m,p-cresol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Methapyrilene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Methyl methanesulfonate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 UJ	< 10.0 UJ
Methyl parathion	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Nitrobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 UJ	< 50.0 UJ
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosopiperidine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
o-Cresol	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
o-Tolidine	SW8270C	ug/L	< 19.0 UJ	< 20.0 UJ	< 18.2 UJ	< 18.2 UJ	< 18.2 UJ	< 19.0 UJ	< 20.0 UJ
o-Toluidine	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Parathion	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
p-Chloroaniline	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Pentachlorobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Pentachloronitrobenzene	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Pentachlorophenol	SW8270C	ug/L	< 47.6 U	< 50.0 U	< 45.5 U	< 45.5 U	< 45.5 U	< 47.6 UJ	< 50.0 UJ
Phenacetin	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Phenol	SW8270C	ug/L	< 9.5 U	< 10.0 U	**2.7 J**	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Phorate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
p-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
p-Phenylene diamine	SW8270C	ug/L	< 19.0 UJ	< 20.0 UJ	< 90.9 UJ	< 90.9 UJ	< 90.9 UJ	< 95.2 U	< 100 U
Propyzamide	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Safrole	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Thionazin	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U
Triethylphosphorothioate	SW8270C	ug/L	< 9.5 U	< 10.0 U	< 9.1 U	< 9.1 U	< 9.1 U	< 9.5 U	< 10.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
		Sample Type	FB	FB	FB	FB	FB	FB	FB
		Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit							
Volatile Organic Compounds, Total									
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	< 3.00 U	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	**2.4 J**	< 20.0 U	< 20.0 U	**2.8 J**	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	**0.78 J**
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

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Table 14b: Validated Field Quality Control Data—Field Blanks
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			Sample ID	FB-003-WQ-20210513	FB-004-WQ-20210518	FB-005-WQ-20210521	FB-006-WQ-20210524	FB-007-WQ-20210525	FB-002-WQ-20210804	FB-001-WQ-20210805
			Sample Type	FB	FB	FB	FB	FB	FB	FB
			Sample Date	05/13/2021	05/18/2021	05/21/2021	05/24/2021	05/25/2021	08/04/2021	08/05/2021
Analyte	Analytic Method	Unit								
Ethylbenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L		< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L		< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L		< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U
Vinyl chloride	SW8260C	ug/L		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L		< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L		< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U
Ethylene dibromide	SW8011	ug/L		< 0.035 U	< 0.034 U	< 0.035 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U
Tetrahydrofuran	SW8260C	ug/L		**2.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	**5.6 J**	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
		Sample Type	FB	FB	FB	FB	FB
		Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit					
Dissolved Permanent Gases, Total							
Carbon dioxide	RSK-175	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
Methane	RSK-175	ug/L	< 5.0 U	< 5.0 U	**7.2**	NA	NA
Methane	RSK-175 MOD	ug/L	NA	NA	NA	< 10.0 U	< 10.0 UJ
General Chemistry Parameters							
Chromium (III)	CALC	mg/L	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U	< 0.010 U
Herbicides, Total							
2,4,5-TP (Silvex)	SW8151A	ug/L	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.97 U
2,4-Dichlorophenoxyacetic acid	SW8151A	ug/L	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.97 U
Dinoseb	SW8151A	ug/L	< 1.0 U	< 0.99 U	< 1.0 UJ	< 1.0 U	< 0.97 U
Trichlorophenoxyacetic Acid, 2,4,5-	SW8151A	ug/L	< 1.0 U	< 0.99 U	< 1.0 U	< 1.0 U	< 0.97 U
Metals, Total							
Aluminum	SW6010B	ug/L	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
Barium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	**2.2 J**	< 10.0 U
Boron	SW6010B	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Calcium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	**284 J**	< 500 U
Cobalt	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Hardness as CaCO3	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	**936 J**	< 1,000 U
Iron	SW6010B	ug/L	< 50.0 U	< 50.0 U	< 50.0 U	**38.2 J**	< 50.0 U
Lithium	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Magnesium	SW6010B	ug/L	< 500 U	< 500 U	< 500 U	**55.0 J**	< 500 U
Manganese	SW6010B	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	**2.8 J**	< 5.0 U
Molybdenum	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Nickel	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Potassium	SW6010B	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	**269 J**	< 1,000 U
Silicon	SW6010B	ug/L	**44.9 J**	< 200 U	**35.5 J**	**214 J+**	< 200 U
Sodium	SW6010B	ug/L	< 1,000 U	< 1,000 U	**72.4 J**	**349 J**	< 1,000 U
Strontium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	**2.2 J**	< 10.0 U
Tin	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Titanium	SW6010B	ug/L	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U	< 10.0 U
Zinc	SW6010B	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Antimony	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Arsenic	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Beryllium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Cadmium	SW6020	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
Chromium	SW6020	ug/L	**0.34**	**0.36**	**0.36 J**	**0.29 J**	**0.33 J**
Copper	SW6020	ug/L	< 1.0 U	< 1.0 U	**0.42 J**	**0.23 J**	**0.22 J**
Lead	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Selenium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Silver	SW6020	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Thallium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Thorium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Uranium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vanadium	SW6020	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chromium (VI)	SW7199	ug/L	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U	< 0.100 U
Mercury	SW7470A	ug/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U

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Table 14b: Validated Field Quality Control Data—Field Blanks
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			Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
			Sample Type	FB	FB	FB	FB	FB
			Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit						
Petroleum Hydrocarbons,Total								
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U
Polychlorinated Biphenyls, Total								
Aroclor 1016	SW8082A	ug/L	< 0.095 U	< 0.091 UJ	< 0.091 UJ	< 0.10 U	< 0.095 U
Aroclor 1221	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1232	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1242	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1248	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1254	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
Aroclor 1260	SW8082A	ug/L	< 0.095 U	< 0.091 U	< 0.091 U	< 0.10 U	< 0.095 U
PCBs, Total	SW8082A	ug/L	< 0.095 U	< 0.091 UJ	< 0.091 UJ	< 0.10 U	< 0.095 U
Radiochemistry, Total								
Radium-226	E903.1	pCi/L	-0.111 ± 0.308 (0.727) U	0.128 ± 0.501 (0.959) U	-0.133 ± 0.368 (0.870) U	-0.206 ± 0.566 (0.925) U	0.547 ± 0.555 (0.841) U
Radium-228	E904.0	pCi/L	0.413 ± 0.570 (1.22) U	0.300 ± 0.338 (0.704) UJ	-0.197 ± 0.419 (1.02) U	**0.995 ± 0.421 (0.680) J-**	0.406 ± 0.353 (0.714) UJ
Radium-226/228	TOTRADIUMCALCULATION	pCi/L	0.413 ± 0.878 (1.95) U	0.428 ± 0.839 (1.66) UJ	0 ± 0.787 (1.89) U	0.995 ± 0.987 (1.61) UJ	0.953 ± 0.908 (1.56) UJ
Thorium-228	HASL300	pCi/L	0.096 ± 0.131 (0.259) U	**0.255 ± 0.171 (0.244)**	0.023 ± 0.097 (0.227) U	-0.005 ± 0.099 (0.217) U	0.123 ± 0.117 (0.201) U
Thorium-230	HASL300	pCi/L	-0.012 ± 0.071 (0.121) U	0 ± 0.070 (0.051) U	0.017 ± 0.066 (0.047) U	0.009 ± 0.043 (0.083) U	-0.012 ± 0.042 (0.081) U
Thorium-232	HASL300	pCi/L	0.013 ± 0.071 (0.101) U	0 ± 0.070 (0.051) U	0 ± 0.065 (0.047) U	-0.006 ± 0.043 (0.067) U	-0.006 ± 0.042 (0.066) U
Uranium-234	HASL300	pCi/L	0.109 ± 0.137 (0.182) U	-0.006 ± 0.112 (0.149) U	0.057 ± 0.109 (0.145) U	0.162 ± 0.151 (0.204) U	0.180 ± 0.167 (0.225) U
Uranium-235	HASL300	pCi/L	-0.001 ± 0.177 (0.174) U	0.076 ± 0.146 (0.195) U	0.037 ± 0.142 (0.190) U	0.077 ± 0.141 (0.155) U	0.085 ± 0.155 (0.171) U
Uranium-238	HASL300	pCi/L	0.109 ± 0.137 (0.182) U	0.122 ± 0.127 (0.149) U	0.025 ± 0.109 (0.145) U	0.081 ± 0.108 (0.168) U	0.055 ± 0.119 (0.186) U
Tritium	E906.0	pCi/L	-79.7 ± 131 (239) U	82.3 ± 127 (215) U	-9.97 ± 129 (229) U	17.4 ± 127 (223) U	-29.9 ± 124 (222) U
Semivolatile Organic Compounds - SIM, Total								
1-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylnaphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Acenaphthylene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Chrysene	SW8270C-SIM	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Dibenzo(a,h)anthracene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluoranthene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Indeno(1,2,3-cd)pyrene	SW8270C-SIM	ug/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Naphthalene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenanthrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
		Sample Type	FB	FB	FB	FB	FB
		Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit					
Pyrene	SW8270C-SIM	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Semivolatile Organic Compounds, Total							
1,2,4,5-Tetrachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
1,3,5-Trinitrobenzene	SW8270C	ug/L	< 19.0 U	< 18.2 UJ	< 19.0 U	< 20.0 UJ	< 18.2 UJ
1,3-Dinitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
1,4-Naphthoquinone	SW8270C	ug/L	< 19.0 U	< 18.2 UJ	< 19.0 U	< 20.0 U	< 18.2 U
2,2-Oxybis(1-chloropropane)	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,3,4,6-Tetrachlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,4,5-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,4,6-Trichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,4-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,4-Dimethylphenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,4-Dinitrophenol	SW8270C	ug/L	< 47.6 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 45.5 U
2,4-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,6-Dichlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2,6-Dinitrotoluene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2-Acetylaminofluorene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2-Chloronaphthalene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2-Chlorophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
2-Nitrophenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
3,3'-Dichlorobenzidine	SW8270C	ug/L	< 19.0 U	< 18.2 UJ	< 19.0 U	< 20.0 U	< 18.2 U
3-Methylcholanthrene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
3-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Aminobiphenyl	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Bromophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Chloro-3-methylphenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Chlorophenyl phenyl ether	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Dimethylaminoazobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
4-Nitrophenol	SW8270C	ug/L	< 47.6 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 45.5 U
5-Nitro-o-toluidine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
7,12-Dimethylbenz(a)anthracene	SW8270C	ug/L	< 19.0 U	< 18.2 UJ	< 19.0 U	< 20.0 U	< 18.2 U
Acetophenone	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
alpha-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Atrazine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Benzaldehyde	SW8270C	ug/L	< 47.6 U	< 45.5 UJ	< 47.6 U	< 50.0 U	< 45.5 U
Benzyl alcohol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Benzyl butyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
beta-Naphthylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Biphenyl	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Bis(2-chloroethoxy)methane	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Bis(2-ethylhexyl)phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Caprolactam	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	**5.3 J**
Carbazole	SW8270C	ug/L	< 9.5 UJ	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Chlorobenzilate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Diallate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dibenzofuran	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dibutyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dichloroethyl ether	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Diethyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dimethoate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dimethyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Dinitro-o-cresol	SW8270C	ug/L	< 19.0 U	< 18.2 UJ	< 19.0 U	< 20.0 U	< 18.2 U
Di-n-octyl phthalate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Diphenylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Disulfoton	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Ethyl methanesulfonate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Famphur	SW8270C	ug/L	< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ
Hexachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Hexachlorocyclopentadiene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 UJ	< 10.0 U	< 9.1 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
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		Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
		Sample Type	FB	FB	FB	FB	FB
		Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit					
Hexachloroethane	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Hexachlorophene	SW8270C	ug/L	< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ
Hexachloropropene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Isodrin	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Isophorone	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Isosafrole	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Kepone	SW8270C	ug/L	< 190 UJ	< 182 UJ	< 190 UJ	< 200 UJ	< 182 UJ
m,p-cresol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Methapyrilene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 UJ	< 10.0 U	< 9.1 U
Methyl methanesulfonate	SW8270C	ug/L	< 9.5 UJ	< 9.1 UJ	< 9.5 UJ	< 10.0 U	< 9.1 U
Methyl parathion	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Nitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosodiethylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosodimethylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosodi-n-butylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosodi-n-propylamine	SW8270C	ug/L	< 47.6 UJ	< 45.5 UJ	< 47.6 UJ	< 50.0 U	< 45.5 U
n-Nitrosodiphenylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosomethylethylamine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosopiperidine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
n-Nitrosopyrrolidine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
o-Cresol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
o-Tolidine	SW8270C	ug/L	< 19.0 UJ	< 18.2 UJ	< 19.0 UJ	< 20.0 UJ	< 18.2 UJ
o-Toluidine	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Parathion	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
p-Chloroaniline	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Pentachlorobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Pentachloronitrobenzene	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Pentachlorophenol	SW8270C	ug/L	< 47.6 UJ	< 45.5 UJ	< 47.6 UJ	< 50.0 UJ	< 45.5 UJ
Phenacetin	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Phenol	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Phorate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
p-Nitroaniline	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
p-Phenylene diamine	SW8270C	ug/L	< 95.2 U	< 90.9 UJ	< 95.2 U	< 100 UJ	< 90.9 UJ
Propyzamide	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Safrole	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Thionazin	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U
Triethylphosphorothioate	SW8270C	ug/L	< 9.5 U	< 9.1 UJ	< 9.5 U	< 10.0 U	< 9.1 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
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		Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
		Sample Type	FB	FB	FB	FB	FB
		Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit					
Volatile Organic Compounds, Total							
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260B_SIM	ug/L	< 3.00 UJ	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U
1,4-Dioxane	SW8260C	ug/L	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U

Notes and definitions are presented on Page 18

Table 14b: Validated Field Quality Control Data—Field Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

		Sample ID	FB-004-WQ-20210810	FB-003-WQ-20210813	FB-005-WQ-20210816	FB-006-WQ-20210825	FB-007-WQ-20210825
		Sample Type	FB	FB	FB	FB	FB
		Sample Date	08/10/2021	08/13/2021	08/16/2021	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit					
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.037 U	< 0.037 U	< 0.035 U	< 0.037 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.037 U	< 0.037 U	< 0.035 U	< 0.037 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ

Notes:

ug/L = micrograms per liter

mg/L = milligrams per liter

pCi/L = picocuries per liter

***Bold** = Detected*

NA = Not Available

Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers

QualifierDefinition

J = Estimated concentration.

J+ = The result is an estimated concentration, but may be biased high.

J- = The result is an estimated concentration, but may be biased low.

U = The analyte was analyzed for but was not detected at or above the referenced reporting limit or minimum detectable concer

UJ = The analyte was analyzed for, but was not detected. The reporting limit or minimum detectable concentration is approximat

Notes and definitions are presented on Page 18

Table 14c: Validated Field Quality Control Data—Filter Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			Sample ID	FILTB-001-WQ-20210222	FILTB-002-WQ-20210222	FILTB-001-WQ-20210503	FILTB-002-WQ-20210503	FILTB-001A-WQ-20210802	FILTB-001-WQ-20210802
			Sample Type	FILTB	FILTB	FILTB	FILTB	FILTB	FILTB
			Sample Date	02/22/2021	02/22/2021	05/03/2021	05/03/2021	08/02/2021	08/02/2021
Analyte	Analytic Method	Unit							
General Chemistry Parameters									
Dissolved Organic Carbon	SM5310C	mg/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Metals, Dissolved									
Antimony	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Arsenic	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Beryllium	SW6020	ug/L		< 0.20 U	NA	< 0.20 U	NA	NA	< 0.20 U
Cadmium	SW6020	ug/L		< 0.20 U	NA	< 0.20 U	NA	NA	< 0.20 U
Chromium	SW6020	ug/L		**0.28 J**	NA	< 2.0 U	NA	NA	**0.27 J**
Copper	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	**0.24 J**
Lead	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Selenium	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Silver	SW6020	ug/L		< 0.50 U	NA	< 0.50 U	NA	NA	< 0.50 U
Thallium	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Thorium	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Uranium	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Vanadium	SW6020	ug/L		< 1.0 U	NA	< 1.0 U	NA	NA	< 1.0 U
Aluminum	SW6010B	ug/L		< 200 U	NA	< 200 U	NA	NA	< 200 U
Barium	SW6010B	ug/L		< 10.0 U	NA	< 10.0 U	NA	NA	< 10.0 U
Boron	SW6010B	ug/L		< 100 U	NA	< 100 U	NA	NA	< 100 U
Calcium	SW6010B	ug/L		< 500 U	NA	< 500 U	NA	NA	< 500 U
Cobalt	SW6010B	ug/L		< 5.0 U	NA	< 5.0 U	NA	NA	< 5.0 U
Iron	SW6010B	ug/L		**38.0 J**	NA	< 50.0 U	NA	NA	< 50.0 U
Lithium	SW6010B	ug/L		< 20.0 U	NA	< 20.0 U	NA	NA	< 20.0 U
Magnesium	SW6010B	ug/L		< 500 U	NA	< 500 U	NA	NA	< 500 U
Manganese	SW6010B	ug/L		< 5.0 U	NA	**1.1 J**	NA	NA	< 5.0 U
Molybdenum	SW6010B	ug/L		< 10.0 U	NA	**0.80 J**	NA	NA	< 10.0 U
Nickel	SW6010B	ug/L		< 10.0 U	NA	< 10.0 U	NA	NA	< 10.0 U
Potassium	SW6010B	ug/L		< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U
Silicon	SW6010B	ug/L		< 200 U	NA	< 200 U	NA	NA	< 200 U
Sodium	SW6010B	ug/L		< 1,000 U	NA	< 1,000 U	NA	NA	< 1,000 U
Strontium	SW6010B	ug/L		< 10.0 U	NA	< 10.0 U	NA	NA	< 10.0 U
Tin	SW6010B	ug/L		< 10.0 U	NA	< 10.0 U	NA	NA	< 10.0 U
Titanium	SW6010B	ug/L		< 10.0 U	NA	< 10.0 U	NA	NA	< 10.0 U
Zinc	SW6010B	ug/L		< 20.0 U	NA	< 20.0 U	NA	NA	< 20.0 U
Mercury	SW7470A	ug/L		< 0.20 U	NA	< 0.20 U	NA	NA	< 0.20 U
Metals, Total									
Chromium (VI)	SW7199	ug/L		NA	< 0.100 U	NA	< 0.100 U	< 0.100 U	NA
Radiochemistry, Dissolved									
Radium-226	E903.1	pCi/L		-0.166 ± 0.287 (0.725) U	NA	0 ± 0.298 (0.480) U	NA	NA	0.105 ± 0.241 (0.143) U
Radium-228	E904.0	pCi/L		-0.0850 ± 0.282 (0.685) U	NA	0.163 ± 0.319 (0.702) U	NA	NA	-0.495 ± 0.658 (1.56) U
Radium-226/228	TOTRADIUMCALCULATION	pCi/L		0 ± 0.569 (1.41) U	NA	0.163 ± 0.617 (1.18) U	NA	NA	0.105 ± 0.899 (1.70) U
Thorium-228	HASL300	pCi/L		0.025 ± 0.111 (0.258) U	NA	0.033 ± 0.100 (0.247) U	NA	NA	**0.367 ± 0.223 (0.313)**
Thorium-230	HASL300	pCi/L		-0.019 ± 0.067 (0.133) U	NA	-0.005 ± 0.097 (0.128) U	NA	NA	-0.005 ± 0.081 (0.112) U
Thorium-232	HASL300	pCi/L		-0.006 ± 0.067 (0.097) U	NA	0 ± 0.097 (0.073) U	NA	NA	-0.007 ± 0.081 (0.121) U
Uranium-234	HASL300	pCi/L		**0.493 ± 0.221 (0.175)**	NA	0.013 ± 0.081 (0.130) U	NA	NA	0.029 ± 0.081 (0.149) U
Uranium-235	HASL300	pCi/L		**0.161 ± 0.133 (0.075)**	NA	0.029 ± 0.106 (0.080) U	NA	NA	0.051 ± 0.105 (0.146) U
Uranium-238	HASL300	pCi/L		0.083 ± 0.093 (0.140) U	NA	0 ± 0.081 (0.061) U	NA	NA	0.058 ± 0.089 (0.175) U

Notes:
ug/L = micrograms per liter
mg/L = milligrams per liter
pCi/L = picocuries per liter
***Bold** = Detected*
NA = Not Available
Radiochemistry data is shown in the following format: activity ± total uncertainty (minimum detectable concentration) qualifiers
QualifierDefinition
J = Estimated concentration.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit or minimum detectable concentration.

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-001-WQ-20210222	TB-002-WQ-20210223	TB-003-WQ-20210224	TB-004-WQ-20210224	TB-005-WQ-20210225	TB-006-WQ-20210225	TB-007-WQ-20210226	TB-008-WQ-20210226	TB-009-WQ-20210301	TB-010-WQ-20210301	TB-011-WQ-20210302	TB-012-WQ-20210302	TB-013-WQ-20210303	TB-014-WQ-20210303
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			02/22/2021	02/23/2021	02/24/2021	02/24/2021	02/25/2021	02/25/2021	02/26/2021	02/26/2021	03/01/2021	03/01/2021	03/02/2021	03/02/2021	03/03/2021	03/03/2021
Analyte	Analytic Method	Unit														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	**655 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	**655 J**	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,140 U	< 1,290 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,150 U	< 1,300 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 UJ	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 UJ	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 UJ	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 R	< 100 UJ	< 100 UJ
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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Sample ID			TB-001-WQ-20210222	TB-002-WQ-20210223	TB-003-WQ-20210224	TB-004-WQ-20210224	TB-005-WQ-20210225	TB-006-WQ-20210225	TB-007-WQ-20210226	TB-008-WQ-20210226	TB-009-WQ-20210301	TB-010-WQ-20210301	TB-011-WQ-20210302	TB-012-WQ-20210302	TB-013-WQ-20210303	TB-014-WQ-20210303
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			02/22/2021	02/23/2021	02/24/2021	02/24/2021	02/25/2021	02/25/2021	02/26/2021	02/26/2021	03/01/2021	03/01/2021	03/02/2021	03/02/2021	03/03/2021	03/03/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 UJ
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.034 U	< 0.033 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.033 U	< 0.034 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.034 U	< 0.033 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.033 U	< 0.034 U	< 0.035 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-015-WQ-20210304	TB-016-WQ-20210304	TB-017-WQ-20210305	TB-018-WQ-20210305	TB-019-WQ-20210308	TB-020-WQ-20210308	TB-021-WQ-20210309	TB-022-WQ-20210309	TB-023-WQ-20210310	TB-024-WQ-20210310	TB-025-WQ-20210312	TB-026-WQ-20210312	TB-027-WQ-20210316	TB-028-WQ-20210315
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			03/04/2021	03/04/2021	03/05/2021	03/05/2021	03/08/2021	03/08/2021	03/09/2021	03/09/2021	03/10/2021	03/10/2021	03/12/2021	03/12/2021	03/15/2021	03/15/2021
Analyte	Analytic Method	Unit														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 936 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 936 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 936 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 936 U	< 936 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,320 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,080 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,320 U	< 1,230 U	< 1,330 U	< 1,000 UJ	< 1,040 UJ	< 1,160 UJ	< 1,310 UJ	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,140 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,080 U	< 2,080 U	< 2,000 U	< 2,020 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 UJ	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,080 U	< 2,080 U	< 2,000 U	< 2,020 U	< 2,000 U	< 2,000 U	< 2,000 UJ	< 2,000 UJ	< 2,000 U	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,040 U	< 1,040 U	< 1,000 U	< 1,010 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 UJ
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-015-WQ-20210304	TB-016-WQ-20210304	TB-017-WQ-20210305	TB-018-WQ-20210305	TB-019-WQ-20210308	TB-020-WQ-20210308	TB-021-WQ-20210309	TB-022-WQ-20210309	TB-023-WQ-20210310	TB-024-WQ-20210310	TB-025-WQ-20210312	TB-026-WQ-20210312	TB-027-WQ-20210316	TB-028-WQ-20210315
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			03/04/2021	03/04/2021	03/05/2021	03/05/2021	03/08/2021	03/08/2021	03/09/2021	03/09/2021	03/10/2021	03/10/2021	03/12/2021	03/12/2021	03/15/2021	03/15/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ
Isobutyl alcohol	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.037 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.037 U	< 0.036 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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			TB-029-WQ-20210316	TB-001-WQ-20210503	TB-002-WQ-20210504	TB-003-WQ-20210504	TB-004-WQ-20210504	TB-005-WQ-20210505	TB-006-WQ-20210505	TB-007-WQ-20210506	TB-008-WQ-20210506	TB-009-WQ-20210507	TB-010-WQ-20210507	TB-011-WQ-20210507	TB-012-WQ-20210510	TB-013-WQ-20210510
Sample ID																
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			03/16/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021	05/05/2021	05/05/2021	05/06/2021	05/06/2021	05/07/2021	05/07/2021	05/07/2021	05/10/2021	05/10/2021
Analyte	**Analytic Method**	**Unit**														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	< 2,000 U	< 2,000 U	NA	NA	< 2,000 U	< 2,000 U	NA	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	NA	NA	< 1,000 U	< 1,000 U	NA	NA
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**1.6 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**5.3 J**	< 20.0 U	**2.4 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			TB-029-WQ-20210316	TB-001-WQ-20210503	TB-002-WQ-20210504	TB-003-WQ-20210504	TB-004-WQ-20210504	TB-005-WQ-20210505	TB-006-WQ-20210505	TB-007-WQ-20210506	TB-008-WQ-20210506	TB-009-WQ-20210507	TB-010-WQ-20210507	TB-011-WQ-20210507	TB-012-WQ-20210510	TB-013-WQ-20210510
Sample ID																
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			03/16/2021	05/03/2021	05/04/2021	05/04/2021	05/04/2021	05/05/2021	05/05/2021	05/06/2021	05/06/2021	05/07/2021	05/07/2021	05/07/2021	05/10/2021	05/10/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	NA	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**4.1 J**	**2.8 J**	< 20.0 U	< 20.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.037 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.037 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-014-WQ-20210511	TB-015-WQ-20210511	TB-016-WQ-20210512	TB-017-WQ-20210512	TB-018-WQ-20210512	TB-019-WQ-20210513	TB-020-WQ-20210513	TB-021-WQ-20210514	TB-022-WQ-20210514	TB-023-WQ-20210517	TB-024-WQ-20210517	TB-025-WQ-20210518	TB-026-WQ-20210518	TB-027-WQ-20210519
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			05/11/2021	05/11/2021	05/12/2021	05/12/2021	05/12/2021	05/13/2021	05/13/2021	05/14/2021	05/14/2021	05/17/2021	05/17/2021	05/18/2021	05/18/2021	05/19/2021
Analyte	Analytic Method	Unit														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 936 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 936 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 936 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 909 U	< 900 U	< 936 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,020 U	NA	NA	NA	NA	< 2,000 U	< 2,020 U	< 2,000 U	NA	NA	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,020 U	NA	NA	NA	NA	< 2,000 U	< 2,020 U	< 2,000 U	NA	NA	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,010 U	NA	NA	NA	NA	< 1,000 U	< 1,010 U	< 1,000 U	NA	NA	< 1,000 U
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	**3.7 J**	< 20.0 U	< 20.0 U	< 20.0 U	**5.5 J**	< 20.0 U	< 20.0 U	< 20.0 U	**3.4 J**	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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			TB-014-WQ-20210511	TB-015-WQ-20210511	TB-016-WQ-20210512	TB-017-WQ-20210512	TB-018-WQ-20210512	TB-019-WQ-20210513	TB-020-WQ-20210513	TB-021-WQ-20210514	TB-022-WQ-20210514	TB-023-WQ-20210517	TB-024-WQ-20210517	TB-025-WQ-20210518	TB-026-WQ-20210518	TB-027-WQ-20210519
Sample ID			TB-014-WQ-20210511	TB-015-WQ-20210511	TB-016-WQ-20210512	TB-017-WQ-20210512	TB-018-WQ-20210512	TB-019-WQ-20210513	TB-020-WQ-20210513	TB-021-WQ-20210514	TB-022-WQ-20210514	TB-023-WQ-20210517	TB-024-WQ-20210517	TB-025-WQ-20210518	TB-026-WQ-20210518	TB-027-WQ-20210519
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			05/11/2021	05/11/2021	05/12/2021	05/12/2021	05/12/2021	05/13/2021	05/13/2021	05/14/2021	05/14/2021	05/17/2021	05/17/2021	05/18/2021	05/18/2021	05/19/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	**2.3 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**13.5 J**	< 20.0 U	< 20.0 U	< 20.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	**0.17 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.038 U	< 0.038 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.044 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U
Ethylene dibromide	SW8011	ug/L	< 0.038 U	< 0.038 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.044 U	< 0.035 U	< 0.037 U	< 0.035 U	< 0.036 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.034 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-028-WQ-20210519	TB-029-WQ-20210520	TB-030-WQ-20210520	TB-031-WQ-20210521	TB-032-WQ-20210521	TB-033-WQ-20210524	TB-034-WQ-20210525	TB-035-WQ-20210526	TB-036-WQ-20210528	TB-001-WQ-20210802	TB-002-WQ-20210803	TB-003-WQ-20210803	TB-004-WQ-20210804	TB-005-WQ-20210804
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			05/19/2021	05/20/2021	05/20/2021	05/21/2021	05/21/2021	05/24/2021	05/25/2021	05/26/2021	05/28/2021	08/02/2021	08/03/2021	08/03/2021	08/04/2021	08/04/2021
Analyte	Analytic Method	Unit														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA	NA	NA	< 2,000 U	< 2,000 U	< 2,000 U	< 2,000 U	NA
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA	NA	NA	< 1,000 U	< 1,000 U	< 1,000 U	< 1,000 U	NA
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 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	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260B_SIM	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 UJ	< 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	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**5.2 J**	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample ID			TB-028-WQ-20210519	TB-029-WQ-20210520	TB-030-WQ-20210520	TB-031-WQ-20210521	TB-032-WQ-20210521	TB-033-WQ-20210524	TB-034-WQ-20210525	TB-035-WQ-20210526	TB-036-WQ-20210528	TB-001-WQ-20210802	TB-002-WQ-20210803	TB-003-WQ-20210803	TB-004-WQ-20210804	TB-005-WQ-20210804
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			05/19/2021	05/20/2021	05/20/2021	05/21/2021	05/21/2021	05/24/2021	05/25/2021	05/26/2021	05/28/2021	08/02/2021	08/03/2021	08/03/2021	08/04/2021	08/04/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	**0.54 J**	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**2.0 J**	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	**3.9 J**	< 20.0 U	< 20.0 U	< 20.0 U	**3.8 J**	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.034 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.034 U	< 0.035 U	< 0.035 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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			TB-006-WQ-20210805	TB-007-WQ-20210805	TB-008-WQ-20210806	TB-009-WQ-20210806	TB-010-WQ-20210809	TB-011-WQ-20210809	TB-012-WQ-20210810	TB-013-WQ-20210810	TB-014-WQ-20210811	TB-015-WQ-20210811	TB-016-WQ-20210812	TB-017-WQ-20210812	TB-018-WQ-20210813	TB-019-WQ-20210813
Sample ID			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Type			08/05/2021	08/05/2021	08/06/2021	08/06/2021	08/09/2021	08/09/2021	08/10/2021	08/10/2021	08/11/2021	08/11/2021	08/12/2021	08/12/2021	08/13/2021	08/13/2021
Sample Date																
Analyte	**Analytic Method**	**Unit**														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	< 2,000 U	NA	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 2,000 U	NA	NA	NA	NA	NA	NA	< 2,000 U	NA	< 2,000 U
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	NA	< 1,000 U	NA	NA	NA	NA	NA	NA	< 1,000 U	NA	< 1,000 U
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260B_SIM	ug/L	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 UJ	< 3.00 UJ	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 UJ	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			TB-006-WQ-20210805	TB-007-WQ-20210805	TB-008-WQ-20210806	TB-009-WQ-20210806	TB-010-WQ-20210809	TB-011-WQ-20210809	TB-012-WQ-20210810	TB-013-WQ-20210810	TB-014-WQ-20210811	TB-015-WQ-20210811	TB-016-WQ-20210812	TB-017-WQ-20210812	TB-018-WQ-20210813	TB-019-WQ-20210813
Sample ID			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Type			08/05/2021	08/05/2021	08/06/2021	08/06/2021	08/09/2021	08/09/2021	08/10/2021	08/10/2021	08/11/2021	08/11/2021	08/12/2021	08/12/2021	08/13/2021	08/13/2021
Sample Date																
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.4 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**1.2 J**	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.035 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.035 U
Ethylene dibromide	SW8011	ug/L	< 0.035 U	< 0.036 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.034 U	< 0.035 U	< 0.034 U	< 0.036 U	< 0.037 U	< 0.036 U	< 0.035 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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			TB-020-WQ-20210816	TB-021-WQ-20210816	TB-022-WQ-20210817	TB-023-WQ-20210817	TB-024-WQ-20210818	TB-025-WQ-20210818	TB-026-WQ-20210819	TB-027-WQ-20210819	TB-028-WQ-20210820	TB-029-WQ-20210820	TB-030-WQ-20210823	TB-031-WQ-20210823	TB-032-WQ-20210824	TB-033-WQ-20210824
Sample ID			TB-020-WQ-20210816	TB-021-WQ-20210816	TB-022-WQ-20210817	TB-023-WQ-20210817	TB-024-WQ-20210818	TB-025-WQ-20210818	TB-026-WQ-20210819	TB-027-WQ-20210819	TB-028-WQ-20210820	TB-029-WQ-20210820	TB-030-WQ-20210823	TB-031-WQ-20210823	TB-032-WQ-20210824	TB-033-WQ-20210824
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			08/16/2021	08/16/2021	08/17/2021	08/17/2021	08/18/2021	08/18/2021	08/19/2021	08/19/2021	08/20/2021	08/20/2021	08/23/2021	08/23/2021	08/24/2021	08/24/2021
Analyte	Analytic Method	Unit														
Petroleum Hydrocarbons,Total																
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 UJ	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 2,000 U	< 2,000 U	NA	< 2,000 UJ	NA	< 2,000 U	< 2,000 U	NA	< 2,000 U	< 2,000 U	**1,810 J**
C6-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	NA	NA	NA	< 1,000 U	< 1,000 U	NA	< 1,000 UJ	NA	< 1,000 U	< 1,000 U	NA	< 1,000 U	< 1,000 U	< 1,000 U
Volatile Organic Compounds, Total																
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane	SW8260B_SIM	ug/L	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U	< 3.00 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Acetonitrile	SW8260C	ug/L	< 100 UJ	< 100 UJ	< 100 UJ	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
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Sample ID			TB-020-WQ-20210816	TB-021-WQ-20210816	TB-022-WQ-20210817	TB-023-WQ-20210817	TB-024-WQ-20210818	TB-025-WQ-20210818	TB-026-WQ-20210819	TB-027-WQ-20210819	TB-028-WQ-20210820	TB-029-WQ-20210820	TB-030-WQ-20210823	TB-031-WQ-20210823	TB-032-WQ-20210824	TB-033-WQ-20210824
Sample Type			TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
Sample Date			08/16/2021	08/16/2021	08/17/2021	08/17/2021	08/18/2021	08/18/2021	08/19/2021	08/19/2021	08/20/2021	08/20/2021	08/23/2021	08/23/2021	08/24/2021	08/24/2021
Analyte	Analytic Method	Unit														
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ	< 20.0 UJ	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.96 J**	**1.1 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 UJ	< 20.0 UJ
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 UJ	< 3.0 UJ	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.037 U	< 0.038 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U
Ethylene dibromide	SW8011	ug/L	< 0.035 U	< 0.035 U	< 0.037 U	< 0.038 U	< 0.035 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U	< 0.036 U	< 0.035 U	< 0.037 U	< 0.036 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

			TB-034-WQ-20210825	TB-035-WQ-20210825
		Sample ID	TB-034-WQ-20210825	TB-035-WQ-20210825
		Sample Type	TB	TB
		Sample Date	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit		
Petroleum Hydrocarbons,Total				
C12-C28-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U
C28-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U
C6-C12-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U
C6-C35-Total	TCEQ-TX-1005	ug/L	< 900 U	< 900 U
C10-C12-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C10-C12-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C12-C16-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C12-C16-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C16-C21-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C16-C21-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C21-C35-Aliphatics	TCEQ-TX-1006	ug/L	< 2,000 U	< 2,000 U
C21-C35-Aromatics	TCEQ-TX-1006	ug/L	**1,030 J**	**1,310 J**
C6-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C6-C8-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C7-C8-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C8-C10-Aliphatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
C8-C10-Aromatics	TCEQ-TX-1006	ug/L	< 1,000 U	< 1,000 U
Volatile Organic Compounds, Total				
1,1,1,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1,1-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1,2-Trichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,1-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2,3-Trichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U
1,2-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2-Dichloroethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,3,5-Trimethylbenzene	SW8260C	ug/L	< 5.0 U	< 5.0 U
1,3-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,3-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
1,4-Dioxane	SW8260C	ug/L	NA	NA
1,4-Dioxane	SW8260B_SIM	ug/L	< 3.00 U	< 3.00 U
2,2-Dichloropropane	SW8260C	ug/L	< 1.0 U	< 1.0 U
2-Butanone	SW8260C	ug/L	< 20.0 U	< 20.0 U
2-Hexanone	SW8260C	ug/L	< 20.0 U	< 20.0 U
4-Chlorotoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U
4-Isopropyltoluene	SW8260C	ug/L	< 1.0 U	< 1.0 U
4-Methyl-2-pentanone	SW8260C	ug/L	< 20.0 U	< 20.0 U
Acetone	SW8260C	ug/L	< 20.0 UJ	< 20.0 UJ
Acetonitrile	SW8260C	ug/L	< 100 U	< 100 U
Acrolein	SW8260C	ug/L	< 20.0 U	< 20.0 UJ
Acrylonitrile	SW8260C	ug/L	< 100 U	< 100 U
Allyl chloride	SW8260C	ug/L	< 20.0 U	< 20.0 U
Benzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
beta-Chloroprene	SW8260C	ug/L	< 100 U	< 100 U
Bromobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U

Notes and definitions are presented on Page 16

Table 14d: Validated Field Quality Control Data—Trip Blanks
West Lake Landfill OU-3
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		Sample ID	TB-034-WQ-20210825	TB-035-WQ-20210825
		Sample Type	TB	TB
		Sample Date	08/25/2021	08/25/2021
Analyte	Analytic Method	Unit		
Bromodichloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
Bromoform	SW8260C	ug/L	< 1.0 U	< 1.0 U
Bromomethane	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ
Carbon disulfide	SW8260C	ug/L	< 5.0 U	< 5.0 U
Carbon tetrachloride	SW8260C	ug/L	< 1.0 U	< 1.0 U
Chlorobenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Chlorobromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
Chloroethane	SW8260C	ug/L	< 2.0 U	< 2.0 UJ
Chloroform	SW8260C	ug/L	< 1.0 U	< 1.0 U
Chloromethane	SW8260C	ug/L	< 2.0 U	< 2.0 UJ
cis-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Cyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U
Dibromochloromethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
Dibromomethane	SW8260C	ug/L	< 1.0 U	< 1.0 U
Dichlorodifluoromethane (Freon 12)	SW8260C	ug/L	< 2.0 UJ	< 2.0 U
Ethyl ether	SW8260C	ug/L	< 20.0 U	< 20.0 U
Ethyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U
Ethylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Hexachlorobutadiene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Isobutyl alcohol	SW8260C	ug/L	< 100 U	< 100 U
Isopropylbenzene (Cumene)	SW8260C	ug/L	< 1.0 U	< 1.0 U
m,p-Xylenes	SW8260C	ug/L	< 2.0 U	< 2.0 U
Methacrylonitrile	SW8260C	ug/L	< 100 U	< 100 U
Methyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U
Methyl iodide	SW8260C	ug/L	< 5.0 UJ	< 5.0 UJ
Methyl methacrylate	SW8260C	ug/L	< 20.0 U	< 20.0 U
Methyl tert-butyl ether	SW8260C	ug/L	< 4.0 U	< 4.0 U
Methylcyclohexane	SW8260C	ug/L	< 20.0 U	< 20.0 U
Methylene chloride	SW8260C	ug/L	< 5.0 U	**0.87 J**
n-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
n-Hexane	SW8260C	ug/L	< 5.0 U	< 5.0 U
n-Propylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
o-Chlorotoluene (2-chlorotoluene)	SW8260C	ug/L	< 1.0 U	< 1.0 U
o-Xylene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Propionitrile	SW8260C	ug/L	< 100 U	< 100 U
sec-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Styrene	SW8260C	ug/L	< 1.0 U	< 1.0 U
tert-Butylbenzene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Tetrachloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Tetrahydrofuran	SW8260C	ug/L	< 20.0 U	< 20.0 UJ
Toluene	SW8260C	ug/L	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene	SW8260C	ug/L	< 1.0 U	< 1.0 U
trans-1,4-Dichlorobutene	SW8260C	ug/L	< 100 U	< 100 U
Trichloroethene	SW8260C	ug/L	< 1.0 U	< 1.0 U
Trichlorofluoromethane (Freon 11)	SW8260C	ug/L	< 2.0 U	< 2.0 UJ
Vinyl acetate	SW8260C	ug/L	< 20.0 U	< 20.0 U
Vinyl chloride	SW8260C	ug/L	< 1.0 U	< 1.0 U
Xylene, Total	SW8260C	ug/L	< 3.0 U	< 3.0 U
1,2-Dibromo-3-chloropropane	SW8011	ug/L	< 0.034 U	< 0.036 U
Ethylene dibromide	SW8011	ug/L	< 0.034 U	< 0.036 U

Notes:
ug/L = micrograms per liter
***Bold** = Detected*
NA = Not Available

QualifierDefinition
J = Estimated concentration.
R = Rejected, data not usable.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit or minimum detectable concentration.
UJ = The analyte was analyzed for, but was not detected. The reporting limit or minimum detectable concentration is approximate and may be inaccurate or imprecise.

Notes and definitions are presented on Page 16

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	AI-001					AI-002								
Sample Location			AI-001					AI-002								
Sample Date			01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	01-17-2021	01-17-2021	04-14-2021	04-14-2021	07-23-2021	07-23-2021	10-27-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	FD	N	FD	N	FD	N	FD
			Engineering Building - Foyer					Engineering Building - Conference Room								
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational						
TO3																
Methane	ppmv	1,000	**52**	**17**	**5.8**	**29**	**47**	**51**	**18**	**15**	**5.9**	**6.3**	**30**	**27**	**52**	**52**
TO15																
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	**2.1**	**0.74**	**0.74**	**0.43 J**	**1.6**	**1.3**	**0.58 J**	**0.58 J**	**0.85**	**0.50 J**	**0.40 J**	**0.41 J**	**1.7**	**1.8**
1S-.alpha.-Pinene	ug/m3	NE	**1.1**	**0.49 J**	**0.69 J**	**2.1**	**0.36 J**	**1.1**	**0.28 J**	**0.60 J**	**0.89**	**0.84**	**2.1**	**2.4**	**0.41 J**	**0.35 J**
2-Butanone	ug/m3	2,190	**1.0 J**	**0.42 J**	**1.4**	**3.8**	**1.5**	**1.0 J**	**0.66 J**	**1.1 J**	**1.8**	**1.5**	**4.3**	**5.1**	**1.6**	**1.6**
2-Hexanone	ug/m3	13.1	< 0.094 U	< 0.092 U	**0.29 J**	**0.90 J**	**0.19 J**	< 0.10 U	< 0.13 U	**0.29 J**	**0.44 J**	**0.26 J**	**0.97 J**	**1.1 J**	< 0.090 U	< 0.085 U
4-Ethyltoluene	ug/m3	NE	**0.18 J**	**0.61 J**	**0.15 J**	< 0.12 U	< 0.12 U	**0.15 J**	< 0.16 U	< 0.12 U	**0.16 J**	**0.13 J**	**0.28 J**	**0.31 J**	< 0.12 U	**0.11 J**
4-Methyl-2-pentanone	ug/m3	1,310	< 0.10 U	< 0.10 U	**0.29 J**	**0.46 J**	**0.15 J**	< 0.11 U	< 0.14 U	< 0.10 U	**0.36 J**	**0.28 J**	**0.57 J**	**0.90 J**	**0.18 J**	**0.16 J**
Acetonitrile	ug/m3	26.3	**0.43 J**	< 0.18 U	**0.44 J**	**3.5**	**0.31 J**	**0.41 J**	< 0.25 U	< 0.18 U	**0.59 J**	**0.50 J**	**3.5**	**3.3**	**0.34 J**	**0.38 J**
Acrylonitrile	ug/m3	0.876	< 0.16 U	< 0.15 U	**0.27 J**	< 0.16 U	< 0.15 U	< 0.17 U	< 0.21 U	< 0.16 U	**0.34 J**	**0.29 J**	< 0.16 U	< 0.15 U	< 0.15 U	< 0.14 U
Allyl chloride	ug/m3	0.438	< 0.10 U	< 0.10 U	< 0.098 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.14 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.099 U	< 0.093 U
Benzyl chloride	ug/m3	0.438	< 0.17 U	< 0.17 U	< 0.16 U	< 0.18 U	< 0.17 U	< 0.18 U	< 0.23 U	< 0.17 U	< 0.17 U	< 0.18 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.15 U
Bromoform	ug/m3	111	< 0.16 U	< 0.15 U	< 0.15 UJ	< 0.16 U	< 0.15 U	< 0.17 U	< 0.21 U	< 0.16 U	< 0.16 UJ	< 0.16 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.14 U
Carbon disulfide	ug/m3	307	**1.5**	**0.81 J**	**1.9**	**0.67 J**	**0.45 J**	**1.2 J**	**0.54 J**	**0.57 J**	**1.6**	**1.4 J**	**0.67 J**	**1.2 J**	**0.23 J**	**2.2**
Cyclohexane	ug/m3	2,630	< 0.21 U	< 0.21 U	< 0.20 U	< 0.22 U	< 0.21 U	< 0.23 U	**0.40 J**	< 0.21 U	**0.23 J**	< 0.22 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.19 U
D-Limonene	ug/m3	NE	**3.7**	**1.1**	**4.1**	**4.4**	**0.78**	**4.6**	< 0.21 U	**1.1**	**5.5**	**4.6**	**4.2**	**4.7**	**1.7**	**0.84**
Ethanol	ug/m3	NE	**140**	**38**	**270**	**200**	**150**	**140**	**47**	**54**	**290**	**290**	**190**	**210**	**160**	**180**
Ethyl acetate	ug/m3	30.7	**1.7**	< 0.39 U	**3.3**	**4.4 J**	**1.9 J**	**1.3 J**	< 0.54 UJ	**7.5 J**	**2.3**	**2.8**	**5.4 J**	**88 J**	**2.9**	**3.7**
Heptane	ug/m3	175	**0.31 J**	**1.3**	**0.30 J**	**0.77**	**0.51 J**	**0.31 J**	**1.5**	**0.60 J**	**0.36 J**	**0.31 J**	**0.83**	**1.7**	**0.51 J**	**0.56 J**
Isopropyl alcohol	ug/m3	87.6	**2.6**	**1.3 J**	**4.3**	**49**	**9.0**	**2.6**	**1.3 J**	**1.5**	**5.8**	**5.8**	**49**	**52**	**9.8**	**11**
Isopropylbenzene (Cumene)	ug/m3	175	**0.32 J**	**0.39 J**	< 0.10 U	**0.23 J**	< 0.11 U	**0.34 J**	< 0.15 U	**0.22 J**	**0.14 J**	< 0.11 U	**0.24 J**	**0.28 J**	< 0.11 U	< 0.099 U
Methyl methacrylate	ug/m3	307	< 0.27 U	< 0.27 U	< 0.26 U	< 0.28 U	< 0.26 U	< 0.29 U	< 0.37 U	< 0.27 U	< 0.27 U	< 0.28 U	< 0.27 U	**0.95 J**	< 0.26 U	< 0.25 U
n-Butyl acetate	ug/m3	NE	< 0.10 U	< 0.10 U	**0.62 J**	**1.5**	**0.30 J**	**0.22 J**	< 0.14 U	< 0.10 U	**0.75 J**	**0.65 J**	**1.7 J**	**6.7 J**	**0.30 J**	**0.33 J**
n-Hexane	ug/m3	307	**0.40 J**	**0.50 J**	**0.27 J**	< 0.16 U	**0.83**	**0.38 J**	**0.91 J**	**0.37 J**	**0.38 J**	**0.29 J**	< 0.16 U	< 0.15 U	**0.83**	**0.94**
Nonane	ug/m3	8.76	**2.7**	**3.4**	**0.22 J**	**0.39 J**	**0.19 J**	**3.0**	**0.33 J**	**1.9 J**	**0.28 J**	**0.23 J**	**0.47 J**	**0.48 J**	**0.22 J**	**0.25 J**
n-Propylbenzene	ug/m3	438	**0.12 J**	**0.42 J**	**0.16 J**	**0.52 J**	**0.17 J**	**0.13 J**	< 0.15 U	**0.20 J**	**0.61 J**	**0.66 J**	**0.59 J**	**0.80**	**0.18 J**	**0.22 J**
Octane	ug/m3	NE	**0.26 J**	**0.96**	**0.31 J**	**0.43 J**	**0.17 J**	**0.28 J**	**0.52 J**	**0.37 J**	**0.34 J**	**0.33 J**	**0.54 J**	**0.84**	**0.19 J**	**0.19 J**
Propylene	ug/m3	1,310	**0.90**	< 0.18 U	**1.8**	**19**	**1.4**	**0.95**	< 0.25 U	< 0.18 U	**1.9**	**1.6**	**18**	**17**	**1.5**	**1.5**
Tetrahydrofuran	ug/m3	876	< 0.096 U	< 0.094 U	**0.15 J**	**0.57 J**	**0.82 J**	**0.23 J**	< 0.13 U	**0.13 J**	**1.9**	**2.5**	**0.58 J**	**0.70 J**	**0.95 J**	**1.1 J**
Vinyl acetate	ug/m3	87.6	< 1.7 U	< 1.7 UJ	**2.3 J**	< 1.8 U	< 1.7 U	< 1.8 U	< 2.3 U	< 1.7 U	**2.5 J**	< 1.8 U	< 1.7 U	< 1.7 U	< 1.6 U	**1.8 J**

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Sample Location			AI-001					AI-002								
Sample Date			01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	01-17-2021	01-17-2021	04-14-2021	04-14-2021	07-23-2021	07-23-2021	10-27-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	FD	N	FD	N	FD	N	FD
Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Engineering Building - Foyer					Engineering Building - Conference Room								
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational						
TO15-SIM																
1,1,1-Trichloroethane	ug/m3	2,190	**0.0085 J**	**0.020 J**	**0.011 J**	**0.014 J**	< 0.013 U	**0.0083 J**	< 0.011 U	**0.011 J**	**0.010 J**	**0.011 J**	**0.013 J**	< 0.017 U	< 0.012 U	**0.012 J**
1,1,2,2-Tetrachloroethane	ug/m3	2.11	< 0.010 U	< 0.010 U	< 0.0098 U	< 0.011 U	< 0.012 U	< 0.0095 U	< 0.014 U	< 0.010 U	< 0.010 U	< 0.011 U	< 0.010 U	< 0.020 U	< 0.012 U	< 0.011 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	2,190	**0.44**	**0.46**	**0.49**	**0.39**	**0.37**	**0.46**	**0.45**	**0.46**	**0.47**	**0.47**	**0.40**	**0.37**	**0.37**	**0.38**
1,1,2-Trichloroethane	ug/m3	0.0876	< 0.011 U	< 0.011 U	< 0.011 U	< 0.012 U	< 0.0082 U	< 0.010 U	< 0.015 U	< 0.011 U	< 0.011 U	< 0.012 U	< 0.011 U	< 0.022 U	< 0.0081 U	< 0.0076 U
1,1-Dichloroethane	ug/m3	76.7	< 0.0087 U	< 0.0085 U	< 0.0083 U	**0.094**	< 0.011 U	< 0.0081 U	< 0.012 U	**0.0096 J**	< 0.0088 U	< 0.0089 U	< 0.0087 U	< 0.017 U	< 0.011 U	< 0.011 U
1,1-Dichloroethene	ug/m3	87.6	< 0.012 U	< 0.012 U	< 0.012 U	**0.016 J**	< 0.012 U	< 0.011 U	< 0.017 U	< 0.012 U	< 0.012 U	< 0.013 U	**0.044 J**	**0.51 J**	< 0.012 U	< 0.011 U
1,2,4-Trichlorobenzene	ug/m3	0.876	< 0.019 U	< 0.018 U	< 0.018 U	< 0.019 U	< 0.028 U	< 0.017 U	< 0.025 U	**0.022 J**	< 0.019 U	< 0.019 U	< 0.019 U	**0.071 J**	< 0.027 U	< 0.026 U
1,2,4-Trimethylbenzene	ug/m3	26.3	**0.50**	**1.3**	**0.32**	**0.65**	**0.24**	**0.51**	**0.077 J**	**0.44 J**	**0.33**	**0.34**	**0.68**	**0.72**	**0.30**	**0.34**
1,2-Dibromo-3-chloropropane	ug/m3	0.0204	< 0.014 U	< 0.013 U	< 0.013 U	< 0.014 U	< 0.019 U	< 0.013 U	< 0.018 U	< 0.013 U	< 0.014 U	< 0.014 U	< 0.014 U	**0.032 J**	< 0.019 U	< 0.018 U
1,2-Dichlorobenzene	ug/m3	87.6	< 0.012 U	**0.036**	< 0.011 U	< 0.012 U	< 0.025 U	< 0.011 U	< 0.016 U	**0.031 J**	**0.17**	**0.20**	**0.028 J**	**0.042 J**	< 0.025 U	< 0.023 U
1,2-Dichloroethane	ug/m3	3.07	**0.067**	**0.062**	**0.080**	**0.065**	**0.065**	**0.067**	**0.060**	**0.069**	**0.14**	**0.17**	**0.063**	**0.075**	**0.062**	**0.066**
1,2-Dichloropropane	ug/m3	1.75	**0.021 J**	**0.023 J**	**0.029 J**	**0.025 J**	**0.011 J**	**0.019 J**	**0.021 J**	**0.35 J**	**0.028 J**	**0.028 J**	**0.024 J**	**0.078**	**0.012 J**	**0.013 J**
1,3,5-Trimethylbenzene	ug/m3	26.3	**0.14 J**	**0.39**	**0.10 J**	**0.21**	**0.066 J**	**0.15**	**0.038 J**	**0.13 J**	**0.11 J**	**0.11 J**	**0.22**	**0.25 J**	**0.089 J**	**0.10 J**
1,3-Butadiene	ug/m3	0.876	**0.14**	< 0.020 U	**0.088 J**	**0.026 J**	**0.065 J**	**0.14**	< 0.027 U	< 0.020 U	< 0.020 UJ	< 0.020 UJ	**0.030 J**	**0.055 J**	**0.091**	**0.15**
1,3-Dichlorobenzene	ug/m3	NE	< 0.012 U	< 0.012 U	< 0.012 U	**0.016 J**	< 0.024 U	< 0.011 U	< 0.016 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	**0.030 J**	< 0.023 U	< 0.022 U
1,4-Dichlorobenzene	ug/m3	11.1	**0.030 J**	**0.040**	**0.065**	**0.22**	**0.10**	**0.029 J**	< 0.016 U	**0.073**	**0.20 J**	**0.26 J**	**0.20**	**0.19**	**0.11**	**0.11**
1,4-Dioxane	ug/m3	13.1	**0.018 J**	**0.013 J**	**0.071 J**	< 0.012 U	< 0.012 U	**0.019 J**	< 0.016 U	**0.015 J**	**0.032 J**	**0.016 J**	< 0.012 U	< 0.024 U	**0.012 J**	**0.056 J**
Acetone	ug/m3	NE	**20**	**4.6**	**29**	**43**	**14**	**18**	**5.7**	**6.3**	**32**	**31**	**45**	**43**	**14**	**14**
Acrolein	ug/m3	0.00876	**0.45**	**0.22 J**	**0.77**	**1.4**	**0.66**	**0.46**	**0.20 J**	**0.26 J**	**1.0**	**0.89**	**1.9**	**2.4**	**1.0**	**0.70**
Benzene	ug/m3	13.1	**0.49**	**0.62**	**0.37**	**0.63**	**0.37**	**0.50**	**0.46**	**0.38**	**1.8 J**	**2.4 J**	**0.62 J**	**0.88 J**	**0.38**	**0.39**
Bromodichloromethane	ug/m3	3.31	**0.043**	< 0.0097 U	**0.043**	< 0.010 U	< 0.0081 U	**0.037**	< 0.013 U	< 0.0098 U	**0.041**	**0.042**	< 0.0099 U	< 0.019 U	< 0.0079 U	< 0.0075 U
Bromomethane	ug/m3	2.19	**0.025 J**	**0.027 J**	**0.029 J**	**0.055**	**0.032 J**	**0.026 J**	**0.027 J**	**0.029 J**	**0.032 J**	**0.035 J**	**0.026 J**	**0.038 J**	**0.031 J**	**0.038**
Carbon tetrachloride	ug/m3	20.4	**0.35**	**0.35**	**0.43**	**0.44**	**0.35**	**0.36**	**0.34**	**0.35**	**0.39**	**0.43**	**0.39**	**0.35**	**0.35**	**0.35**
Chlorobenzene	ug/m3	21.9	< 0.013 U	< 0.013 U	**0.014 J**	**0.071 J**	**0.039 J**	< 0.012 U	< 0.018 U	**0.020 J**	**0.21**	**0.24**	**0.070 J**	**0.35**	**0.041 J**	**0.047 J**
Chloroethane	ug/m3	1,750	**0.017 J**	**0.014 J**	**0.033 J**	**0.032 J**	**0.014 J**	**0.016 J**	< 0.016 U	**0.016 J**	**0.030 J**	**0.026 J**	**0.047**	**0.036 J**	**0.023 J**	**0.025 J**
Chloroform	ug/m3	5.33	**0.25**	**0.17**	**2.6**	**0.29**	**0.39**	**0.22**	**0.14 J**	**0.42**	**2.5**	**2.5**	**0.31**	**0.27 J**	**0.41**	**0.41**
Chloromethane	ug/m3	39.4	**0.32 J**	**0.21**	**0.29**	**0.071 J**	**0.052 J**	**0.30 J**	**0.25**	**0.23**	**0.30**	**0.25**	**0.073 J**	< 0.053 UJ	**0.060 J**	**0.044 J**
cis-1,2-Dichloroethene	ug/m3	NE	< 0.013 U	**0.038**	< 0.013 U	< 0.013 U	< 0.010 U	< 0.012 U	< 0.018 U	< 0.013 U	**0.038**	< 0.013 U	< 0.013 U	< 0.026 U	< 0.0099 U	< 0.0093 U
cis-1,3-Dichloropropene	ug/m3	NE	< 0.0089 U	< 0.0087 U	< 0.0084 U	< 0.0091 U	< 0.0099 U	< 0.0082 U	< 0.012 U	< 0.0088 U	< 0.0089 U	< 0.0091 U	< 0.0089 U	< 0.017 U	< 0.0097 U	< 0.0092 U
Dibromochloromethane	ug/m3	NE	< 0.013 U	< 0.012 U	< 0.012 U	< 0.013 U	< 0.0089 U	< 0.012 U	< 0.017 U	< 0.012 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.025 U	< 0.0088 U	< 0.0083 U
Dichlorodifluoromethane (Freon 12)	ug/m3	43.8	**2.5**	**2.1**	**2.7**	**1.9**	**1.9**	**2.3**	**2.1**	**2.1**	**2.6**	**2.5**	**2.0**	**1.8**	**1.9**	**1.9**
Ethylbenzene	ug/m3	49.1	**0.38**	**0.96**	**0.89**	**4.1**	**1.2**	**0.33**	**0.16 J**	**0.30**	**1.0**	**1.1**	**4.2**	**3.7**	**1.3**	**1.3**
Ethylene dibromide	ug/m3	0.204	< 0.011 U	< 0.011 U	< 0.011 U	**0.015 J**	< 0.0093 U	< 0.010 U	< 0.015 U	< 0.011 U	< 0.011 U	< 0.012 U	**0.013 J**	< 0.022 U	< 0.0092 U	< 0.0086 U
Hexachlorobutadiene	ug/m3	5.57	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.018 U	< 0.012 U	< 0.018 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	**0.030 J**	< 0.018 U	< 0.017 U
m,p-Xylenes	ug/m3	NE	**1.3**	**3.5**	**1.6**	**4.2**	**1.5**	**1.2**	**0.48 J**	**1.0 J**	**1.8**	**1.8**	**4.2**	**4.3**	**1.6**	**1.7**
Methyl tert-butyl ether	ug/m3	472	< 0.013 U	< 0.013 U	< 0.013 U	**0.023 J**	< 0.017 U	< 0.012 U	< 0.018 U	< 0.013 U	< 0.013 U	< 0.014 U	**0.019 J**	**0.078**	< 0.016 U	< 0.015 U
Methylene chloride	ug/m3	263	**0.28**	**0.25**	**1.5**	**0.40**	**0.25**	**0.28**	**0.28**	**0.36**	**1.5**	**1.5**	**0.39 J**	**1.2 J**	**0.25**	**0.30**
Naphthalene	ug/m3	1.31	**0.21 J**	**1.7**	**0.10 J**	**0.47 J**	**0.20 J**	**0.16 J**	< 0.031 U	**0.31**	**0.045 J**	**0.091 J**	**0.59 J**	**0.37 J**	**0.25 J**	**0.25 J**
o-Xylene	ug/m3	43.8	**0.59**	**1.1**	**0.71**	**2.0**	**0.67**	**0.53**	**0.18 J**	**0.48 J**	**0.84**	**0.82**	**2.0**	**2.0**	**0.71**	**0.75**
Styrene	ug/m3	438	**0.79**	**1.1**	**0.82**	**2.1**	**0.41**	**0.72**	**0.12 J**	**0.61 J**	**0.69**	**0.73**	**2.1**	**2.0**	**0.61**	**0.45**
Tetrachloroethene	ug/m3	17.5	**0.078**	**26**	**0.30**	**0.15**	**0.054**	**0.072**	**0.34 J**	**0.12 J**	**0.23 J**	**0.13 J**	**0.19**	**0.15**	**0.059**	**0.061**
Toluene	ug/m3	2,190	**1.4**	**1.4**	**2.4**	**3.8**	**2.1**	**1.3**	**1.3 J**	**5.8 J**	**2.4**	**2.6**	**3.9 J**	**12 J**	**2.3**	**2.3**
trans-1,2-Dichloroethene	ug/m3	17.5	< 0.010 U	< 0.010 U	< 0.0099 U	**0.025 J**	**0.019 J**	< 0.0096 U	< 0.014 U	< 0.010 U	< 0.011 U	< 0.011 U	**0.026 J**	**0.099 J**	**0.023 J**	**0.030 J**
trans-1,3-Dichloropropene	ug/m3	NE	< 0.0079 U	< 0.0077 U	< 0.0075 U	< 0.0080 U	< 0.0067 U	< 0.0073 U	< 0.011 U	< 0.0078 U	< 0.0079 U	< 0.0080 U	< 0.0079 U	< 0.015 U	< 0.0066 U	< 0.0062 U
Trichloroethene	ug/m3	6	< 0.012 U	**0.16**	**0.013 J**	**0.098**	**0.014 J**	< 0.011 U	< 0.016 U	**0.017 J**	**0.26 J**	**0.013 J**	**0.12 J**	**0.43 J**	**0.030 J**	**0.021 J**
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**1.0**	**0.97**	**1.2**	**1.1**	**0.91**	**1.0**	**0.99**	**0.99**	**1.2**	**1.2**	**1.1**	**1.0**	**0.92**	**0.92**
Vinyl chloride	ug/m3	27.9	< 0.011 U	< 0.011 U	< 0.010 U	< 0.011 U	< 0.017 U	< 0.010 U	< 0.015 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.021 U	< 0.016 U	< 0.015 U

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
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Sample Location			AI-003					AI-004				AI-005			
Sample Date			01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	04-14-2021	07-23-2021	10-29-2021	01-11-2021	04-14-2021	07-23-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Engineering Building-Garage/Store Room					Pretreatment Building Office				Pump House			
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs)				Sample Collected During Normal Business Hours (0800 and 1800 hrs)			
TO3															
Methane	ppmv	1,000	**6.1**	**4.6**	**3.0**	**22**	**4.8**	**4.7**	**2.7**	**3.1**	**3.5**	**7.0**	**3.3**	**5.6**	**6.4 J**
TO15															
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	**0.16 J**	< 0.12 U	< 0.12 U	**0.74 J**	**0.14 J**	< 0.12 U	< 0.11 U	< 0.12 U	< 0.12 U	< 0.14 U	< 0.15 U	< 0.12 U	**0.12 J**
1S-.alpha.-Pinene	ug/m3	NE	**0.44 J**	**0.23 J**	**0.12 J**	**6.5**	< 0.11 U	< 0.12 U	**0.49 J**	**0.50 J**	**0.37 J**	**2.2**	**3.4**	**8.0**	**1.2 J**
2-Butanone	ug/m3	2,190	**1.1 J**	**0.47 J**	**1.1 J**	**8.2**	**1.2 J**	**2.5**	**7.1**	**3.1**	**4.8**	**0.96 J**	**5.0**	**5.6**	**1.4 J**
2-Hexanone	ug/m3	13.1	< 0.097 U	< 0.097 U	**0.22 J**	**0.55 J**	**0.12 J**	< 0.097 U	**0.33 J**	**0.18 J**	**0.19 J**	< 0.11 U	**0.29 J**	**0.73 J**	**0.19 J**
4-Ethyltoluene	ug/m3	NE	**0.39 J**	**0.27 J**	< 0.12 U	**2.3**	< 0.12 U	< 0.12 U	**0.21 J**	**0.17 J**	< 0.12 U	**0.14 J**	**0.27 J**	**0.27 J**	< 0.11 UJ
4-Methyl-2-pentanone	ug/m3	1,310	< 0.11 U	< 0.11 U	< 0.10 U	**0.76 J**	**0.10 J**	< 0.11 U	**0.31 J**	**0.19 J**	**0.19 J**	< 0.12 U	**0.44 J**	**1.8**	**0.16 J**
Acetonitrile	ug/m3	26.3	**0.94**	< 0.19 U	**1.0**	**2.2**	**0.61 J**	< 0.19 U	**0.25 J**	**0.83**	**0.34 J**	**0.51 J**	**0.37 J**	**1.1**	**0.20 J**
Acrylonitrile	ug/m3	0.876	< 0.16 U	< 0.16 U	< 0.15 U	< 0.16 U	**0.16 J**	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	< 0.19 U	**0.42 J**	< 0.14 UJ
Allyl chloride	ug/m3	0.438	< 0.11 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.12 U	< 0.13 U	< 0.10 U	< 0.090 UJ
Benzyl chloride	ug/m3	0.438	< 0.18 U	< 0.18 U	< 0.17 U	< 0.18 U	< 0.17 U	< 0.18 U	< 0.16 U	< 0.17 U	< 0.17 U	< 0.19 U	< 0.21 U	< 0.17 U	< 0.15 UJ
Bromoform	ug/m3	111	< 0.16 U	< 0.16 U	< 0.15 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 UJ	< 0.15 U	< 0.15 U	< 0.18 U	< 0.19 UJ	< 0.16 U	< 0.14 UJ
Carbon disulfide	ug/m3	307	< 0.24 U	< 0.24 U	< 0.22 U	**1.2 J**	< 0.22 U	< 0.24 U	**0.42 J**	**0.32 J**	**0.32 J**	**0.41 J**	**6.7**	**6.7**	**0.32 J**
Cyclohexane	ug/m3	2,630	< 0.22 U	< 0.22 U	< 0.21 U	< 0.22 U	< 0.21 U	< 0.22 U	< 0.20 U	< 0.21 U	< 0.21 U	< 0.24 U	< 0.26 U	< 0.22 U	**0.42 J**
D-Limonene	ug/m3	NE	**0.66 J**	**0.26 J**	**0.23 J**	**2.5**	**0.20 J**	**0.39 J**	**3.0**	**6.4**	**8.5**	**1.2**	**3.3**	**2.4**	**0.18 J**
Ethanol	ug/m3	NE	**32**	**8.0**	**12**	**190**	**33**	**340**	**600**	**110**	**1,000**	**51**	**67**	**30**	**16 J**
Ethyl acetate	ug/m3	30.7	**0.58 J**	< 0.41 U	**1.4 J**	**3.3 J**	**5.6**	**0.51 J**	**2.9**	**2.5 J**	**4.0**	< 0.45 U	**3.5**	**1.7 J**	**3.1 J**
Heptane	ug/m3	175	**0.24 J**	**0.40 J**	**0.14 J**	**0.76 J**	**0.49 J**	**0.17 J**	**0.49 J**	**0.41 J**	**0.74**	**0.14 J**	**0.49 J**	**1.6**	**0.71 J**
Isopropyl alcohol	ug/m3	87.6	**0.59 J**	**0.49 J**	**0.96 J**	**45**	**1.7**	**7.3**	**14**	**23**	**7.4**	**2.6**	**6.3**	**4.0**	**1.1 J**
Isopropylbenzene (Cumene)	ug/m3	175	< 0.11 U	< 0.11 U	< 0.11 U	**0.93**	< 0.11 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.11 U	**0.46 J**	**0.27 J**	**0.12 J**	< 0.096 UJ
Methyl methacrylate	ug/m3	307	< 0.28 U	< 0.28 U	< 0.27 U	< 0.28 U	< 0.26 U	< 0.28 U	< 0.25 U	< 0.26 U	< 0.26 U	< 0.31 U	< 0.33 U	< 0.28 U	< 0.24 UJ
n-Butyl acetate	ug/m3	NE	< 0.11 U	< 0.11 U	**0.13 J**	**1.2 J**	**0.26 J**	< 0.11 U	**0.26 J**	**0.91 J**	**0.90 J**	< 0.12 U	**0.70 J**	**0.24 J**	**0.17 J**
n-Hexane	ug/m3	307	**0.40 J**	**0.31 J**	< 0.15 U	< 0.16 U	**0.62 J**	**0.25 J**	**0.64 J**	< 0.15 U	**0.30 J**	**0.34 J**	**0.54 J**	**4.7**	**2.1 J**
Nonane	ug/m3	8.76	**12**	**9.2**	**0.22 J**	**1.7**	**0.18 J**	**0.18 J**	**0.53 J**	**0.23 J**	**0.34 J**	**0.19 J**	**0.83 J**	**0.34 J**	**0.15 J**
n-Propylbenzene	ug/m3	438	**0.29 J**	**0.21 J**	**0.15 J**	**7.2**	**0.26 J**	< 0.11 U	**0.15 J**	**0.13 J**	**0.14 J**	< 0.12 U	**0.19 J**	**0.21 J**	< 0.096 UJ
Octane	ug/m3	NE	**0.43 J**	**0.55 J**	**0.17 J**	**1.2**	< 0.17 U	< 0.18 U	**0.60 J**	**0.32 J**	**0.24 J**	**0.36 J**	**0.70 J**	**0.98**	< 0.15 UJ
Propylene	ug/m3	1,310	**2.1**	< 0.19 U	**0.54 J**	< 0.19 U	**0.89**	**0.57 J**	**3.8**	**7.1**	**0.92**	< 0.21 U	**2.8**	**1.8**	**0.43 J**
Tetrahydrofuran	ug/m3	876	**0.51 J**	**0.34 J**	< 0.094 U	**3.7**	**0.85 J**	**0.76 J**	**4.0**	**0.24 J**	**1.9**	**0.32 J**	**0.85 J**	**0.71 J**	**0.25 J**
Vinyl acetate	ug/m3	87.6	< 1.8 U	< 1.8 U	**1.8 J**	< 1.8 U	< 1.7 U	< 1.8 U	**2.7 J**	< 1.7 U	**4.4 J**	< 1.9 U	**5.0 J**	< 1.7 U	**3.5 J**

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Sample Location			AI-003					AI-004				AI-005			
Sample Date			01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	04-14-2021	07-23-2021	10-29-2021	01-11-2021	04-14-2021	07-23-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Engineering Building-Garage/Store Room					Pretreatment Building Office				Pump House			
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs)				Sample Collected During Normal Business Hours (0800 and 1800 hrs)			
TO15-SIM															
1,1,1-Trichloroethane	ug/m3	2,190	< 0.0087 U	**0.010 J**	< 0.0083 U	**0.0099 J**	< 0.013 U	< 0.0087 U	**0.0091 J**	< 0.010 U	< 0.013 U	< 0.0083 U	**0.049**	**0.010 J**	< 0.011 UJ
1,1,2,2-Tetrachloroethane	ug/m3	2.11	< 0.011 U	< 0.011 U	< 0.010 U	< 0.011 U	< 0.012 U	< 0.011 U	< 0.0095 U	< 0.012 U	< 0.012 U	< 0.010 U	< 0.0099 U	< 0.010 U	< 0.011 UJ
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	2,190	**0.44**	**0.48**	**0.47**	**0.39**	**0.35**	**0.45**	**0.45**	**0.40**	**0.40**	**0.45**	**0.35**	**0.40**	**0.37 J**
1,1,2-Trichloroethane	ug/m3	0.0876	< 0.012 U	< 0.012 U	< 0.011 U	< 0.012 U	< 0.0082 U	< 0.012 U	< 0.010 U	< 0.014 U	< 0.0082 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.0074 UJ
1,1-Dichloroethane	ug/m3	76.7	< 0.0090 U	< 0.0090 U	< 0.0085 U	**0.011 J**	< 0.011 U	< 0.0090 U	< 0.0081 U	< 0.011 U	< 0.011 U	< 0.0086 U	**0.25**	< 0.0088 U	< 0.010 UJ
1,1-Dichloroethene	ug/m3	87.6	< 0.013 U	< 0.013 U	< 0.012 U	**0.11**	< 0.012 U	< 0.013 U	< 0.011 U	**0.023 J**	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.011 UJ
1,2,4-Trichlorobenzene	ug/m3	0.876	< 0.019 U	< 0.019 U	< 0.018 U	**0.11**	< 0.028 U	< 0.019 U	< 0.017 U	**0.036 J**	< 0.028 U	< 0.018 U	< 0.018 U	< 0.019 U	< 0.025 UJ
1,2,4-Trimethylbenzene	ug/m3	26.3	**1.5**	**1.6**	**0.12 J**	**2.0**	**0.15**	**0.18**	**0.65**	**0.68**	**0.61**	**0.59**	**0.70**	**0.82**	**0.30 J**
1,2-Dibromo-3-chloropropane	ug/m3	0.0204	< 0.014 U	< 0.014 U	< 0.013 U	< 0.014 U	< 0.019 U	< 0.014 U	< 0.013 U	< 0.016 U	< 0.019 U	< 0.013 U	< 0.013 U	< 0.014 U	< 0.018 UJ
1,2-Dichlorobenzene	ug/m3	87.6	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.025 U	< 0.012 U	< 0.011 U	**0.015 J**	< 0.025 U	**0.025 J**	< 0.011 U	< 0.012 U	< 0.023 UJ
1,2-Dichloroethane	ug/m3	3.07	**0.059**	**0.064**	**0.074**	**0.052**	**0.031 J**	**0.060**	**0.074**	**0.055**	**0.041**	**0.061**	**0.065**	**0.051**	**0.039 J**
1,2-Dichloropropane	ug/m3	1.75	**0.017 J**	**0.023 J**	**0.027 J**	**0.023 J**	< 0.0085 U	**0.036 J**	**0.046**	**0.024 J**	**0.017 J**	**0.017 J**	**0.019 J**	**0.014 J**	**0.011 J**
1,3,5-Trimethylbenzene	ug/m3	26.3	**0.44**	**0.50**	**0.037 J**	**0.57**	**0.042 J**	**0.041 J**	**0.19**	**0.15 J**	**0.13 J**	**0.13 J**	**0.20**	**0.26**	**0.088 J**
1,3-Butadiene	ug/m3	0.876	**0.35**	< 0.021 U	**0.083 J**	< 0.021 U	**0.15**	< 0.021 U	**0.19 J**	< 0.024 U	**0.049 J**	**0.032 J**	< 0.019 UJ	< 0.020 U	< 0.0099 UJ
1,3-Dichlorobenzene	ug/m3	NE	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.024 U	< 0.012 U	< 0.011 U	**0.015 J**	< 0.024 U	**0.014 J**	< 0.012 U	< 0.012 U	< 0.021 UJ
1,4-Dichlorobenzene	ug/m3	11.1	**0.020 J**	**0.021 J**	**0.013 J**	**0.19**	< 0.028 U	**0.092**	**0.18**	**0.075**	**0.12**	**1.5**	**0.26**	**0.18**	**0.059 J**
1,4-Dioxane	ug/m3	13.1	< 0.012 U	< 0.012 U	**0.042 J**	**0.11 J**	< 0.012 U	**0.045 J**	**0.15**	**0.022 J**	**0.33**	**0.034 J**	< 0.012 U	**0.19**	< 0.011 UJ
Acetone	ug/m3	NE	**5.3**	< 3.7 U	**6.5**	**34**	**4.8**	**13**	**45**	**26**	**36**	**16**	**15**	**34**	**9.4 J**
Acrolein	ug/m3	0.00876	**0.61**	**0.17 J**	**0.43**	**3.6**	**0.40**	**0.22 J**	**0.61**	**0.66**	**0.78**	**0.35**	**0.82**	**1.9**	**0.97 J**
Benzene	ug/m3	13.1	**0.73**	**0.38**	**0.28**	**0.67**	**0.37**	**0.38**	**0.66**	**0.58**	**0.29**	**0.67**	**0.27**	**1.6**	**0.53 J**
Bromodichloromethane	ug/m3	3.31	< 0.010 U	< 0.010 U	< 0.0097 U	< 0.010 U	< 0.0081 U	**0.046**	**0.16**	< 0.012 U	< 0.0081 U	< 0.0097 U	< 0.0095 U	< 0.010 U	< 0.0073 UJ
Bromomethane	ug/m3	2.19	**0.025 J**	**0.028 J**	**0.032 J**	< 0.014 U	**0.029 J**	**0.023 J**	**0.029 J**	**0.032 J**	**0.029 J**	**0.023 J**	**0.032 J**	**0.050**	**0.026 J**
Carbon tetrachloride	ug/m3	20.4	**0.35**	**0.37**	**0.41**	**0.37**	**0.33**	**0.36**	**0.40**	**0.39**	**0.36**	**0.35**	**0.33**	**0.38**	**0.34 J**
Chlorobenzene	ug/m3	21.9	< 0.014 U	< 0.014 U	< 0.013 U	< 0.014 U	< 0.013 U	< 0.014 U	< 0.012 U	**0.75**	< 0.013 U	**0.13 J**	**0.027 J**	**0.14 J**	**0.014 J**
Chloroethane	ug/m3	1,750	**0.015 J**	< 0.012 U	**0.034 J**	**0.039**	< 0.011 U	< 0.012 U	**0.026 J**	**0.031 J**	**0.035**	**0.015 J**	< 0.012 U	**0.057**	**0.014 J**
Chloroform	ug/m3	5.33	**0.064 J**	**0.067 J**	**0.085 J**	**0.39**	**0.063 J**	**0.24**	**1.6**	**0.25**	**0.23**	**0.086 J**	**0.081 J**	**0.17**	**0.075 J**
Chloromethane	ug/m3	39.4	**0.40 J**	**0.24**	**0.29**	**0.048 J**	**0.052 J**	**0.24 J**	**0.23**	**0.079 J**	**0.080**	**0.21 J**	**0.18**	< 0.028 UJ	**0.043 J**
cis-1,2-Dichloroethene	ug/m3	NE	< 0.014 U	< 0.014 U	< 0.013 U	< 0.014 U	< 0.010 U	< 0.014 U	< 0.012 U	**0.024 J**	< 0.010 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.0090 UJ
cis-1,3-Dichloropropene	ug/m3	NE	< 0.0091 U	< 0.0091 U	< 0.0087 U	< 0.0091 U	< 0.0099 U	< 0.0091 U	< 0.0082 U	< 0.011 U	< 0.0099 U	< 0.0087 U	< 0.0085 U	< 0.0090 U	< 0.0089 UJ
Dibromochloromethane	ug/m3	NE	< 0.013 U	< 0.013 U	< 0.012 U	< 0.013 U	< 0.0089 U	**0.016 J**	**0.029 J**	< 0.015 U	< 0.0089 U	< 0.012 U	< 0.012 U	< 0.013 U	< 0.0080 UJ
Dichlorodifluoromethane (Freon 12)	ug/m3	43.8	**1.9**	**2.0**	**2.4**	**1.9**	**1.6**	**1.9**	**2.3**	**1.7**	**2.1**	**1.9**	**1.9**	**1.7**	**1.7 J**
Ethylbenzene	ug/m3	49.1	**0.36**	**0.32**	**0.93**	**60**	**1.9**	**0.20**	**0.62**	**0.51**	**0.64**	**0.46**	**0.55**	**0.81**	**0.29 J**
Ethylene dibromide	ug/m3	0.204	< 0.012 U	< 0.012 U	< 0.011 U	**0.016 J**	< 0.0093 U	< 0.012 U	< 0.010 U	< 0.014 U	< 0.0093 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.0084 UJ
Hexachlorobutadiene	ug/m3	5.57	< 0.014 U	< 0.014 U	< 0.013 U	< 0.014 U	< 0.018 U	< 0.014 U	< 0.012 U	< 0.016 U	< 0.018 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.016 UJ
m,p-Xylenes	ug/m3	NE	**1.4**	**1.3**	**0.54**	**12**	**0.76**	**0.55**	**2.0**	**1.5**	**1.7**	**0.51**	**1.5**	**2.2**	**0.82 J**
Methyl tert-butyl ether	ug/m3	472	< 0.014 U	< 0.014 U	< 0.013 U	**0.027 J**	< 0.017 U	< 0.014 U	< 0.012 U	< 0.016 U	< 0.017 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.015 UJ
Methylene chloride	ug/m3	263	**0.24**	**0.26**	**0.49**	**0.33**	**0.22**	**0.24**	**0.46**	**0.35**	**0.27**	**0.26**	**0.58**	**0.30**	**0.22 J**
Naphthalene	ug/m3	1.31	**0.18 J**	**0.67**	**0.035 J**	**1.6 J**	**0.035 J**	**0.20 J**	**0.36**	**0.20 J**	**0.25**	**0.56 J**	**0.72 J**	**0.70 J**	**0.13 J**
o-Xylene	ug/m3	43.8	**0.57**	**0.56**	**0.25**	**5.6**	**0.29**	**0.20**	**0.76**	**0.64**	**0.58**	**0.25**	**0.52**	**0.88**	**0.30 J**
Styrene	ug/m3	438	**0.29**	**0.22**	**0.061 J**	**1.8**	**0.13 J**	**0.52**	**0.89**	**0.79**	**1.4**	**0.43**	**0.17**	**0.37**	**0.069 J**
Tetrachloroethene	ug/m3	17.5	**0.065**	**0.36**	**0.046**	**0.48**	**0.044**	**0.076**	**0.15**	**0.096**	**0.23**	**0.064**	**0.17**	**1.7**	**0.55 J**
Toluene	ug/m3	2,190	**1.8**	**1.1**	**0.90**	**6.5**	**1.7**	**1.9**	**4.2**	**2.2**	**3.3**	**0.65**	**1.5**	**5.6**	**1.7 J**
trans-1,2-Dichloroethene	ug/m3	17.5	< 0.011 U	< 0.011 U	< 0.010 U	**0.022 J**	< 0.015 U	< 0.011 U	< 0.0096 U	**0.023 J**	< 0.015 U	< 0.010 U	< 0.010 U	**0.011 J**	< 0.014 UJ
trans-1,3-Dichloropropene	ug/m3	NE	< 0.0081 U	< 0.0081 U	< 0.0077 U	< 0.0081 U	< 0.0067 U	< 0.0081 U	< 0.0073 U	< 0.0095 U	< 0.0067 U	< 0.0078 U	< 0.0075 U	< 0.0080 U	< 0.0060 UJ
Trichloroethene	ug/m3	6	< 0.012 U	< 0.012 U	< 0.012 U	**0.23**	**0.019 J**	< 0.012 U	< 0.011 U	**0.066**	**0.014 J**	< 0.012 U	< 0.012 U	**0.073**	**0.023 J**
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**0.97**	**1.0**	**1.2**	**1.1**	**0.86**	**1.0**	**1.2**	**1.1**	**0.97**	**0.99**	**0.90**	**1.1**	**0.89 J**
Vinyl chloride	ug/m3	27.9	< 0.011 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.017 U	< 0.011 U	< 0.010 U	< 0.013 U	< 0.017 U	< 0.011 U	< 0.010 U	< 0.011 U	< 0.015 UJ

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
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Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Sample Location	AI-006					AI-007			AO-001				
			Sample Date	01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
				Scale House					Asphalt Plant Building			Engineering Building Ambient				
Notes				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest
TO3																
Methane	ppmv	1,000		**6.0**	**5.8**	**3.0**	**4.5**	**5.7**	**3.3**	**3.1**	**3.3**	**4.2**	**3.8**	**3.1**	**3.7**	**5.9**
TO15																
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE		< 0.12 U	**0.16 J**	< 0.12 U	**0.11 J**	< 0.12 U	< 0.12 U	**0.11 J**	< 0.13 U	< 0.12 U	**0.12 J**	< 0.12 U	< 0.14 U	< 0.12 U
1S-.alpha.-Pinene	ug/m3	NE		**1.1**	**0.95**	**0.61 J**	**5.4**	**0.94**	< 0.11 U	**1.6**	**0.21 J**	< 0.12 U	< 0.11 U	< 0.11 U	**0.23 J**	< 0.12 U
2-Butanone	ug/m3	2,190		**0.51 J**	**1.5**	**0.53 J**	**3.0**	**0.79 J**	**2.3**	**2.9**	**0.43 J**	< 0.16 U	< 0.15 U	**0.38 J**	**1.9**	**0.55 J**
2-Hexanone	ug/m3	13.1		< 0.095 U	< 0.092 U	< 0.091 U	**0.30 J**	< 0.095 U	< 0.092 U	**0.41 J**	< 0.098 U	< 0.098 U	< 0.090 U	< 0.091 U	**0.13 J**	< 0.098 U
4-Ethyltoluene	ug/m3	NE		< 0.12 U	< 0.12 U	< 0.12 U	**0.21 J**	< 0.12 U	**0.32 J**	**0.21 J**	< 0.13 U	< 0.13 U	< 0.12 U	< 0.12 U	< 0.14 U	< 0.13 U
4-Methyl-2-pentanone	ug/m3	1,310		< 0.11 U	**0.27 J**	< 0.10 U	**0.43 J**	< 0.11 U	**0.40 J**	**0.76 J**	**0.14 J**	< 0.11 U	< 0.099 U	< 0.10 U	**0.20 J**	< 0.11 U
Acetonitrile	ug/m3	26.3		< 0.19 U	< 0.18 U	< 0.18 U	**2.1**	**0.38 J**	**0.19 J**	**0.66 J**	< 0.19 U	< 0.19 U	< 0.18 U	< 0.18 U	**1.2**	< 0.19 U
Acrylonitrile	ug/m3	0.876		< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U	< 0.14 U	< 0.16 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.18 U	< 0.16 U
Allyl chloride	ug/m3	0.438		< 0.10 U	< 0.10 U	< 0.099 U	< 0.095 U	< 0.10 U	< 0.10 U	< 0.094 U	< 0.11 U	< 0.11 U	< 0.098 U	< 0.099 U	< 0.12 U	< 0.11 U
Benzyl chloride	ug/m3	0.438		< 0.17 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.17 U	< 0.20 U	< 0.18 U
Bromoform	ug/m3	111		< 0.16 U	< 0.15 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 UJ	< 0.14 U	< 0.16 U	< 0.16 U	< 0.15 U	< 0.15 UJ	< 0.18 U	< 0.16 U
Carbon disulfide	ug/m3	307		< 0.23 U	< 0.22 U	**0.39 J**	**0.33 J**	< 0.23 U	**7.5**	**0.90 J**	**0.94 J**	< 0.24 U	< 0.22 U	< 0.22 U	< 0.26 U	< 0.24 U
Cyclohexane	ug/m3	2,630		**0.65 J**	**0.65 J**	**0.63 J**	< 0.20 U	**0.42 J**	< 0.21 U	< 0.20 U	< 0.22 U	< 0.22 U	< 0.20 U	< 0.21 U	< 0.24 U	< 0.22 U
D-Limonene	ug/m3	NE		**38**	**5.2**	**9.0**	**8.4**	**3.1**	**0.16 J**	**6.9**	**1.5**	< 0.16 U	< 0.15 U	< 0.15 U	**0.43 J**	< 0.16 U
Ethanol	ug/m3	NE		**2,800**	**240**	**190**	**240**	**1,000**	**96**	**340**	**25**	**10**	**3.2 J**	**2.5 J**	**25**	**4.2 J**
Ethyl acetate	ug/m3	30.7		**0.61 J**	**23**	**1.8**	**6.1 J**	**2.9 J**	**3.6**	**2.9 J**	**0.51 J**	< 0.41 U	< 0.38 U	**1.1 J**	**6.5 J**	**1.7 J**
Heptane	ug/m3	175		**0.19 J**	**0.16 J**	**0.19 J**	**0.67 J**	**0.36 J**	**0.40 J**	**0.41 J**	**0.20 J**	< 0.13 U	**0.26 J**	< 0.12 U	**0.38 J**	**0.33 J**
Isopropyl alcohol	ug/m3	87.6		**98**	**10**	**6.0**	**16**	**340**	**4.7**	**7.8**	**1.2 J**	< 0.33 U	< 0.30 U	< 0.30 U	**1.9**	**0.52 J**
Isopropylbenzene (Cumene)	ug/m3	175		< 0.11 U	< 0.11 U	< 0.11 U	< 0.10 U	< 0.11 U	**0.14 J**	**0.14 J**	< 0.11 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.13 U	< 0.11 U
Methyl methacrylate	ug/m3	307		< 0.27 U	< 0.27 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.27 U	< 0.25 U	< 0.28 U	< 0.28 U	< 0.26 U	< 0.26 U	< 0.31 U	< 0.28 U
n-Butyl acetate	ug/m3	NE		< 0.11 U	**1.3 J**	**0.18 J**	**1.4**	**0.18 J**	**0.30 J**	**0.64 J**	**0.11 J**	< 0.11 U	< 0.099 U	**0.14 J**	**1.1 J**	**0.14 J**
n-Hexane	ug/m3	307		**0.66 J**	**0.60 J**	**0.57 J**	< 0.15 U	**0.56 J**	**0.38 J**	< 0.14 U	**0.37 J**	**0.37 J**	**0.23 J**	< 0.15 U	< 0.18 U	**0.34 J**
Nonane	ug/m3	8.76		**0.38 J**	**0.22 J**	**0.21 J**	**0.53 J**	**0.14 J**	**1.5**	**1.9**	**0.17 J**	< 0.13 U	< 0.12 U	< 0.12 U	**0.26 J**	**0.19 J**
n-Propylbenzene	ug/m3	438		< 0.11 U	< 0.11 U	< 0.11 U	**0.15 J**	< 0.11 U	**0.30 J**	**0.17 J**	< 0.11 U	< 0.11 U	< 0.10 U	< 0.11 U	< 0.13 U	< 0.11 U
Octane	ug/m3	NE		< 0.17 U	< 0.17 U	**0.21 J**	**0.45 J**	< 0.17 U	**0.75**	**0.27 J**	< 0.18 U	< 0.18 U	**0.24 J**	< 0.17 U	**0.23 J**	< 0.18 U
Propylene	ug/m3	1,310		**3.5**	< 0.18 U	**2.0**	**5.0**	< 3.7 U	**2.0**	**2.7**	**0.39 J**	< 0.19 U	< 0.18 U	**0.20 J**	**1.2**	**0.22 J**
Tetrahydrofuran	ug/m3	876		< 0.096 U	**0.24 J**	< 0.092 U	**0.31 J**	**0.14 J**	**0.62 J**	< 0.087 U	< 0.10 U	< 0.099 U	< 0.091 U	< 0.092 U	< 0.11 U	< 0.099 U
Vinyl acetate	ug/m3	87.6		< 1.7 U	< 1.7 UJ	< 1.7 U	< 1.6 U	< 1.7 U	< 1.7 U	< 1.6 U	< 1.8 U	< 1.8 U	< 1.6 UJ	< 1.7 U	< 2.0 U	< 1.8 U

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Sample Location	AI-006					AI-007			AO-001				
			Sample Date	01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	01-17-2021	04-14-2021	07-23-2021	10-27-2021
			Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
				Scale House					Asphalt Plant Building			Engineering Building Ambient				
Notes				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational	Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Vent Fans Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational			Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest
TO15-SIM																
1,1,1-Trichloroethane	ug/m3	2,190		< 0.0085 U	< 0.0083 U	**0.0082 J**	**0.0082 J**	< 0.013 U	**0.0094 J**	**0.011 J**	< 0.013 U	< 0.0083 U	**0.0093 J**	< 0.0081 U	< 0.0096 U	< 0.013 U
1,1,2,2-Tetrachloroethane	ug/m3	2.11		< 0.010 U	< 0.010 U	< 0.0099 U	< 0.0095 U	< 0.013 U	< 0.010 U	< 0.0094 U	< 0.013 U	< 0.010 U	< 0.0098 U	< 0.0099 U	< 0.012 U	< 0.013 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	2,190		**0.46**	**0.46**	**0.47**	**0.39**	**0.37**	**0.45**	**0.40**	**0.40**	**0.47**	**0.48**	**0.45**	**0.39**	**0.36**
1,1,2-Trichloroethane	ug/m3	0.0876		< 0.011 U	< 0.011 U	< 0.011 U	< 0.010 U	< 0.0085 U	< 0.011 U	< 0.010 U	< 0.0088 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.013 U	< 0.0087 U
1,1-Dichloroethane	ug/m3	76.7		< 0.0088 U	< 0.0085 U	< 0.0084 U	**0.035**	< 0.012 U	< 0.0085 U	**0.0083 J**	< 0.012 U	< 0.0085 U	**0.0096 J**	< 0.0084 U	< 0.0099 U	< 0.012 U
1,1-Dichloroethene	ug/m3	87.6		**0.017 J**	< 0.012 U	< 0.012 U	**0.050**	**0.019 J**	< 0.012 U	< 0.011 U	**0.016 J**	< 0.012 U	< 0.012 U	< 0.012 U	< 0.014 U	< 0.013 U
1,2,4-Trichlorobenzene	ug/m3	0.876		< 0.019 U	< 0.018 U	< 0.018 U	**0.023 J**	< 0.029 U	< 0.018 UJ	**0.020 J**	< 0.030 U	< 0.018 U	**0.020 J**	< 0.018 U	< 0.021 U	< 0.030 U
1,2,4-Trimethylbenzene	ug/m3	26.3		**0.11 J**	**0.12 J**	**0.15**	**0.47**	**0.17**	**0.85**	**0.78**	**0.33**	**0.13 J**	**0.053 J**	**0.052 J**	**0.14 J**	**0.071 J**
1,2-Dibromo-3-chloropropane	ug/m3	0.0204		< 0.014 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.020 U	< 0.013 U	< 0.012 U	< 0.021 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.015 U	< 0.021 U
1,2-Dichlorobenzene	ug/m3	87.6		< 0.012 U	< 0.012 U	< 0.011 U	< 0.011 U	< 0.026 U	< 0.012 U	**0.11**	< 0.027 U	< 0.012 U	< 0.011 U	< 0.011 U	< 0.014 U	< 0.027 U
1,2-Dichloroethane	ug/m3	3.07		**0.057**	**0.062**	**0.073**	**0.045**	**0.035 J**	**0.081**	**0.052**	**0.043**	**0.057**	**0.061**	**0.067**	**0.043**	**0.030 J**
1,2-Dichloropropane	ug/m3	1.75		**0.018 J**	**0.027 J**	**0.024 J**	**0.018 J**	**0.013 J**	**0.027 J**	**0.019 J**	**0.012 J**	**0.016 J**	**0.022 J**	**0.022 J**	**0.021 J**	< 0.0090 U
1,3,5-Trimethylbenzene	ug/m3	26.3		**0.039 J**	**0.034 J**	**0.045 J**	**0.15**	**0.054 J**	**0.28**	**0.27**	**0.085 J**	**0.033 J**	**0.020 J**	**0.015 J**	**0.045 J**	< 0.021 U
1,3-Butadiene	ug/m3	0.876		< 0.020 U	< 0.020 U	< 0.019 UJ	**0.027 J**	**0.069 J**	**0.082 J**	< 0.018 U	< 0.012 U	< 0.020 U	< 0.019 U	< 0.019 UJ	< 0.023 U	< 0.012 U
1,3-Dichlorobenzene	ug/m3	NE		< 0.012 U	< 0.012 U	< 0.012 U	< 0.011 U	< 0.024 U	< 0.012 U	< 0.011 U	< 0.025 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.014 U	< 0.025 U
1,4-Dichlorobenzene	ug/m3	11.1		< 0.012 U	**0.021 J**	**0.018 J**	**0.052**	**0.041**	**0.034 J**	**0.14**	**0.081**	< 0.011 U	**0.013 J**	< 0.011 U	**0.028 J**	**0.032 J**
1,4-Dioxane	ug/m3	13.1		**0.036 J**	**0.015 J**	**0.024 J**	**0.052 J**	**0.017 J**	**0.72**	**0.10 J**	**0.015 J**	< 0.012 U	< 0.012 U	< 0.012 U	< 0.014 U	< 0.013 U
Acetone	ug/m3	NE		**16**	**7.9**	**11**	**28**	**17**	**16**	**28**	**7.2**	< 3.5 U	< 3.4 U	**4.1**	**10**	**3.0 J**
Acrolein	ug/m3	0.00876		**0.27 J**	**0.35**	**0.38**	**2.1**	**0.49**	**0.57**	**1.2**	**0.24 J**	**0.096 J**	**0.084 J**	**0.15 J**	**0.48**	**0.14 J**
Benzene	ug/m3	13.1		**0.36**	**0.34**	**0.27**	**0.72**	**0.28**	**0.37**	**0.65**	**0.32**	**0.38**	**0.35**	**0.20**	**0.71**	**0.22**
Bromodichloromethane	ug/m3	3.31		**0.086**	< 0.0097 U	< 0.0095 U	< 0.0091 U	< 0.0084 U	< 0.0097 U	< 0.0090 U	< 0.0086 U	< 0.0097 U	< 0.0094 U	< 0.0095 U	< 0.011 U	< 0.0086 U
Bromomethane	ug/m3	2.19		**0.024 J**	**0.024 J**	**0.041**	**0.018 J**	**0.029 J**	**0.028 J**	**0.025 J**	**0.021 J**	**0.023 J**	**0.028 J**	**0.038**	**0.022 J**	**0.028 J**
Carbon tetrachloride	ug/m3	20.4		**0.69**	**0.38**	**0.51**	**0.46**	**0.45**	**0.43**	**0.40**	**0.39**	**0.36**	**0.36**	**0.40**	**0.38**	**0.33**
Chlorobenzene	ug/m3	21.9		< 0.013 U	< 0.013 U	< 0.013 U	**0.072 J**	**0.017 J**	< 0.013 U	**1.6**	**0.019 J**	< 0.013 U	< 0.013 U	< 0.013 U	**0.027 J**	**0.018 J**
Chloroethane	ug/m3	1,750		**0.012 J**	< 0.012 U	**0.014 J**	**0.020 J**	**0.023 J**	< 0.012 U	**0.024 J**	**0.012 J**	< 0.012 U	**0.015 J**	**0.017 J**	**0.029 J**	< 0.012 U
Chloroform	ug/m3	5.33		**1.6**	**0.61**	**1.6**	**1.9**	**1.1**	**0.28**	**0.84**	**1.4**	**0.060 J**	**0.066 J**	**0.063 J**	**0.10 J**	**0.072 J**
Chloromethane	ug/m3	39.4		**0.24 J**	**0.26**	**0.29**	**0.053 J**	**0.045 J**	**0.28**	**0.061 J**	**0.047 J**	**0.23 J**	**0.24**	**0.24**	**0.054 J**	**0.041 J**
cis-1,2-Dichloroethene	ug/m3	NE		< 0.013 U	< 0.013 U	< 0.013 U	**0.096**	< 0.010 U	< 0.013 U	< 0.012 U	< 0.011 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.015 U	< 0.011 U
cis-1,3-Dichloropropene	ug/m3	NE		< 0.0089 U	< 0.0087 U	< 0.0086 U	< 0.0082 U	< 0.010 U	< 0.0087 U	< 0.0081 U	< 0.011 U	< 0.0087 U	< 0.0084 U	< 0.0086 U	< 0.010 U	< 0.011 U
Dibromochloromethane	ug/m3	NE		**0.027 J**	< 0.012 U	< 0.012 U	< 0.012 U	< 0.0092 U	< 0.012 U	< 0.011 U	< 0.0095 U	< 0.012 U	< 0.012 U	< 0.012 U	< 0.014 U	< 0.0095 U
Dichlorodifluoromethane (Freon 12)	ug/m3	43.8		**1.9**	**2.0**	**2.4**	**1.9**	**1.7**	**2.4**	**1.7**	**1.4**	**2.0**	**2.0**	**2.3**	**1.8**	**1.7**
Ethylbenzene	ug/m3	49.1		**0.10 J**	**0.088 J**	**0.15**	**0.54**	**0.18**	**0.54**	**0.40**	**0.18**	**0.13 J**	**0.063 J**	**0.078 J**	**0.22**	**0.11 J**
Ethylene dibromide	ug/m3	0.204		< 0.011 U	< 0.011 U	< 0.011 U	< 0.010 U	< 0.0096 U	< 0.011 U	< 0.010 U	< 0.010 U	< 0.011 U	< 0.011 U	< 0.011 U	< 0.013 U	< 0.0099 U
Hexachlorobutadiene	ug/m3	5.57		< 0.013 U	< 0.013 U	< 0.013 U	< 0.012 U	< 0.019 U	< 0.013 U	< 0.012 U	< 0.019 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.015 U	< 0.019 U
m,p-Xylenes	ug/m3	NE		**0.25**	**0.24**	**0.50**	**1.8**	**0.49**	**1.7**	**1.4**	**0.69**	**0.33**	**0.19**	**0.27**	**0.59**	**0.27**
Methyl tert-butyl ether	ug/m3	472		< 0.013 U	< 0.013 U	< 0.013 U	< 0.012 U	< 0.017 U	< 0.013 U	**0.012 J**	< 0.018 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.015 U	< 0.018 U
Methylene chloride	ug/m3	263		**0.25**	**0.33**	**0.35**	**0.31**	**0.24**	**0.73**	**0.34**	**0.40**	**0.24**	**0.25**	**0.36**	**0.34**	**0.26**
Naphthalene	ug/m3	1.31		< 0.023 UJ	**0.13 J**	**0.065 J**	**0.17 J**	**0.089 J**	**0.065 J**	**0.25 J**	**0.12 J**	**0.077 J**	**0.033 J**	< 0.022 U	**0.081 J**	**0.034 J**
o-Xylene	ug/m3	43.8		**0.11 J**	**0.099 J**	**0.22**	**0.69**	**0.19**	**0.76**	**0.64**	**0.25**	**0.13 J**	**0.066 J**	**0.13 J**	**0.28**	**0.12 J**
Styrene	ug/m3	438		**0.068 J**	**0.22**	**0.070 J**	**0.34**	**0.13 J**	**0.16**	**0.80**	**0.19**	**0.049 J**	**0.074 J**	**0.030 J**	**0.18**	**0.053 J**
Tetrachloroethene	ug/m3	17.5		**0.044**	**0.054**	**0.051**	**0.22**	**0.058**	**0.094**	**0.12**	**0.084**	**0.090**	**0.030 J**	**0.025 J**	**0.087**	**0.067**
Toluene	ug/m3	2,190		**0.41**	**0.77**	**0.52**	**2.7**	**0.79**	**1.7**	**7.7**	**1.3**	**0.52**	**0.41**	**0.53**	**2.9**	**0.53**
trans-1,2-Dichloroethene	ug/m3	17.5		< 0.011 U	< 0.010 U	< 0.010 U	**0.012 J**	**0.016 J**	< 0.010 U	**0.018 J**	< 0.016 U	< 0.010 U	< 0.0099 U	< 0.010 U	**0.012 J**	< 0.016 U
trans-1,3-Dichloropropene	ug/m3	NE		< 0.0079 U	< 0.0077 U	< 0.0076 U	< 0.0073 U	< 0.0069 U	< 0.0077 U	< 0.0072 U	< 0.0072 U	< 0.0077 U	< 0.0075 U	< 0.0076 U	< 0.0090 U	< 0.0071 U
Trichloroethene	ug/m3	6		< 0.012 U	**0.016 J**	< 0.012 U	**0.26**	**0.026 J**	**0.015 J**	**0.075**	**0.016 J**	< 0.012 U	**0.013 J**	< 0.012 U	**0.074**	**0.027 J**
Trichlorofluoromethane (Freon 11)	ug/m3	NE		**0.99**	**0.99**	**1.2**	**1.1**	**0.91**	**1.3**	**1.2**	**0.95**	**1.0**	**1.0**	**1.1**	**1.0**	**0.89**
Vinyl chloride	ug/m3	27.9		< 0.011 U	< 0.011 U	< 0.010 U	< 0.010 U	< 0.017 U	< 0.011 U	< 0.0099 U	< 0.018 U	< 0.011 U	< 0.010 U	< 0.010 U	< 0.012 U	< 0.018 U

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Table 15: Indoor Air and Ambient Air Sample Results
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Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	AO-002				AO-003				AO-004			
Sample Location			AO-002				AO-003				AO-004			
Sample Date			01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	04-14-2021	07-23-2021	10-29-2021	01-11-2021	04-14-2021	07-23-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N
			Scale House Ambient				Pretreatment Building Office Ambient				Pump House Ambient			
Notes			Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest
TO3														
Methane	ppmv	1,000	**3.6**	**2.7**	**4.7**	**6.6**	**5.1**	**3.3**	**3.0**	**3.1**	**5.4**	**2.7**	**3.4**	**4.7**
TO15														
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	< 0.13 U	< 0.12 U	< 0.13 U	**0.14 J**	< 0.16 U	< 0.13 U	< 0.13 U	< 0.11 U	< 0.16 U	< 0.12 U	< 0.13 U	< 0.12 U
1S-.alpha.-Pinene	ug/m3	NE	< 0.13 U	< 0.11 U	**0.29 J**	< 0.11 U	< 0.15 U	**0.23 J**	**0.47 J**	**0.16 J**	< 0.15 U	**0.12 J**	**0.33 J**	< 0.11 U
2-Butanone	ug/m3	2,190	< 0.17 U	**0.70 J**	**80**	**1.4**	**0.67 J**	**0.81 J**	**3.0**	**1.0 J**	< 0.21 U	**3.3**	**2.9**	**0.67 J**
2-Hexanone	ug/m3	13.1	< 0.10 U	**0.15 J**	**0.45 J**	< 0.092 U	< 0.12 U	< 0.10 U	< 0.10 U	< 0.085 U	< 0.12 U	**0.63 J**	**0.30 J**	< 0.091 U
4-Ethyltoluene	ug/m3	NE	< 0.13 U	< 0.12 U	**0.18 J**	< 0.12 U	< 0.16 U	< 0.13 U	< 0.13 U	< 0.11 U	< 0.16 U	**0.18 J**	< 0.13 U	< 0.12 U
4-Methyl-2-pentanone	ug/m3	1,310	< 0.12 U	< 0.10 U	< 0.11 U	**0.12 J**	< 0.14 U	< 0.11 U	**0.61 J**	**0.13 J**	< 0.14 U	**0.31 J**	< 0.11 U	< 0.10 U
Acetonitrile	ug/m3	26.3	< 0.21 U	< 0.18 U	**2.1**	< 0.18 U	< 0.24 U	< 0.20 U	**0.83**	**1.5**	< 0.24 U	< 0.18 U	**0.85**	< 0.18 U
Acrylonitrile	ug/m3	0.876	< 0.17 U	< 0.15 U	< 0.17 U	< 0.15 U	< 0.20 U	< 0.17 U	< 0.17 U	< 0.14 U	< 0.21 U	< 0.16 U	< 0.17 U	< 0.15 U
Allyl chloride	ug/m3	0.438	< 0.11 U	< 0.099 U	< 0.11 U	< 0.10 U	< 0.13 U	< 0.11 U	< 0.11 U	< 0.093 U	< 0.13 U	< 0.10 U	< 0.11 U	< 0.099 U
Benzyl chloride	ug/m3	0.438	< 0.19 U	< 0.17 U	< 0.18 U	< 0.17 U	< 0.22 U	< 0.18 U	< 0.19 U	< 0.15 U	< 0.22 U	< 0.17 U	< 0.18 U	< 0.17 U
Bromoform	ug/m3	111	< 0.17 U	< 0.15 UJ	< 0.17 U	< 0.15 U	< 0.20 U	< 0.17 UJ	< 0.17 U	< 0.14 U	< 0.21 U	< 0.16 UJ	< 0.17 U	< 0.15 U
Carbon disulfide	ug/m3	307	< 0.25 U	**1.1 J**	**0.41 J**	< 0.22 U	**0.54 J**	< 0.24 U	**0.46 J**	**0.39 J**	< 0.30 U	< 0.23 U	< 0.24 U	< 0.22 U
Cyclohexane	ug/m3	2,630	< 0.24 U	< 0.21 U	< 0.23 U	< 0.21 U	< 0.28 U	< 0.23 U	< 0.23 U	< 0.19 U	< 0.28 U	< 0.21 U	< 0.23 U	< 0.21 U
D-Limonene	ug/m3	NE	< 0.17 U	< 0.15 U	**0.81**	< 0.15 U	< 0.20 U	**1.7**	**0.77 J**	**1.5**	**0.37 J**	< 0.16 U	**0.47 J**	< 0.15 U
Ethanol	ug/m3	NE	**4.4 J**	**6.7 J**	**98**	**21**	**3.9 J**	**18**	**41**	**41**	**8.4 J**	**38**	**14**	**8.1**
Ethyl acetate	ug/m3	30.7	< 0.44 U	**8.8**	**50 J**	**78**	< 0.52 U	**4.2**	**93 J**	**1.6 J**	< 0.52 U	**4.2**	**3.6 J**	**4.3**
Heptane	ug/m3	175	< 0.13 U	< 0.12 U	**0.31 J**	**0.37 J**	< 0.16 U	**0.26 J**	**1.1**	**0.27 J**	< 0.16 U	**0.49 J**	**0.22 J**	**0.13 J**
Isopropyl alcohol	ug/m3	87.6	< 0.35 U	**6.3**	**15**	**3.7**	< 0.41 U	**2.5**	**5.9**	**1.9**	< 0.41 U	**4.7**	< 0.34 U	**0.86 J**
Isopropylbenzene (Cumene)	ug/m3	175	< 0.12 U	< 0.11 U	< 0.12 U	< 0.11 U	< 0.14 U	< 0.12 U	< 0.12 U	< 0.099 U	< 0.14 U	< 0.11 U	< 0.12 U	< 0.11 U
Methyl methacrylate	ug/m3	307	< 0.30 U	< 0.26 U	< 0.29 U	< 0.27 U	< 0.35 U	< 0.29 U	**0.87 J**	< 0.25 U	< 0.36 U	< 0.27 U	< 0.29 U	< 0.26 U
n-Butyl acetate	ug/m3	NE	< 0.12 U	**0.16 J**	**1.1 J**	**0.26 J**	< 0.14 U	**0.28 J**	**7.4**	**0.57 J**	< 0.14 U	**0.51 J**	**1.0 J**	< 0.10 U
n-Hexane	ug/m3	307	**0.18 J**	< 0.15 U	< 0.17 U	**0.48 J**	**0.21 J**	**0.33 J**	< 0.17 U	**0.27 J**	**0.39 J**	**0.50 J**	< 0.17 U	**0.31 J**
Nonane	ug/m3	8.76	< 0.14 U	< 0.12 U	**0.29 J**	< 0.12 U	< 0.17 U	**0.41 J**	**0.24 J**	**0.30 J**	< 0.17 U	**0.88**	**0.15 J**	< 0.12 U
n-Propylbenzene	ug/m3	438	< 0.12 U	< 0.11 U	< 0.12 U	< 0.11 U	< 0.14 U	< 0.12 U	**0.12 J**	< 0.099 U	< 0.14 U	**0.13 J**	< 0.12 U	< 0.11 U
Octane	ug/m3	NE	< 0.19 U	**0.29 J**	**0.36 J**	< 0.17 U	< 0.22 U	**0.25 J**	**0.56 J**	< 0.15 U	< 0.22 U	**0.45 J**	**0.23 J**	< 0.17 U
Propylene	ug/m3	1,310	< 0.21 U	**2.0**	**3.1**	**0.61 J**	< 0.24 U	**0.84**	**2.6**	**0.34 J**	**0.52 J**	**1.8**	**0.91**	**0.26 J**
Tetrahydrofuran	ug/m3	876	< 0.11 U	< 0.092 U	**6.0**	**2.6**	< 0.12 U	< 0.10 U	**0.27 J**	**0.10 J**	< 0.13 U	**0.16 J**	< 0.10 U	**0.18 J**
Vinyl acetate	ug/m3	87.6	< 1.9 UJ	< 1.7 U	< 1.8 U	< 1.7 U	< 2.2 U	< 1.8 U	< 1.9 U	< 1.5 U	< 2.2 U	**13**	< 1.8 U	< 1.7 U

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	AO-002				AO-003				AO-004			
Sample Location			AO-002				AO-003				AO-004			
Sample Date			01-17-2021	04-14-2021	07-23-2021	10-27-2021	01-11-2021	04-14-2021	07-23-2021	10-29-2021	01-11-2021	04-14-2021	07-23-2021	10-27-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N
			Scale House Ambient				Pretreatment Building Office Ambient				Pump House Ambient			
Notes			Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From North-Northwest	Predominant Wind Direction At Time of Sampling - From South-Southwest	Predominant Wind Direction At Time of Sampling - From South-Southwest
TO15-SIM														
1,1,1-Trichloroethane	ug/m3	2,190	< 0.0079 U	< 0.0081 U	< 0.022 U	< 0.013 U	< 0.011 U	**0.043**	< 0.025 U	**0.051**	< 0.010 U	**0.082**	< 0.0090 U	< 0.012 U
1,1,2,2-Tetrachloroethane	ug/m3	2.11	< 0.0096 U	< 0.0099 U	< 0.026 U	< 0.012 U	< 0.013 U	< 0.011 U	< 0.030 U	< 0.011 U	< 0.012 U	< 0.010 U	< 0.011 U	< 0.012 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	2,190	**0.40**	**0.47**	**0.38**	**0.36**	**0.47**	**0.45**	**0.40**	**0.37**	**0.47**	**0.44**	**0.39**	**0.38**
1,1,2-Trichloroethane	ug/m3	0.0876	< 0.011 U	< 0.011 U	< 0.029 U	< 0.0083 U	< 0.015 U	< 0.012 U	< 0.033 U	< 0.0076 U	< 0.014 U	< 0.011 U	< 0.012 U	< 0.0081 U
1,1-Dichloroethane	ug/m3	76.7	< 0.0082 U	< 0.0084 U	**0.024 J**	< 0.011 U	< 0.011 U	< 0.0093 U	< 0.025 U	< 0.011 U	< 0.011 U	**0.012 J**	**0.026 J**	< 0.011 U
1,1-Dichloroethene	ug/m3	87.6	< 0.012 U	< 0.012 U	**0.10**	< 0.012 U	< 0.016 U	< 0.013 U	< 0.036 U	< 0.011 U	< 0.015 U	< 0.012 U	< 0.013 U	< 0.012 U
1,2,4-Trichlorobenzene	ug/m3	0.876	< 0.017 U	< 0.018 U	**1.1**	< 0.028 U	< 0.024 U	< 0.020 U	< 0.054 U	< 0.026 U	< 0.022 U	< 0.018 U	< 0.020 U	< 0.028 U
1,2,4-Trimethylbenzene	ug/m3	26.3	**0.040 J**	**0.059 J**	**0.20 J**	**0.091 J**	**0.074 J**	**0.21**	**0.27 J**	**0.22**	**0.18**	**0.50**	**0.20**	< 0.022 U
1,2-Dibromo-3-chloropropane	ug/m3	0.0204	< 0.013 U	< 0.013 U	< 0.035 U	< 0.020 U	< 0.018 U	< 0.015 U	< 0.040 U	< 0.018 U	< 0.016 U	< 0.013 U	< 0.015 U	< 0.019 U
1,2-Dichlorobenzene	ug/m3	87.6	< 0.011 U	< 0.011 U	**0.28**	< 0.025 U	< 0.015 U	< 0.013 U	< 0.035 U	< 0.023 U	< 0.014 U	< 0.012 U	< 0.013 U	< 0.025 U
1,2-Dichloroethane	ug/m3	3.07	**0.051**	**0.072**	**0.31**	**0.039**	**0.057**	**0.069**	**0.060 J**	**0.036**	**0.058**	**0.077**	**0.036 J**	**0.032 J**
1,2-Dichloropropane	ug/m3	1.75	**0.025 J**	**0.045**	< 0.027 U	**0.022 J**	**0.017 J**	**0.022 J**	**0.080 J**	**0.010 J**	**0.016 J**	**0.029 J**	**0.012 J**	**0.0090 J**
1,3,5-Trimethylbenzene	ug/m3	26.3	**0.013 J**	**0.018 J**	**0.063 J**	**0.028 J**	**0.020 J**	**0.072 J**	**0.079 J**	**0.072 J**	**0.054 J**	**0.17**	**0.055 J**	< 0.019 U
1,3-Butadiene	ug/m3	0.876	< 0.019 U	< 0.019 UJ	< 0.052 U	< 0.011 U	< 0.026 U	< 0.021 UJ	< 0.059 U	< 0.010 U	< 0.024 U	< 0.020 UJ	< 0.021 U	< 0.011 U
1,3-Dichlorobenzene	ug/m3	NE	< 0.011 U	< 0.012 U	< 0.031 U	< 0.024 U	< 0.016 U	< 0.013 U	< 0.036 U	< 0.022 U	< 0.015 U	< 0.012 U	< 0.013 U	< 0.023 U
1,4-Dichlorobenzene	ug/m3	11.1	< 0.011 U	< 0.011 U	**0.60**	**0.037**	< 0.015 U	**0.015 J**	**0.096 J**	**0.033**	< 0.014 U	**0.021 J**	**0.035 J**	< 0.028 U
1,4-Dioxane	ug/m3	13.1	< 0.011 U	**0.068 J**	< 0.031 U	< 0.012 U	**0.028 J**	< 0.013 U	< 0.036 U	**0.041 J**	< 0.015 U	< 0.012 U	**0.025 J**	< 0.012 U
Acetone	ug/m3	NE	< 3.4 U	**6.1**	**20**	**4.3**	< 4.7 U	**7.0**	**18**	**3.8**	< 4.3 U	**17**	**15**	**3.5**
Acrolein	ug/m3	0.00876	**0.10 J**	**0.31**	**0.97**	**0.23 J**	**0.21 J**	**0.17 J**	**1.3**	**0.11 J**	**0.092 J**	**1.2**	**1.1**	**0.18 J**
Benzene	ug/m3	13.1	**0.33**	**0.25**	**0.60**	**0.42**	**0.35**	**0.22**	**0.90**	**0.21**	**0.51**	**0.23**	**0.53**	**0.23**
Bromodichloromethane	ug/m3	3.31	< 0.0092 U	< 0.0095 U	< 0.025 U	< 0.0081 U	< 0.013 U	< 0.011 U	< 0.029 U	< 0.0075 U	< 0.012 U	< 0.0097 U	< 0.011 U	< 0.0080 U
Bromomethane	ug/m3	2.19	**0.022 J**	**0.046**	< 0.034 U	**0.023 J**	**0.022 J**	**0.027 J**	< 0.039 U	**0.020 J**	**0.023 J**	**0.026 J**	**0.022 J**	**0.023 J**
Carbon tetrachloride	ug/m3	20.4	**0.30**	**0.40**	**0.36**	**0.34**	**0.35**	**0.40**	**0.38**	**0.36**	**0.35**	**0.41**	**0.35**	**0.35**
Chlorobenzene	ug/m3	21.9	< 0.012 U	< 0.013 U	**0.10 J**	**0.021 J**	< 0.017 U	< 0.014 U	**0.74**	< 0.013 U	**0.016 J**	< 0.013 U	**0.019 J**	< 0.013 U
Chloroethane	ug/m3	1,750	< 0.011 U	**0.024 J**	< 0.031 U	< 0.011 U	< 0.016 U	< 0.013 U	< 0.036 U	**0.046**	< 0.015 U	**0.016 J**	**0.019 J**	< 0.011 U
Chloroform	ug/m3	5.33	**0.054 J**	**0.069 J**	**0.20 J**	**0.080 J**	**0.060 J**	**0.081 J**	**0.12 J**	**0.061 J**	**0.061 J**	**0.072 J**	**0.093 J**	**0.065 J**
Chloromethane	ug/m3	39.4	**0.21**	**0.27**	**0.098 J**	**0.042 J**	**0.19 J**	**0.21**	**0.12 J**	**0.052 J**	**0.21 J**	**0.27**	**0.055 J**	**0.052 J**
cis-1,2-Dichloroethene	ug/m3	NE	< 0.012 U	< 0.013 U	**0.26**	**0.024 J**	< 0.017 U	< 0.014 U	< 0.038 U	< 0.0093 U	< 0.016 U	< 0.013 U	**0.014 J**	< 0.0099 U
cis-1,3-Dichloropropene	ug/m3	NE	< 0.0083 U	< 0.0086 U	< 0.023 U	< 0.0099 U	< 0.012 U	< 0.0095 U	< 0.026 U	< 0.0092 U	< 0.011 U	< 0.0087 U	< 0.0095 U	< 0.0098 U
Dibromochloromethane	ug/m3	NE	< 0.012 U	< 0.012 U	< 0.032 U	< 0.0090 U	< 0.016 U	< 0.013 U	< 0.037 U	< 0.0083 U	< 0.015 U	< 0.012 U	< 0.013 U	< 0.0088 U
Dichlorodifluoromethane (Freon 12)	ug/m3	43.8	**1.7**	**2.5**	**1.8**	**1.6**	**1.9**	**2.3**	**1.8**	**1.9**	**1.9**	**2.5**	**1.7**	**1.7**
Ethylbenzene	ug/m3	49.1	**0.050 J**	**0.11 J**	**0.30 J**	**0.18**	**0.061 J**	**0.24**	**0.50**	**0.24**	**0.14 J**	**0.52**	**0.23**	**0.068 J**
Ethylene dibromide	ug/m3	0.204	< 0.011 U	< 0.011 U	< 0.029 U	< 0.0094 U	< 0.015 U	< 0.012 U	< 0.033 U	< 0.0086 U	< 0.014 U	< 0.011 U	< 0.012 U	< 0.0092 U
Hexachlorobutadiene	ug/m3	5.57	< 0.012 U	< 0.013 U	< 0.034 U	< 0.018 U	< 0.017 U	< 0.014 U	< 0.038 U	< 0.017 U	< 0.016 U	< 0.013 U	< 0.014 U	< 0.018 U
m,p-Xylenes	ug/m3	NE	**0.14**	**0.40**	**0.81**	**0.54**	**0.14 J**	**0.82**	**1.4**	**0.79**	**0.39**	**1.8**	**0.59**	**0.12 J**
Methyl tert-butyl ether	ug/m3	472	< 0.012 U	< 0.013 U	< 0.034 U	< 0.017 U	< 0.017 U	< 0.014 U	**0.066 J**	< 0.015 U	< 0.016 U	< 0.013 U	< 0.014 U	< 0.017 U
Methylene chloride	ug/m3	263	**0.21**	**0.36**	**0.30 J**	**0.32**	**0.24**	**0.43**	**1.2**	**0.39**	**0.25**	**0.55**	**0.29**	**0.23**
Naphthalene	ug/m3	1.31	**0.042 J**	**0.023 J**	**0.094 J**	< 0.031 UJ	**0.040 J**	**0.038 J**	**0.13 J**	**0.034 J**	**0.050 J**	**0.046 J**	**0.20 J**	< 0.030 UJ
o-Xylene	ug/m3	43.8	**0.052 J**	**0.20**	**0.36 J**	**0.24**	**0.056 J**	**0.30**	**0.73**	**0.27**	**0.15 J**	**0.56**	**0.29**	**0.037 J**
Styrene	ug/m3	438	**0.058 J**	**0.030 J**	**0.16 J**	**0.15**	< 0.014 U	**0.055 J**	**0.65**	**0.050 J**	**0.036 J**	**0.072 J**	**0.19**	< 0.017 U
Tetrachloroethene	ug/m3	17.5	**0.031 J**	**0.029 J**	**0.24**	**0.56**	**0.024 J**	**0.095**	**0.12**	**0.062**	**0.72**	**0.19**	**0.080**	**0.12**
Toluene	ug/m3	2,190	**0.39**	**0.69**	**2.2**	**1.8**	**0.29**	**0.97**	**12**	**0.94**	**0.56**	**1.5**	**1.9**	**0.48**
trans-1,2-Dichloroethene	ug/m3	17.5	< 0.0098 U	< 0.010 U	< 0.027 U	< 0.015 U	< 0.014 U	< 0.011 U	**0.087 J**	< 0.014 U	< 0.013 U	< 0.010 U	< 0.011 U	< 0.015 U
trans-1,3-Dichloropropene	ug/m3	NE	< 0.0074 U	< 0.0076 U	< 0.020 U	< 0.0067 U	< 0.010 U	< 0.0084 U	< 0.023 U	< 0.0062 U	< 0.0095 U	< 0.0078 U	< 0.0084 U	< 0.0066 U
Trichloroethene	ug/m3	6	< 0.011 U	< 0.012 U	**0.22**	**0.043**	< 0.016 U	< 0.013 U	**0.43**	**0.011 J**	< 0.015 U	< 0.012 U	**0.087**	**0.023 J**
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**0.85**	**1.2**	**1.0**	**0.88**	**1.0**	**1.1**	**1.1**	**0.81**	**1.0**	**1.2**	**1.1**	**0.91**
Vinyl chloride	ug/m3	27.9	< 0.010 U	< 0.010 U	< 0.028 U	< 0.017 U	< 0.014 U	< 0.012 U	< 0.032 U	< 0.015 U	< 0.013 U	< 0.011 U	< 0.012 U	< 0.017 U

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
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Sample Location			AO-005					
Sample Date			04-14-2021	04-14-2021	07-23-2021	07-23-2021	10-27-2021	10-27-2021
Sample Type			N	FD	N	FD	N	FD
Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Asphalt Plant Building Ambient					
Notes			Predominant Wind Direction At Time of Sampling - From North Northwest		Predominant Wind Direction At Time of Sampling - From South-Southwest		Predominant Wind Direction At Time of Sampling - From South-Southwest	
TO3								
Methane	ppmv	1,000	**2.6**	**3.7**	**2.8**	**2.8**	**3.2 J**	**5.4 J**
TO15								
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	< 0.11 U	< 0.12 U	< 0.11 U	< 0.11 U	< 0.12 U	< 0.13 U
1S-.alpha.-Pinene	ug/m3	NE	< 0.11 U	< 0.11 U	**0.41 J**	**0.31 J**	< 0.12 U	< 0.12 U
2-Butanone	ug/m3	2,190	**0.71 J**	**0.46 J**	**4.7 J**	**10 J**	**0.95 J**	**0.89 J**
2-Hexanone	ug/m3	13.1	**0.15 J**	< 0.092 U	**0.85 J**	**1.3 J**	**0.11 J**	< 0.10 U
4-Ethyltoluene	ug/m3	NE	< 0.12 U	< 0.12 U	**0.11 J**	**0.11 J**	< 0.12 U	< 0.13 U
4-Methyl-2-pentanone	ug/m3	1,310	< 0.099 U	< 0.10 U	**0.28 J**	**0.50 J**	**0.12 J**	< 0.11 U
Acetonitrile	ug/m3	26.3	< 0.18 U	< 0.18 U	**0.71**	**0.87**	< 0.19 U	< 0.20 U
Acrylonitrile	ug/m3	0.876	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U
Allyl chloride	ug/m3	0.438	< 0.098 U	< 0.10 U	< 0.095 U	< 0.096 U	< 0.11 U	< 0.11 U
Benzyl chloride	ug/m3	0.438	< 0.16 U	< 0.17 U	< 0.16 U	< 0.16 U	< 0.18 U	< 0.18 U
Bromoform	ug/m3	111	< 0.15 UJ	< 0.15 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U
Carbon disulfide	ug/m3	307	< 0.22 U	< 0.22 U	**11 J**	**6.6 J**	< 0.23 U	< 0.24 U
Cyclohexane	ug/m3	2,630	< 0.20 U	< 0.21 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.23 U
D-Limonene	ug/m3	NE	< 0.15 U	< 0.15 U	**0.86**	**0.62 J**	< 0.16 U	< 0.17 U
Ethanol	ug/m3	NE	**9.8**	**7.0 J**	**190 J**	**37 J**	**8.0**	**5.5 J**
Ethyl acetate	ug/m3	30.7	**2.5**	**2.4**	**2.9 J**	**34 J**	**2.1 J**	< 0.43 U
Heptane	ug/m3	175	< 0.12 U	< 0.12 U	**0.34 J**	**0.25 J**	**0.20 J**	**0.18 J**
Isopropyl alcohol	ug/m3	87.6	**0.93 J**	**0.33 J**	**12 J**	**3.8 J**	**1.3 J**	**0.82 J**
Isopropylbenzene (Cumene)	ug/m3	175	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.12 U
Methyl methacrylate	ug/m3	307	< 0.26 U	< 0.27 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.29 U
n-Butyl acetate	ug/m3	NE	**0.13 J**	**0.12 J**	**0.74 J**	**0.67 J**	**0.18 J**	< 0.11 U
n-Hexane	ug/m3	307	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	**0.40 J**	**0.33 J**
Nonane	ug/m3	8.76	**0.22 J**	**0.20 J**	**0.19 J**	**0.24 J**	< 0.13 U	< 0.14 U
n-Propylbenzene	ug/m3	438	**0.26 J**	< 0.11 U	**0.19 J**	**0.27 J**	< 0.11 U	< 0.12 U
Octane	ug/m3	NE	**0.31 J**	**0.20 J**	**0.23 J**	**0.22 J**	< 0.18 U	< 0.18 U
Propylene	ug/m3	1,310	**0.40 J**	**0.29 J**	**4.1 J**	**1.9 J**	**0.34 J**	**0.32 J**
Tetrahydrofuran	ug/m3	876	**0.99 J**	< 0.094 U	**0.37 J**	**1.3 J**	**0.17 J**	< 0.10 U
Vinyl acetate	ug/m3	87.6	< 1.6 U	< 1.7 U	**8.6**	< 1.6 U	< 1.8 U	< 1.8 U

Notes are presented on Page 10

Table 15: Indoor Air and Ambient Air Sample Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location			AO-005					
Sample Date			04-14-2021	04-14-2021	07-23-2021	07-23-2021	10-27-2021	10-27-2021
Sample Type			N	FD	N	FD	N	FD
Analyte	Unit	USEPA IA (COM TCR=1E-05, THQ=0.1) or Site-Specific Screening Level	Asphalt Plant Building Ambient					
Notes			Predominant Wind Direction At Time of Sampling - From North Northwest		Predominant Wind Direction At Time of Sampling - From South-Southwest		Predominant Wind Direction At Time of Sampling - From South-Southwest	
TO15-SIM								
1,1,1-Trichloroethane	ug/m3	2,190	< 0.0080 U	< 0.0083 U	**0.0080 J**	< 0.0079 U	< 0.013 U	< 0.017 U
1,1,2,2-Tetrachloroethane	ug/m3	2.11	< 0.0098 U	< 0.010 U	< 0.0095 U	< 0.0096 U	< 0.013 U	< 0.017 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	2,190	**0.46**	**0.48**	**0.40**	**0.38**	**0.40**	**0.39**
1,1,2-Trichloroethane	ug/m3	0.0876	< 0.011 U	< 0.011 U	< 0.010 U	< 0.011 U	< 0.0086 U	**0.016 J**
1,1-Dichloroethane	ug/m3	76.7	< 0.0083 U	< 0.0085 U	< 0.0081 U	**0.020 J**	< 0.012 U	< 0.016 U
1,1-Dichloroethene	ug/m3	87.6	< 0.012 U	< 0.012 U	< 0.011 U	< 0.012 U	< 0.013 U	< 0.017 U
1,2,4-Trichlorobenzene	ug/m3	0.876	**0.024 J**	< 0.018 UJ	**0.022 J**	**0.029 J**	< 0.029 U	**0.043 J**
1,2,4-Trimethylbenzene	ug/m3	26.3	**0.12 J**	**0.14**	**0.36**	**0.39**	**0.089 J**	**0.093 J**
1,2-Dibromo-3-chloropropane	ug/m3	0.0204	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.020 U	< 0.027 U
1,2-Dichlorobenzene	ug/m3	87.6	**0.11 J**	**0.014 J**	**0.032 J**	**0.053**	< 0.026 U	< 0.035 U
1,2-Dichloroethane	ug/m3	3.07	**0.12**	**0.072**	**0.048**	**0.044**	**0.038**	**0.059**
1,2-Dichloropropane	ug/m3	1.75	**0.023 J**	**0.023 J**	**0.011 J**	**0.011 J**	**0.013 J**	**0.012 J**
1,3,5-Trimethylbenzene	ug/m3	26.3	**0.033 J**	**0.045 J**	**0.11 J**	**0.099 J**	**0.029 J**	< 0.027 U
1,3-Butadiene	ug/m3	0.876	< 0.019 UJ	< 0.020 UJ	< 0.018 U	**0.063 J**	< 0.012 U	< 0.015 U
1,3-Dichlorobenzene	ug/m3	NE	< 0.012 U	< 0.012 U	< 0.011 U	< 0.011 U	< 0.025 U	< 0.033 U
1,4-Dichlorobenzene	ug/m3	11.1	**0.13 J**	**0.056 J**	**0.087**	**0.11**	**0.035 J**	**0.052**
1,4-Dioxane	ug/m3	13.1	< 0.012 U	< 0.012 U	**0.12 J**	**0.11 J**	< 0.013 U	< 0.017 U
Acetone	ug/m3	NE	**8.0**	**10**	**30 J**	**39 J**	**5.8**	**5.6**
Acrolein	ug/m3	0.00876	**0.45**	**0.64**	**1.3 J**	**3.1 J**	**0.36**	**0.30 J**
Benzene	ug/m3	13.1	**1.3 J**	**0.23 J**	**0.84 J**	**1.1 J**	**0.27**	**0.25**
Bromodichloromethane	ug/m3	3.31	< 0.0094 U	< 0.0097 U	< 0.0091 U	< 0.0092 U	< 0.0085 U	< 0.011 U
Bromomethane	ug/m3	2.19	**0.029 J**	**0.028 J**	**0.032 J**	**0.040**	**0.037**	**0.064**
Carbon tetrachloride	ug/m3	20.4	**0.41**	**0.40**	**0.38**	**0.37**	**0.35**	**0.34**
Chlorobenzene	ug/m3	21.9	**0.15**	**0.045 J**	**0.47**	**0.43**	< 0.014 U	**0.031 J**
Chloroethane	ug/m3	1,750	**0.018 J**	**0.030 J**	**0.046**	**0.035**	**0.019 J**	**0.027 J**
Chloroform	ug/m3	5.33	**0.068 J**	**0.066 J**	**0.13 J**	**0.11 J**	**0.081 J**	**0.079 J**
Chloromethane	ug/m3	39.4	**0.29**	**0.26**	**0.050 J**	**0.047 J**	**0.063 J**	**0.069 J**
cis-1,2-Dichloroethene	ug/m3	NE	< 0.013 U	< 0.013 U	< 0.012 U	**0.021 J**	< 0.011 U	**0.032 J**
cis-1,3-Dichloropropene	ug/m3	NE	< 0.0084 U	< 0.0087 U	< 0.0082 U	< 0.0083 U	< 0.010 U	**0.027 J**
Dibromochloromethane	ug/m3	NE	< 0.012 U	< 0.012 U	< 0.012 U	< 0.012 U	**0.014 J**	**0.018 J**
Dichlorodifluoromethane (Freon 12)	ug/m3	43.8	**2.5**	**2.5**	**1.6**	**1.6**	**2.2**	**1.9**
Ethylbenzene	ug/m3	49.1	**0.21**	**0.12 J**	**0.26**	**0.31**	**0.10 J**	**0.093 J**
Ethylene dibromide	ug/m3	0.204	**0.015 J**	< 0.011 U	< 0.010 U	< 0.011 U	< 0.0098 U	**0.031 J**
Hexachlorobutadiene	ug/m3	5.57	< 0.013 U	< 0.013 U	< 0.012 U	< 0.012 U	< 0.019 U	< 0.025 U
m,p-Xylenes	ug/m3	NE	**0.53**	**0.43**	**0.78**	**0.89**	**0.27**	**0.24**
Methyl tert-butyl ether	ug/m3	472	< 0.013 U	< 0.013 U	< 0.012 U	< 0.012 U	< 0.018 U	< 0.023 U
Methylene chloride	ug/m3	263	**0.32**	**0.31**	**0.33**	**0.31**	**0.25**	**0.25**
Naphthalene	ug/m3	1.31	**0.041 J**	**0.091 J**	**0.60 J**	**1.6 J**	< 0.032 U	< 0.043 U
o-Xylene	ug/m3	43.8	**0.29**	**0.22**	**0.35**	**0.40**	**0.11 J**	**0.096 J**
Styrene	ug/m3	438	**0.061 J**	**0.068 J**	**0.38**	< 0.0099 U	**0.052 J**	**0.050 J**
Tetrachloroethene	ug/m3	17.5	**0.030 J**	**0.026 J**	**0.11**	**0.084**	**0.061**	**0.064**
Toluene	ug/m3	2,190	**0.57**	**0.51**	**1.7**	**1.7**	**0.59**	**0.53**
trans-1,2-Dichloroethene	ug/m3	17.5	< 0.0099 U	< 0.010 U	**0.013 J**	< 0.0098 U	< 0.016 U	**0.036 J**
trans-1,3-Dichloropropene	ug/m3	NE	**0.015 J**	< 0.0077 U	< 0.0073 U	< 0.0074 U	< 0.0070 U	**0.036 J**
Trichloroethene	ug/m3	6	< 0.012 U	< 0.012 U	**0.049**	**0.065**	**0.015 J**	**0.035 J**
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**1.2**	**1.2**	**1.1**	**1.0**	**0.96**	**0.89**
Vinyl chloride	ug/m3	27.9	< 0.010 U	< 0.011 U	< 0.010 U	< 0.010 U	< 0.018 U	< 0.023 U

Notes:

Site Specific Screening Level for Methane noted as 10,000 ppmv (1%) for comparison purpsoses only. Other screening levels may be applicable such as a MSWLF typical value of 25% of LE (1.25% or 12,500 ppmv) or the LEL (5% or 50,000 ppmv)
ft BGS = feet below ground surface
%v/v = percent volume/volume
ug/m3 = micrograms per cubic meters
ppmv = parts per million volume
USEPA IA (COM TCR = 1E-05, THQ = 0.1) = West Lake Target Indoor Air Concentration - Commercial THQ-0.1 / TR-10-5, Nov 2021
Bold = Detected
***Orange Shaded** = Exceeds USEPA IA (COM TCR = 1E-05, THQ = 0.1)*
***Green Shaded** = Non-Detect Value < RL/MDL Exceeds USEPA IA (COM TCR = 1E-05, THQ = 0.1)*
Outdoor ambient air samples are displayed on the same table but are not compared to USEPA Indoor Air Screening Levels
NE = Not Established
N = Normal environmental sample
FD = Field duplicate

Qualifier Definition
J = Estimated concentration.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Notes are presented on Page 10

Table 16: Radon Vapor Intrusion Sample Results
West Lake Landfill OU-3
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Sample Location				AI-001	AI-002	AI-003	AI-004	AI-005	AI-006	AI-006	AI-007	AO-001	AO-002	AO-003	AO-004	AO-005	AO-005
Sample Depth (ft BGS)				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Type				N	N	N	N	N	N	FD	N	N	N	N	N	N	FD
Long-Term (LT) Sample Dates (Deploy>Retrieve)				1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	4/13/21>7/19/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	1/14/21>4/15/21	4/13/21>7/19/21	4/13/21>7/19/21
Short-Term (ST) Sample Dates (Deploy>Retrieve)				1/11/21>1/13/21	1/11/21>1/13/21	1/11/21>1/13/21	1/11/21>1/13/21	1/14/21>1/16/21	1/14/21>1/16/21	1/14/21>1/16/21	4/16/21>4/18/21	1/11/21>1/13/21	1/14/21>1/16/21	1/11/21>1/13/21	1/14/21>1/16/21	4/16/21>4/18/21	-
Matrix				Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air	Ambient Air
Analyte	**Unit**	**QAPP AL**	**EPA AL**	Engineering Building - Foyer	Engineering Building - Conference Room	Engineering Building- Garage/Store Room	Pretreatment Building Office	Pump House	Scale House		Asphalt Plant Building	Engineering Building Ambient	Scale House Ambient	Pretreatment Building Office Ambient	Pump House Ambient	Asphalt Plant Building Ambient	
Notes				***ST***: Placed on floor below LT sampler on tote. ***LT***: Suspended from light fixture in building foyer	***ST***: Placed on floor below LT sampler on tote. ***LT***: Suspended from drop ceiling on west end of conference room between the two doorways on the western wall	***ST***: Placed on floor below LT sampler on tote.***LT***: Suspended from rafters at the entry into the garage area from the offices	***ST***: Placed on floor below LT sampler on tote. ***LT***: Suspended from light fixture in middle of office area	***ST***: Placed on floor below LT sampler on tote. ***LT***: Suspended from light fixture in middle of office area	***ST***: Placed on floor below LT sampler on tote.***LT***: Suspended from light fixture in middle of office area		***ST***: Placed on floor below LT sampler on tote. ***LT***: Suspended from light fixture in building entry/kitchen area	Predominant wind direction at the time of sampling from north. ***ST***: Sampler placed adjacent to LT location in plastic tote with holes for intake and exhaust hoses +/- 3 feet above ground.***LT***: Sampler suspended from shepherds hook +/-3 feet above ground +/-100 feet north of the north corner of the Engineering Building	Predominant wind direction at the time of sampling from north. ***ST***: Sampler placed adjacent to LT location in plastic tote with holes for intake and exhaust hoses +/- 3 feet above ground.***LT***: Sampler suspended from shepherds hook +/-3 feet above ground +/-100 feet north of the north corner of the Scale House	Predominant wind direction at the time of sampling from north. ***ST***: Sampler placed adjacent to LT location in plastic tote with holes for intake and exhaust hoses +/- 3 feet above ground.***LT***: Sampler suspended from shepherds hook +/-3 feet above ground +/- 200 feet north of the north corner of the Pretreatment Building at steel pipe sticking out of ground	Predominant wind direction at the time of sampling from north. ***ST***: Sampler placed adjacent to LT location in plastic tote with holes for intake and exhaust hoses +/- 3 feet above ground. ***LT***: Sampler suspended from ladder into leachate AST secondary containment +/-5 feet above ground +/-220 feet north-northwest of the north-west corner of the Pump House	Predominant wind direction at the time of sampling from west-northwest.***ST***: Sampler placed adjacent to LT location in plastic tote with holes for intake and exhaust hoses +/- 3 feet above ground.***LT***: Sampler suspended from shepherd hook +/- 3 feet above ground +/-200 feet to the west-northwest from the control house building adjacent to large concrete block	
Long-Term by EPA 402-R-92-004																	
Radon	pCi/L	2	4	**1.03**	**0.972**	**0.22**	**0.405**	< 0.19	< 0.19	**0.513**	**0.513**	No Result	No Result	No Result	No Result	No Result	No Result
Short-Term by Field Measure with RAD7 Meter																	
Radon, Field	pCi/L	2	4	**1.522**	**1.514**	**1.12**	**0.136**	**0.192**	**0.101**	--	**0.907**	**0.194**	**0.142**	**0.161**	**0.126**	**0.072**	--

Notes:
AL = action level
pCi/L = picocuries per liter
FD = field duplicate
Bold = Detected
Orange Shaded = Exceeds QAPP radon action level of 2 pCi/L
Blue Shaded = Exceeds EPA radon action level of 4 pCi/L
-- = Not Available
No Result = moisture from precipitation leaked into the long-term radon sampling deployment boxes, which held the sampler, causing the electric charge on the plate within the e-perm chambers to completely discharge. Therefore, the laboratory could not analyze the ambient e-perm chambers for radon.

Table 17: Sub-Slab Vapor Sample Results
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Sample Location			GB-001				GB-002				GB-003				GB-004							
Sample Date			01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	01-14-2021	04-16-2021	04-16-2021	07-21-2021	07-21-2021	10-28-2021	10-28-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N	FD	N	FD
Analyte	Unit	USEPA SG (COM TCR = 1E-05, THQ = 0.1) or Site-Specific Screening Level	Engineering Building - Foyer				Engineering Building - Conference Room				Engineering Building - Garage/Store Room				Pretreatment Building Office							
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs)							
TO3																						
Methane	ppmv	10,000	--	490	60,000	78,000	--	130,000	310,000	240,000	410	3.6	11	1,800	3.4	3.6	1.7	1.6	< 1.9 U	< 1.8 U	1.8	1.8
E3CMOD																						
Carbon dioxide	%v/v	NE	12.8	4.38	15.6	16.1 J-	16.4	22.4	12.0	23.2 J-	0.361	< 0.17 U	2.44	1.1 J-	0.229	0.204	< 0.18 U	< 0.18 U	0.227	< 0.26 U	< 0.22 UJ	< 0.21 UJ
Methane	ppmv	10,000	28,300	--	--	--	158,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxygen	%v/v	NE	3.33	16.1	5.58	4.3 J-	2.13	1.02	12.9	1.6 J-	21.7	22.1	19.6	20.7 J-	22.1	22.1	22.0	22.1	22.1	22.3	22.0 J-	22.2 J-
TO15M																						
1,1,1-Trichloroethane	ug/m3	73,000	< 0.27 U	< 0.24 U	< 0.27 U	< 0.28 U	< 1.1 U	< 0.98 U	< 0.32 U	< 0.29 U	< 0.25 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.29 U	< 0.28 U	< 0.27 U	< 0.33 U	< 0.31 U
1,1,2,2-Tetrachloroethane	ug/m3	70.5	< 0.31 U	< 0.27 U	< 0.30 U	< 0.32 U	< 1.2 U	< 1.1 U	< 0.36 U	< 0.32 U	< 0.28 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.34 U	< 0.32 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.36 U	< 0.34 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	73,000	0.33 J	0.43 J	0.33 J	< 0.32 U	< 1.3 U	< 1.1 U	< 0.37 U	0.52 J	0.46 J	0.59 J	0.46 J	0.45 J	0.39 J	0.45 J	1.8 J	0.44 J	0.44 J	0.48 J	0.51 J	0.46 J
1,1,2-Trichloroethane	ug/m3	2.92	< 0.22 U	< 0.20 U	< 0.22 U	< 0.23 U	< 0.91 U	< 0.80 U	< 0.26 U	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.24 U	< 0.24 U	< 0.23 U	< 0.22 U	< 0.27 U	< 0.25 U
1,1-Dichloroethane	ug/m3	2,560	< 0.32 U	< 0.29 U	1.2 J	0.36 J	< 1.3 U	< 1.2 U	< 0.38 U	0.90 J	< 0.30 U	< 0.33 U	< 0.34 U	< 0.33 U	< 0.36 U	< 0.33 U	< 0.35 U	< 0.34 U	< 0.33 U	< 0.32 U	< 0.38 U	< 0.36 U
1,1-Dichloroethene	ug/m3	2,920	< 0.31 U	< 0.27 U	< 0.30 U	< 0.32 U	< 1.2 U	< 1.1 U	< 0.36 U	< 0.32 U	< 0.28 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.34 U	< 0.32 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.36 U	< 0.34 U
1,2,4-Trichlorobenzene	ug/m3	29.2	< 0.54 U	< 0.48 UJ	< 0.53 U	< 0.56 U	< 2.2 U	< 1.9 UJ	< 0.63 U	< 0.57 U	< 0.50 U	0.91 J	< 0.57 U	< 0.55 U	< 0.60 U	< 0.56 U	< 0.58 U	< 0.57 U	< 0.56 U	< 0.54 U	< 0.64 U	< 0.60 U
1,2,4-Trimethylbenzene	ug/m3	876	1.0 J	0.35 J	3.8	2.4	< 1.2 U	2.4 J	3.7	3.9	0.80 J	1.4 J	5.9	2.4	3.4	3.8	2.2 J	2.2 J	3.4	3.3	2.8	2.8
1,2-Dibromo-3-chloropropane	ug/m3	0.681	< 0.42 U	< 0.37 U	< 0.41 U	< 0.43 U	< 1.7 U	< 1.5 U	< 0.49 U	< 0.44 U	< 0.38 U	< 0.42 U	< 0.44 U	< 0.43 U	< 0.46 U	< 0.43 U	< 0.44 U	< 0.44 U	< 0.43 U	< 0.41 U	< 0.49 U	< 0.46 U
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	1,200	180	890	1,100	2,400	1,300	1,500	2,000	14	2.4	57	67	< 0.39 U	< 0.36 U	< 0.37 U	< 0.37 U	0.46 J	< 0.35 U	< 0.41 U	< 0.39 U
1,2-Dichlorobenzene	ug/m3	2,920	< 0.33 U	< 0.29 U	< 0.32 U	< 0.34 U	< 1.3 U	< 1.2 U	< 0.38 U	< 0.35 U	< 0.30 U	< 0.33 U	< 0.35 U	< 0.34 U	< 0.37 U	< 0.34 U	< 0.35 U	< 0.35 U	< 0.34 U	< 0.33 U	< 0.39 U	< 0.37 U
1,2-Dichloroethane	ug/m3	102	< 0.24 U	< 0.22 U	< 0.24 U	< 0.25 U	< 0.99 U	< 0.87 U	< 0.29 U	< 0.26 U	< 0.23 U	< 0.25 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.25 U	< 0.26 U	< 0.26 U	< 0.25 U	< 0.24 U	< 0.29 U	< 0.27 U
1,2-Dichloropropane	ug/m3	58.4	< 0.27 U	< 0.24 U	< 0.27 U	0.30 J	< 1.1 U	< 0.98 U	< 0.32 U	0.60 J	< 0.25 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.29 U	< 0.28 U	< 0.27 U	< 0.33 U	< 0.31 U
1,3,5-Trimethylbenzene	ug/m3	876	< 0.32 U	< 0.28 U	2.4	1.2 J	< 1.3 U	< 1.1 U	< 0.37 U	2.2 J	< 0.29 U	0.52 J	3.8	1.2 J	0.70 J	0.89 J	0.69 J	0.67 J	1.7 J	1.7 J	1.1 J	1.2 J
1,3-Butadiene	ug/m3	29.2	< 0.37 U	< 0.32 U	< 0.36 U	< 0.38 U	< 1.5 U	< 1.3 U	< 0.43 U	< 0.39 U	< 0.34 U	< 0.37 U	< 0.39 U	< 0.37 U	< 0.41 U	< 0.38 U	< 0.39 U	< 0.39 U	< 0.38 U	< 0.36 U	< 0.43 U	< 0.41 U
1,3-Dichlorobenzene	ug/m3	NE	< 0.33 U	< 0.30 U	< 0.33 U	< 0.34 U	< 1.3 U	< 1.2 U	< 0.39 U	0.42 J	< 0.31 U	< 0.33 U	< 0.35 U	< 0.34 U	< 0.37 U	< 0.34 U	< 0.35 U	< 0.35 U	< 0.34 U	< 0.33 U	< 0.39 U	< 0.37 U
1,4-Dichlorobenzene	ug/m3	372	< 0.34 U	< 0.30 U	1.2 J	1.8 J	13	19	70	92	< 0.31 U	0.35 J	< 0.36 U	< 0.35 U	< 0.38 U	< 0.35 U	< 0.36 U	< 0.36 U	< 0.35 U	< 0.34 U	< 0.40 U	< 0.38 U
1,4-Dioxane	ug/m3	438	< 0.26 U	< 0.23 U	< 0.26 U	< 0.27 U	< 1.1 U	< 0.93 U	< 0.31 U	< 0.28 U	0.37 J	< 0.26 U	< 0.28 U	< 0.27 U	0.74 J	1.0 J	< 0.28 U	< 0.28 U	< 0.27 U	< 0.26 U	< 0.31 U	0.36 J
1S-.alpha.-Pinene	ug/m3	NE	1.6 J	0.71 J	8.9	4.8	2.6 J	3.8 J	< 0.40 U	12	1.7 J	1.7 J	13	4.6	1.2 J	1.4 J	1.5 J	1.4 J	4.8	4.9	3.2	3.5
2-Butanone	ug/m3	73,000	16	7.2	3.6 J	1.9 J	< 1.8 U	3.6 J	6.9	12	3.3 J	3.9 J	< 0.48 U	1.3 J	2.1 J	3.4 J	3.3 J	3.5 J	5.2	2.0 J	1.8 J	1.1 J
2-Hexanone	ug/m3	438	< 0.27 U	< 0.24 U	< 0.27 U	< 0.28 U	< 1.1 U	< 0.98 U	< 0.32 U	< 0.29 U	< 0.25 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.29 U	< 0.28 U	< 0.27 U	< 0.33 U	< 0.31 U
4-Ethyltoluene	ug/m3	NE	< 0.35 U	< 0.31 U	1.2 J	0.84 J	< 1.4 U	< 1.3 U	< 0.41 U	2.0 J	< 0.33 U	0.52 J	2.0 J	0.77 J	0.75 J	0.85 J	0.56 J	0.55 J	0.92 J	0.95 J	0.76 J	0.77 J
4-Methyl-2-pentanone	ug/m3	43,800	1.3 J	0.41 J	0.97 J	0.61 J	< 1.2 U	< 1.1 U	2.0 J	1.6 J	< 0.28 U	0.43 J	1.3 J	0.45 J	< 0.34 U	< 0.31 U	< 0.32 U	< 0.32 U	0.97 J	1.0 J	< 0.36 U	< 0.34 U
Acetone	ug/m3	NE	110	64	< 4.9 U	27	< 20 U	66 J	43	240	26	13 J	14 J	16 J	85	88	8.3 J	7.8 J	22 J	12 J	16 J	7.9 J
Acetonitrile	ug/m3	876	6.7	< 0.48 U	< 0.53 U	< 0.56 U	< 2.2 U	< 1.9 U	< 0.63 U	< 0.57 U	< 0.50 U	< 0.54 U	0.66 J	< 0.55 U	< 0.60 U	0.64 J	< 0.58 U	< 0.57 U	0.63 J	0.71 J	< 0.64 U	< 0.60 U
Acrolein	ug/m3	0.292	2.6 J	3.1 J	1.1 J	< 0.64 U	< 2.5 U	< 2.2 U	1.2 J	0.73 J	2.1 J	0.85 J	0.88 J	< 0.64 U	0.72 J	1.1 J	< 0.66 U	< 0.66 U	3.8 J	1.0 J	< 0.74 U	< 0.69 U
Acrylonitrile	ug/m3	29.2	< 0.46 U	< 0.41 U	< 0.45 U	< 0.47 U	< 1.8 U	< 1.6 U	< 0.53 U	< 0.48 U	< 0.42 U	< 0.46 U	< 0.48 U	< 0.47 U	< 0.51 U	< 0.47 U	< 0.49 U	< 0.48 U	< 0.47 U	< 0.45 U	< 0.54 U	< 0.51 U
Allyl chloride	ug/m3	14.6	< 0.30 U	< 0.27 U	< 0.30 U	< 0.31 U	< 1.2 U	< 1.1 U	< 0.35 U	< 0.32 U	< 0.28 U	< 0.30 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.30 U	< 0.35 U	< 0.33 U
Benzene	ug/m3	438	0.73 J	0.91 J	1.1 J	3.7	< 1.3 U	< 1.1 U	2.6	0.53 J	0.48 J	0.40 J	< 0.34 U	< 0.33 U	0.37 J	0.42 J	1.3 J	< 0.34 U	< 0.33 U	< 0.32 U	< 0.38 U	< 0.36 U
Benzyl chloride	ug/m3	14.6	< 0.50 U	< 0.44 U	< 0.49 U	< 0.51 U	< 2.0 U	< 1.8 U	< 0.58 U	< 0.53 U	< 0.46 U	< 0.50 U	< 0.53 U	< 0.51 U	< 0.56 U	< 0.51 U	< 0.53 U	< 0.53 U	< 0.51 U	< 0.50 U	< 0.59 U	< 0.56 U
Bromodichloromethane	ug/m3	110	< 0.32 U	< 0.28 U	< 0.32 U	< 0.33 U	< 1.3 U	< 1.1 U	< 0.37 U	< 0.34 U	< 0.29 U	< 0.32 U	< 0.34 U	< 0.33 U	< 0.36 U	< 0.33 U	< 0.34 U	< 0.34 U	< 0.33 U	< 0.32 U	< 0.38 U	< 0.36 U
Bromoform	ug/m3	3,720	< 0.46 U	< 0.41 UJ	< 0.45 U	< 0.47 U	< 1.8 U	< 1.6 UJ	< 0.53 U	< 0.48 U	< 0.42 U	< 0.46 UJ	< 0.48 U	< 0.47 U	< 0.51 U	< 0.47 U	< 0.49 UJ	< 0.48 UJ	< 0.47 U	< 0.45 U	< 0.54 U	< 0.51 U
Bromomethane	ug/m3	73	0.81 J	< 0.27 U	< 0.30 U	< 0.32 U	< 1.2 U	< 1.1 U	< 0.36 U	< 0.32 U	< 0.28 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.34 U	< 0.32 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.36 U	< 0.34 U
Carbon disulfide	ug/m3	10,200	1.9 J	2.1 J	5.8	0.94 J	< 2.7 U	< 2.4 U	1.2 J	1.2 J	< 0.61 U	1.3 J	0.75 J	< 0.68 U	< 0.74 U	< 0.68 U	< 0.71 U	< 0.70 U	< 0.68 U	< 0.66 U	< 0.79 U	6.3
Carbon tetrachloride	ug/m3	681	< 0.31 U	0.30 J	< 0.30 U	< 0.32 U	< 1.2 U	< 1.1 U	< 0.36 U	< 0.32 U	0.36 J	0.45 J	< 0.33 U	0.34 J	< 0.34 U	0.35 J	< 0.33 U	< 0.32 U	0.42 J	0.38 J	< 0.36 U	< 0.34 U
Chlorobenzene	ug/m3	730	< 0.29 U	< 0.26 U	0.88 J	4.3	< 1.2 U	< 1.0 U	15	3.7	< 0.27 U	< 0.30 U	0.55 J	1.1 J	< 0.33 U	< 0.30 U	< 0.31 U	< 0.31 U	0.32 J	< 0.29 U	0.69 J	0.73 J
Chloroethane	ug/m3	58,400	3.5	< 0.24 U	0.60 J	7.1	5.4 J	32	57	28	< 0.25 U	< 0.28 U	< 0.29 U	< 0.28 U	< 0.31 U	< 0.28 U	< 0.29 U	< 0.29 U	< 0.28 U	< 0.27 U	< 0.33 U	< 0.31 U
Chloroform	ug/m3	178	83	14	16	28	1.7 J	< 1.0 U	< 0.34 U	< 0.31 U	0.77 J	0.91 J	5.0	4.6	2.1 J	2.1 J	1.8 J	1.8 J	1.1 J	1.1 J	1.5 J	1.5 J
Chloromethane	ug/m3	1,310	< 0.36 U	< 0.32 U	< 0.35 U	< 0.37 U	< 1.4 U	1.7 J	< 0.42 U	< 0.38 U	0.42 J	< 0.36 U	< 0.38 U	< 0.37 U	< 0.40 U	< 0.37 U	< 0.38 U	< 0.38 U	< 0.37 U	< 0.35 U	< 0.42 U	< 0.40 U
cis-1,2-Dichloroethene	ug/m3	NE	< 0.31 U	< 0.28 U	0.61 J	0.93 J	< 1.3 U	< 1.1 U	8.1	0.72 J	< 0.29 U	< 0.31 U	< 0.33 U	< 0.32 U	< 0.35 U	< 0.32 U	< 0.33 U	< 0.33 U	< 0.32 U	< 0.31 U	< 0.37 U	< 0.35 U
cis-1,3-Dichloropropene	ug/m3	NE	< 0.34 U	< 0.31 U	< 0.34 U	< 0.35 U	< 1.4 U	< 1.2 U	< 0.40 U	< 0.36 U	< 0.32 U	< 0.35 U	< 0.37 U	< 0.35 U	< 0.38 U	< 0.35 U	< 0.37 U	< 0.36 U	< 0.35 U	< 0.34 U	< 0.41 U	< 0.38 U
Cyclohexane	ug/m3	87,600	16	4.3	< 0.62 U	73	86	130	340	210	3.7 J	20	< 0.66 U	4.6 J	3.5 J	3.1 J	1.7 J	1.9 J	< 0.64 U	< 0.62 U	14	15
Dibromochloromethane	ug/m3	NE	< 0.29 U	< 0.26 U	< 0.29 U	< 0.30 U	< 1.2 U	< 1.0 U	< 0.34 U	< 0.31 U	< 0.27 U	< 0.29 U	< 0.31 U	< 0.30 U	< 0.32 U	< 0.30 U	< 0.31 U	< 0.31 U	< 0.30 U	< 0.29 U	< 0.34 U	< 0.32 U
Dichlorodifluoromethane (Freon 12)	ug/m3	1,460	410	70	220	250	1,000	420	430	430	10	2.9	22	22	2.4	2.6	2.3 J	2.2 J	2.3	2.3	2.0 J	2.0 J
D-Limonene	ug/m3	NE	11	< 0.41 U	3.3	< 0.47 U	14	6.6 J	< 0.53 U	< 0.48 U	7.5	1.8 J	3.5	2.1 J	13 J	22 J	3.0	3.0	2.0 J	1.8 J	2.3 J	2.4
Ethanol	ug/m3	NE	85	160	36	84	67 J	21 J	18 J	20 J	44	< 1.5 U	8.0 J	27	240	210	< 1.6 U	< 1.6 U	16 J	14 J	110	93

Notes and definitions are presented on Page 4

Table 17: Sub-Slab Vapor Sample Results
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Sample Location			GB-001				GB-002				GB-003				GB-004							
Sample Date			01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-14-2021	01-14-2021	04-16-2021	04-16-2021	07-21-2021	07-21-2021	10-28-2021	10-28-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	FD	N	FD	N	FD
Analyte	Unit	USEPA SG (COM TCR = 1E-05, THQ = 0.1) or Site-Specific Screening Level	Engineering Building - Foyer				Engineering Building - Conference Room				Engineering Building - Garage/Store Room				Pretreatment Building Office							
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fans Operational				Sample Collected During Normal Business Hours (0800 and 1800 hrs)							
Ethyl acetate	ug/m3	1,020	**8.3**	**2.0 J**	**1.5 J**	< 1.2 U	< 4.7 U	< 4.1 U	< 1.4 UJ	< 1.2 U	< 1.1 U	**2.0 J**	< 1.2 UJ	**4.9 J**	**1.5 J**	< 1.2 U	**1.3 J**	**1.2 J**	< 1.2 UJ	< 1.2 UJ	**8.3 J**	**1.5 J**
Ethylbenzene	ug/m3	1,640	**0.57 J**	**2.3**	**8.7**	**4.2**	< 1.3 U	**4.4 J**	**7.7**	**5.0**	**0.47 J**	**3.5**	**15**	**5.0**	**0.45 J**	**0.48 J**	**2.6**	**2.5**	**5.2**	**5.2**	**3.3**	**3.5**
Ethylene dibromide	ug/m3	6.81	< 0.26 U	< 0.23 U	< 0.25 U	< 0.27 U	< 1.0 U	< 0.92 U	< 0.30 U	< 0.27 U	< 0.24 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.29 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.26 U	< 0.31 U	< 0.29 U
Heptane	ug/m3	5,840	**0.37 J**	**6.6**	**0.64 J**	**0.88 J**	**1.7 J**	**5.2 J**	**4.4**	**4.5**	< 0.33 U	**0.61 J**	**0.64 J**	**0.79 J**	< 0.39 U	< 0.36 U	< 0.38 U	< 0.37 U	< 0.36 U	< 0.35 U	**0.50 J**	**0.54 J**
Hexachlorobutadiene	ug/m3	186	< 0.46 U	< 0.41 U	< 0.45 U	< 0.47 U	< 1.8 U	< 1.6 U	< 0.53 U	< 0.48 U	< 0.42 U	< 0.46 U	< 0.48 U	< 0.47 U	< 0.51 U	< 0.47 U	< 0.49 U	< 0.48 U	< 0.47 U	< 0.45 U	< 0.54 U	< 0.51 U
Isopropyl alcohol	ug/m3	2,920	**4.9**	**28**	**5.3**	**1.0 J**	**6.7 J**	< 3.3 U	**3.2 J**	**140**	**6.4**	**1.6 J**	**1.2 J**	< 0.94 U	**8.5**	**8.2**	**5.2**	**5.2**	**2.3 J**	**1.3 J**	**1.8 J**	**1.1 J**
Isopropylbenzene (Cumene)	ug/m3	5,840	< 0.32 U	< 0.28 U	**0.65 J**	**0.41 J**	< 1.3 U	**2.0 J**	**4.1**	**3.1**	< 0.29 U	< 0.32 U	**1.0 J**	**0.34 J**	< 0.36 U	< 0.33 U	< 0.34 U	< 0.34 U	**0.39 J**	**0.42 J**	< 0.38 U	< 0.36 U
m,p-Xylenes	ug/m3	NE	**2.3 J**	**6.9**	**37**	**17**	< 2.4 U	**19**	**34**	**20**	**1.8 J**	**13**	**64**	**20**	**1.7 J**	**1.8 J**	**11**	**11**	**23**	**23**	**14**	**14**
Methyl methacrylate	ug/m3	10,200	< 0.79 U	< 0.70 U	< 0.78 U	< 0.81 U	< 3.2 U	< 2.8 U	< 0.92 U	< 0.83 U	< 0.73 U	< 0.79 U	< 0.84 U	< 0.81 U	< 0.88 U	< 0.81 U	< 0.84 U	< 0.83 U	< 0.81 U	< 0.78 U	< 0.94 U	< 0.88 U
Methyl tert-butyl ether	ug/m3	15,700	< 0.26 U	< 0.23 UJ	< 0.26 U	< 0.27 U	< 1.1 U	< 0.93 UJ	< 0.31 U	< 0.28 U	< 0.24 U	< 0.26 UJ	< 0.28 U	< 0.27 U	< 0.29 U	< 0.27 U	< 0.28 UJ	< 0.28 UJ	< 0.27 U	< 0.26 U	< 0.31 U	< 0.29 U
Methylene chloride	ug/m3	8,760	**1.3 J**	**1.7 J**	**5.0**	**1.8 J**	< 2.5 U	< 2.2 U	**1.8 J**	< 0.66 U	< 0.57 U	**1.9 J**	**1.5 J**	< 0.64 U	< 0.69 U	**0.66 J**	**0.96 J**	< 0.66 U	**1.4 J**	**1.8 J**	< 0.74 U	< 0.69 U
Naphthalene	ug/m3	43.8	< 0.54 U	< 0.48 UJ	**1.4 J**	< 0.56 UJ	< 2.2 U	< 1.9 UJ	**0.78 J**	**0.62 J**	< 0.50 U	**1.2 J**	**1.4 J**	< 0.55 UJ	< 0.60 U	< 0.56 U	**1.2 J**	**1.0 J**	**0.98 J**	**1.1 J**	< 0.64 UJ	< 0.60 UJ
n-Butyl acetate	ug/m3	NE	< 0.30 U	< 0.27 U	**0.40 J**	< 0.31 U	< 1.2 U	< 1.1 U	< 0.35 U	< 0.32 U	< 0.28 U	**0.53 J**	**0.49 J**	< 0.31 U	< 0.34 U	< 0.31 U	< 0.32 U	< 0.32 U	**0.45 J**	**0.33 J**	< 0.36 U	< 0.34 U
n-Hexane	ug/m3	10,200	**41**	**10**	**8.6**	**84**	**160**	**160**	**500**	**370**	**1.6 J**	**0.71 J**	< 0.48 U	< 0.47 U	**0.96 J**	< 0.47 U	< 0.49 U	< 0.48 U	< 0.47 U	< 0.45 U	< 0.54 U	< 0.51 U
Nonane	ug/m3	292	**0.51 J**	**1.1 J**	**2.6**	**5.6**	**3.0 J**	**4.8 J**	< 0.43 U	**13**	**0.46 J**	**1.1 J**	**3.3**	**7.1**	**0.49 J**	**0.48 J**	**0.59 J**	**0.50 J**	**1.3 J**	**1.3 J**	**5.1**	**5.2**
n-Propylbenzene	ug/m3	14,600	< 0.32 U	< 0.28 U	**0.84 J**	< 0.33 U	< 1.3 U	< 1.1 U	< 0.37 U	< 0.34 U	< 0.29 U	**0.39 J**	**1.4 J**	**0.70 J**	**0.55 J**	**0.56 J**	**0.42 J**	**0.35 J**	**0.65 J**	**0.68 J**	**0.58 J**	**0.60 J**
Octane	ug/m3	NE	**0.68 J**	**8.0**	**13**	**3.6**	< 2.0 U	**14**	**12**	**4.5**	< 0.46 U	**9.7**	**22**	**4.6**	**0.82 J**	**0.79 J**	**6.5**	**6.5**	**7.8**	**7.9**	**2.8**	**3.1**
o-Xylene	ug/m3	1,460	**0.92 J**	**4.1**	**22**	**9.4**	< 1.3 U	**10**	**21**	**14**	**0.75 J**	**6.7**	**38**	**11**	**0.72 J**	**0.79 J**	**5.6**	**5.7**	**14**	**14**	**7.5**	**7.9**
Propylene	ug/m3	43,800	< 0.54 U	**8.1**	< 0.53 U	**53**	< 2.2 U	< 1.9 U	< 0.63 U	**160**	< 0.50 U	**4.0**	**1.1 J**	**1.2 J**	**2.2 J**	**3.0**	**1.3 J**	**1.5 J**	**2.1 J**	**2.5**	**2.5 J**	**2.9**
Styrene	ug/m3	14,600	**0.40 J**	< 0.32 U	**2.1**	**0.68 J**	< 1.4 U	**1.7 J**	**2.3 J**	**0.75 J**	< 0.33 U	**1.2 J**	**3.2**	**0.66 J**	< 0.40 U	**0.39 J**	**1.1 J**	**1.1 J**	**1.5 J**	**1.6 J**	**0.60 J**	**0.57 J**
Tetrachloroethene	ug/m3	584	**0.49 J**	**0.38 J**	**3.4**	**1.8 J**	< 1.2 U	**3.2 J**	**5.3**	**2.3**	< 0.26 U	**0.46 J**	**0.84 J**	**0.73 J**	< 0.32 U	< 0.29 U	**1.5 J**	< 0.30 U	**0.37 J**	**0.42 J**	< 0.34 U	< 0.32 U
Tetrahydrofuran	ug/m3	29,200	**1.4 J**	**0.76 J**	**0.40 J**	< 0.29 U	< 1.1 U	< 0.99 U	< 0.32 U	< 0.29 U	< 0.26 U	**0.48 J**	< 0.29 U	**0.62 J**	< 0.31 U	< 0.29 U	**0.31 J**	**0.37 J**	< 0.29 U	< 0.28 U	**1.2 J**	**0.32 J**
Toluene	ug/m3	73,000	**2.1 J**	**2.6**	**2.1 J**	**2.9**	**2.1 J**	**1.9 J**	< 0.32 U	**2.9**	**1.6 J**	**1.9 J**	**2.3**	**2.6**	**1.8 J**	**2.0 J**	**1.5 J**	**1.1 J**	**1.2 J**	**1.1 J**	**2.3 J**	**1.7 J**
trans-1,2-Dichloroethene	ug/m3	584	< 0.31 U	< 0.27 U	**1.1 J**	**0.58 J**	< 1.2 U	< 1.1 U	**8.0**	**2.2 J**	< 0.28 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.34 U	< 0.32 U	< 0.33 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.36 U	< 0.34 U
trans-1,3-Dichloropropene	ug/m3	NE	< 0.46 U	< 0.41 U	< 0.45 U	< 0.47 U	< 1.8 U	< 1.6 U	< 0.53 U	< 0.48 U	< 0.42 U	< 0.46 U	< 0.48 U	< 0.47 U	< 0.51 U	< 0.47 U	< 0.49 U	< 0.48 U	< 0.47 U	< 0.45 U	< 0.54 U	< 0.51 U
Trichloroethene	ug/m3	29.2	< 0.30 U	< 0.27 U	**0.59 J**	< 0.31 U	< 1.2 U	< 1.1 U	**3.2**	**0.63 J**	< 0.28 U	< 0.30 U	< 0.32 U	< 0.31 U	< 0.33 U	< 0.31 U	< 0.32 U	< 0.32 U	< 0.31 U	< 0.30 U	< 0.35 U	< 0.33 U
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**0.71 J**	**0.98 J**	**0.93 J**	**0.46 J**	< 1.4 U	< 1.2 U	< 0.39 U	< 0.35 U	**1.2 J**	**1.2 J**	**1.8 J**	**1.4 J**	**1.1 J**	**1.2 J**	**1.2 J**	**1.2 J**	**1.9 J**	**1.9 J**	**1.0 J**	**1.1 J**
Vinyl acetate	ug/m3	2,920	**38**	< 4.4 U	< 4.9 U	< 5.1 U	< 20 U	< 18 U	< 5.8 U	< 5.3 U	**7.1 J**	< 5.0 U	< 5.3 U	< 5.1 U	< 5.6 U	< 5.1 U	< 5.3 U	< 5.3 U	< 5.1 U	< 5.0 U	< 5.9 U	< 5.6 U
Vinyl chloride	ug/m3	929	**0.88 J**	< 0.21 U	< 0.23 U	**3.4**	< 0.96 U	**1.7 J**	**10**	**9.7**	< 0.22 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.26 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.28 U	< 0.26 U

Notes and definitions are presented on Page 4

Table 17: Sub-Slab Vapor Sample Results
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

Sample Location			GB-005				GB-006				GB-007		
Sample Date			01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-17-2021	04-16-2021	07-21-2021	10-28-2021	04-16-2021	07-21-2021	10-28-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit	USEPA SG (COM TCR = 1E-05, THQ = 0.1) or Site-Specific Screening Level	Pump House				Scale House				Asphalt Plant Building		
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs)				Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Mitigation Fan Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fan Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs)		
TO3													
Methane	ppmv	10,000	**3.8**	**1.5**	< 1.9 U	**2.8**	**760**	**3.8**	< 1.8 U	**4.9**	**1.7**	**3.5**	**1.9**
E3CMOD													
Carbon dioxide	%v/v	NE	< 0.17 U	**0.353**	**1.50**	< 0.22 UJ	< 0.14 U	< 0.17 U	< 0.16 U	< 0.21 UJ	**0.639**	**1.24**	**1.4 J-**
Methane	ppmv	10,000	--	--	--	--	--	--	--	--	--	--	--
Oxygen	%v/v	NE	**22.1**	**22.0**	**20.8**	**22.1 J-**	**22.2**	**22.3**	**22.3**	**22.2 J-**	**19.4**	**20.2**	**19.9 J-**
TO15M													
1,1,1-Trichloroethane	ug/m3	73,000	< 0.28 U	< 0.27 U	< 0.28 U	< 0.35 U	< 0.23 U	< 0.27 U	< 0.27 U	< 0.31 U	< 0.27 U	**5.2**	< 0.29 U
1,1,2,2-Tetrachloroethane	ug/m3	70.5	< 0.31 U	< 0.30 U	< 0.31 U	< 0.39 U	< 0.26 U	< 0.31 U	< 0.30 U	< 0.34 U	< 0.30 U	< 0.32 U	< 0.32 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	73,000	**0.43 J**	**0.48 J**	**0.51 J**	**0.47 J**	**0.48 J**	**0.46 J**	**0.42 J**	**0.45 J**	**0.46 J**	**0.47 J**	**0.38 J**
1,1,2-Trichloroethane	ug/m3	2.92	< 0.23 U	< 0.22 U	< 0.23 U	< 0.28 U	< 0.19 U	< 0.22 U	< 0.22 U	< 0.25 U	< 0.22 U	< 0.23 U	< 0.23 U
1,1-Dichloroethane	ug/m3	2,560	< 0.33 U	< 0.32 U	< 0.33 U	< 0.41 U	< 0.28 U	< 0.32 U	< 0.32 U	< 0.36 U	< 0.32 U	**6.5**	< 0.34 U
1,1-Dichloroethene	ug/m3	2,920	< 0.31 U	< 0.30 U	< 0.31 U	< 0.39 U	< 0.26 U	< 0.31 U	< 0.30 U	< 0.34 U	< 0.30 U	**0.83 J**	< 0.32 U
1,2,4-Trichlorobenzene	ug/m3	29.2	< 0.55 U	< 0.53 U	< 0.55 U	< 0.69 U	< 0.46 U	< 0.54 U	< 0.53 U	< 0.60 U	< 0.53 U	< 0.56 U	< 0.56 U
1,2,4-Trimethylbenzene	ug/m3	876	**0.71 J**	**2.4**	**5.6**	**2.5 J**	< 0.26 U	< 0.31 U	**5.8**	**7.6**	**2.4**	**3.1**	**1.6 J**
1,2-Dibromo-3-chloropropane	ug/m3	0.681	< 0.43 U	< 0.41 U	< 0.43 U	< 0.53 U	< 0.36 U	< 0.42 U	< 0.41 U	< 0.46 U	< 0.41 U	< 0.43 U	< 0.43 U
1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ug/m3	NE	< 0.36 U	**5.4**	**0.93 J**	< 0.44 U	**2.3**	< 0.35 U	< 0.34 U	< 0.39 U	**5.3**	**1.9 J**	**1.2 J**
1,2-Dichlorobenzene	ug/m3	2,920	< 0.34 U	**0.85 J**	< 0.34 U	< 0.42 U	< 0.28 U	< 0.33 U	< 0.32 U	< 0.37 U	**0.84 J**	< 0.34 U	< 0.34 U
1,2-Dichloroethane	ug/m3	102	< 0.25 U	< 0.24 U	< 0.25 U	< 0.31 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.27 U	< 0.24 U	< 0.25 U	< 0.26 U
1,2-Dichloropropane	ug/m3	58.4	< 0.28 U	< 0.27 U	< 0.28 U	< 0.35 U	< 0.23 U	< 0.27 U	< 0.27 U	< 0.31 U	< 0.27 U	< 0.28 U	< 0.29 U
1,3,5-Trimethylbenzene	ug/m3	876	< 0.33 U	**0.73 J**	**3.6**	**1.3 J**	< 0.27 U	< 0.32 U	**3.5**	**3.0**	**0.69 J**	**1.8 J**	**0.78 J**
1,3-Butadiene	ug/m3	29.2	< 0.37 U	< 0.36 U	< 0.37 U	< 0.46 U	< 0.31 U	< 0.37 U	< 0.36 U	< 0.41 U	< 0.36 U	< 0.38 U	< 0.38 U
1,3-Dichlorobenzene	ug/m3	NE	< 0.34 U	< 0.33 U	< 0.34 U	< 0.42 U	< 0.28 U	< 0.33 U	< 0.33 U	< 0.37 U	< 0.33 U	< 0.34 U	< 0.35 U
1,4-Dichlorobenzene	ug/m3	372	< 0.35 U	< 0.33 U	< 0.35 U	< 0.43 U	< 0.29 U	< 0.34 U	**0.33 J**	< 0.38 U	< 0.34 U	< 0.35 U	< 0.35 U
1,4-Dioxane	ug/m3	438	< 0.27 U	< 0.26 U	**0.58 J**	< 0.33 U	< 0.22 U	< 0.26 U	< 0.26 U	< 0.29 U	< 0.26 U	< 0.27 U	**0.28 J**
1S-.alpha.-Pinene	ug/m3	NE	**0.97 J**	**1.8 J**	**13**	**5.5**	**0.52 J**	< 0.34 U	**11**	**2.9**	**1.6 J**	**6.5**	**2.9**
2-Butanone	ug/m3	73,000	**0.80 J**	**8.6**	< 0.47 U	**0.85 J**	**3.8**	**2.5 J**	**5.2**	**4.9**	**8.7**	**1.1 J**	**0.63 J**
2-Hexanone	ug/m3	438	< 0.28 U	< 0.27 U	< 0.28 U	< 0.35 U	< 0.23 U	< 0.27 U	< 0.27 U	< 0.31 U	< 0.27 U	< 0.28 U	< 0.29 U
4-Ethyltoluene	ug/m3	NE	< 0.36 U	**0.49 J**	**1.8 J**	**0.80 J**	< 0.30 U	< 0.35 U	**1.7 J**	**2.4 J**	**0.48 J**	**0.90 J**	**0.48 J**
4-Methyl-2-pentanone	ug/m3	43,800	< 0.31 U	**0.87 J**	**1.9 J**	< 0.39 U	< 0.26 U	< 0.30 U	**1.3 J**	**0.73 J**	**0.82 J**	**0.79 J**	< 0.32 U
Acetone	ug/m3	NE	**11 J**	**70**	**31**	**22 J**	**23**	**6.9 J**	**36**	**18 J**	**70**	**10 J**	**10 J**
Acetonitrile	ug/m3	876	**1.3 J**	< 0.53 U	**0.87 J**	< 0.69 U	< 0.46 U	< 0.54 U	**1.1 J**	< 0.60 U	< 0.53 U	< 0.56 U	< 0.56 U
Acrolein	ug/m3	0.292	< 0.64 U	**0.95 J**	**3.7 J**	< 0.79 U	< 0.53 U	< 0.62 U	**2.1 J**	< 0.69 U	**0.86 J**	**0.68 J**	< 0.65 U
Acrylonitrile	ug/m3	29.2	< 0.47 U	< 0.45 U	< 0.47 U	< 0.58 U	< 0.39 U	< 0.46 U	**1.9 J**	< 0.51 U	< 0.45 U	< 0.47 U	< 0.48 U
Allyl chloride	ug/m3	14.6	< 0.31 U	< 0.29 U	< 0.31 U	< 0.38 U	< 0.26 U	< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	< 0.31 U	< 0.31 U
Benzene	ug/m3	438	**2.2 J**	< 0.31 U	**0.54 J**	< 0.41 U	**0.54 J**	**0.33 J**	**2.3**	**2.9**	< 0.32 U	**0.93 J**	< 0.33 U
Benzyl chloride	ug/m3	14.6	< 0.51 U	< 0.49 U	< 0.51 U	< 0.63 U	< 0.43 U	< 0.50 U	< 0.49 U	< 0.56 U	< 0.49 U	< 0.52 U	< 0.52 U
Bromodichloromethane	ug/m3	110	< 0.33 U	< 0.31 U	< 0.33 U	< 0.41 U	< 0.27 U	< 0.32 U	< 0.31 U	< 0.36 U	< 0.32 U	< 0.33 U	< 0.33 U
Bromoform	ug/m3	3,720	< 0.47 U	< 0.45 UJ	< 0.47 U	< 0.58 U	< 0.39 U	< 0.46 UJ	< 0.45 U	< 0.51 U	< 0.45 UJ	< 0.47 U	< 0.48 U
Bromomethane	ug/m3	73	< 0.31 U	< 0.30 U	< 0.31 U	< 0.39 U	< 0.26 U	< 0.31 U	< 0.30 U	< 0.34 U	< 0.30 U	< 0.32 U	< 0.32 U
Carbon disulfide	ug/m3	10,200	< 0.68 U	**0.77 J**	**2.7 J**	< 0.84 U	< 0.57 U	< 0.66 U	**5.5**	**2.6 J**	**0.78 J**	**3.3 J**	**3.9 J**
Carbon tetrachloride	ug/m3	681	< 0.31 U	< 0.30 U	**0.36 J**	< 0.39 U	**0.44 J**	**0.37 J**	**0.44 J**	**0.39 J**	< 0.30 U	< 0.32 U	< 0.32 U
Chlorobenzene	ug/m3	730	< 0.30 U	**0.33 J**	**0.97 J**	**1.0 J**	< 0.25 U	< 0.29 U	**0.73 J**	**0.43 J**	**0.32 J**	**0.39 J**	**0.49 J**
Chloroethane	ug/m3	58,400	< 0.28 U	< 0.27 U	< 0.28 U	< 0.35 U	< 0.23 U	< 0.27 U	< 0.27 U	< 0.31 U	< 0.27 U	< 0.28 U	< 0.29 U
Chloroform	ug/m3	178	**16**	**8.0**	**32**	**7.4**	< 0.25 U	< 0.29 U	< 0.29 U	< 0.33 U	**7.8**	**9.7**	**9.4**
Chloromethane	ug/m3	1,310	< 0.37 U	< 0.35 U	< 0.37 U	< 0.45 U	**0.70 J**	**0.44 J**	**0.90 J**	**0.70 J**	< 0.35 U	< 0.37 U	< 0.37 U
cis-1,2-Dichloroethene	ug/m3	NE	< 0.32 U	< 0.31 U	< 0.32 U	< 0.40 U	< 0.27 U	< 0.31 U	< 0.31 U	< 0.35 U	< 0.31 U	**0.61 J**	< 0.32 U
cis-1,3-Dichloropropene	ug/m3	NE	< 0.35 U	< 0.34 U	< 0.35 U	< 0.44 U	< 0.29 U	< 0.34 U	< 0.34 U	< 0.38 U	< 0.34 U	< 0.36 U	< 0.36 U
Cyclohexane	ug/m3	87,600	**1.2 J**	**9.6**	< 0.64 U	**1.1 J**	< 0.53 U	< 0.62 U	< 0.61 U	**3.0 J**	**9.5**	< 0.65 U	**3.0 J**
Dibromochloromethane	ug/m3	NE	< 0.30 U	< 0.29 U	< 0.30 U	< 0.37 U	< 0.25 U	< 0.29 U	< 0.29 U	< 0.32 U	< 0.29 U	< 0.30 U	< 0.30 U
Dichlorodifluoromethane (Freon 12)	ug/m3	1,460	**2.2 J**	**3.5**	**2.5**	**2.1 J**	**6.5**	**2.1 J**	**2.3**	**2.0 J**	**3.4**	**2.8**	**2.2 J**
D-Limonene	ug/m3	NE	**5.6**	**3.2**	**4.3**	**2.6 J**	**1.0 J**	< 0.46 U	**3.8**	**1.3 J**	**3.1**	**2.4**	**2.1 J**
Ethanol	ug/m3	NE	**26**	**400**	**18 J**	**28**	**24**	< 1.5 U	**22**	**28**	**390**	**12 J**	**27**

Notes and definitions are presented on Page 4

Table 17: Sub-Slab Vapor Sample Results
West Lake Landfill OU-3
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Sample Location			GB-005				GB-006				GB-007		
Sample Date			01-14-2021	04-16-2021	07-21-2021	10-28-2021	01-17-2021	04-16-2021	07-21-2021	10-28-2021	04-16-2021	07-21-2021	10-28-2021
Sample Type			N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit	USEPA SG (COM TCR = 1E-05, THQ = 0.1) or Site-Specific Screening Level	Pump House				Scale House				Asphalt Plant Building		
Notes			Sample Collected During Normal Business Hours (0800 and 1800 hrs)				Sample Collected During Off Hours (Sat, Btwn 1400 and 2200 hrs), Mitigation Fan Not Operational	Sample Collected During Normal Business Hours (0800 and 1800 hrs), Vent Fan Operational			Sample Collected During Normal Business Hours (0800 and 1800 hrs)		
Ethyl acetate	ug/m3	1,020	< 1.2 U	**2.2 J**	**1.9 J**	**1.5 J**	< 0.99 U	< 1.2 U	< 1.1 UJ	< 1.3 U	**2.1 J**	< 1.2 UJ	**4.3 J**
Ethylbenzene	ug/m3	1,640	**0.51 J**	**2.6**	**13**	**4.8**	< 0.27 U	**0.90 J**	**10**	**11**	**2.5**	**5.5**	**2.4**
Ethylene dibromide	ug/m3	6.81	< 0.26 U	< 0.25 U	< 0.26 U	< 0.33 U	< 0.22 U	< 0.26 U	< 0.25 U	< 0.29 U	< 0.25 U	< 0.27 U	< 0.27 U
Heptane	ug/m3	5,840	**0.79 J**	< 0.35 U	**1.4 J**	**0.76 J**	< 0.30 U	**0.68 J**	**0.54 J**	**6.9**	< 0.35 U	< 0.37 U	< 0.37 U
Hexachlorobutadiene	ug/m3	186	< 0.47 U	< 0.45 U	< 0.47 U	< 0.58 U	< 0.39 U	< 0.46 U	< 0.45 U	< 0.51 U	< 0.45 U	< 0.47 U	< 0.48 U
Isopropyl alcohol	ug/m3	2,920	**3.0 J**	**63**	**2.0 J**	< 1.2 U	**2.7 J**	**11**	**2.2 J**	< 1.0 U	**58**	< 0.95 U	< 0.95 U
Isopropylbenzene (Cumene)	ug/m3	5,840	< 0.33 U	< 0.31 U	**1.2 J**	< 0.41 U	< 0.27 U	< 0.32 U	**0.76 J**	**0.74 J**	< 0.32 U	**0.47 J**	< 0.33 U
m,p-Xylenes	ug/m3	NE	**1.6 J**	**11**	**57**	**20**	< 0.50 U	< 0.58 U	**45**	**39**	**11**	**24**	**9.9**
Methyl methacrylate	ug/m3	10,200	< 0.81 U	< 0.77 U	< 0.81 U	< 1.0 U	< 0.67 U	< 0.79 U	< 0.77 U	< 0.88 U	< 0.78 U	< 0.82 U	< 0.82 U
Methyl tert-butyl ether	ug/m3	15,700	< 0.27 U	< 0.26 UJ	< 0.27 U	< 0.33 U	< 0.22 U	< 0.26 UJ	< 0.26 U	< 0.29 U	< 0.26 UJ	< 0.27 U	< 0.27 U
Methylene chloride	ug/m3	8,760	**5.7**	< 0.61 U	**1.9 J**	< 0.79 U	< 0.53 U	< 0.62 U	**1.7 J**	< 0.69 U	< 0.62 U	**1.3 J**	**1.6 J**
Naphthalene	ug/m3	43.8	< 0.55 U	**1.5 J**	< 0.55 UJ	< 0.69 UJ	< 0.46 U	< 0.54 U	< 0.53 UJ	< 0.60 UJ	**1.6 J**	**1.2 J**	< 0.56 U
n-Butyl acetate	ug/m3	NE	< 0.31 U	< 0.30 U	**0.59 J**	< 0.39 U	< 0.26 U	< 0.30 U	**0.58 J**	< 0.34 U	< 0.30 U	**0.55 J**	< 0.32 U
n-Hexane	ug/m3	10,200	**1.5 J**	< 0.45 U	< 0.47 U	< 0.58 U	< 0.39 U	**0.82 J**	< 0.45 U	**8.3**	< 0.45 U	< 0.47 U	< 0.48 U
Nonane	ug/m3	292	**0.43 J**	**0.88 J**	**3.4**	**6.7**	< 0.32 U	**0.68 J**	**2.4**	**5.0**	**0.85 J**	**1.4 J**	**4.0**
n-Propylbenzene	ug/m3	14,600	< 0.33 U	**0.33 J**	**1.3 J**	**0.68 J**	< 0.27 U	< 0.32 U	**1.7 J**	**2.1 J**	< 0.32 U	**0.66 J**	**0.37 J**
Octane	ug/m3	NE	**0.55 J**	**6.6**	**21**	**4.5**	< 0.43 U	**0.73 J**	**15**	**7.9**	**6.0**	**7.6**	**1.9 J**
o-Xylene	ug/m3	1,460	**0.65 J**	**5.7**	**34**	**11**	< 0.27 U	< 0.32 U	**27**	**18**	**5.6**	**15**	**5.7**
Propylene	ug/m3	43,800	< 0.55 U	**13**	**4.7**	< 0.69 U	< 0.46 U	**2.4**	**1.2 J**	**0.65 J**	**15**	< 0.56 U	**6.6**
Styrene	ug/m3	14,600	< 0.37 U	**1.0 J**	**2.7**	**0.74 J**	< 0.31 U	**2.2**	**5.7**	< 0.40 U	**1.0 J**	**1.5 J**	**0.56 J**
Tetrachloroethene	ug/m3	584	**4.1**	**8.1**	**24**	**11**	< 0.24 U	< 0.29 U	**0.37 J**	< 0.32 U	**8.0**	**22**	**12**
Tetrahydrofuran	ug/m3	29,200	< 0.28 U	**0.76 J**	< 0.28 U	**1.0 J**	< 0.24 U	< 0.28 U	**2.6 J**	< 0.31 U	**0.75 J**	< 0.29 U	**0.42 J**
Toluene	ug/m3	73,000	**2.9**	**1.4 J**	**3.1**	**2.3 J**	**1.6 J**	**0.61 J**	**3.1**	**43**	**1.3 J**	**2.1 J**	**2.3**
trans-1,2-Dichloroethene	ug/m3	584	< 0.31 U	< 0.30 U	< 0.31 U	< 0.39 U	< 0.26 U	< 0.31 U	< 0.30 U	< 0.34 U	< 0.30 U	< 0.32 U	< 0.32 U
trans-1,3-Dichloropropene	ug/m3	NE	< 0.47 U	< 0.45 U	< 0.47 U	< 0.58 U	< 0.39 U	< 0.46 U	< 0.45 U	< 0.51 U	< 0.45 U	< 0.47 U	< 0.48 U
Trichloroethene	ug/m3	29.2	< 0.31 U	< 0.29 U	< 0.31 U	< 0.38 U	< 0.26 U	< 0.30 U	< 0.29 U	< 0.33 U	< 0.30 U	**0.85 J**	< 0.31 U
Trichlorofluoromethane (Freon 11)	ug/m3	NE	**1.0 J**	**1.1 J**	**1.6 J**	**1.0 J**	**1.2 J**	**1.1 J**	**1.1 J**	**1.0 J**	**1.1 J**	**1.4 J**	**1.0 J**
Vinyl acetate	ug/m3	2,920	< 5.1 U	< 4.9 U	< 5.1 U	< 6.3 U	< 4.3 UJ	< 5.0 U	< 4.9 U	< 5.6 U	< 4.9 U	< 5.2 U	< 5.2 U
Vinyl chloride	ug/m3	929	< 0.24 U	< 0.23 U	< 0.24 U	< 0.30 U	< 0.20 U	< 0.24 U	< 0.23 U	< 0.26 U	< 0.23 U	**0.77 J**	< 0.25 U

Notes:
Site Specific Screening Level for Methane noted as 10,000 ppmv (1%) for comparison purpsoses only. Other screening levels may be applicable such as a MSWLF typical value of 25% of LEL (1.25% or 12,500 ppmv) or the LEL (5% or 50,000 ppmv)
ft BGS = feet below ground surface
%v/v = percent volume/volume
ug/m3 = micrograms per cubic meters
ppmv = parts per million volume
USEPA SG (COM TCR = 1E-05, THQ = 0.1) = West Lake Target Sub-Slab Concentration - Commercial THQ-0.1 / TR-10-5, Nov 2021
Bold = Detected
***Orange Shaded** = Exceeds USEPA SG (COM TCR = 1E-05, THQ = 0.1)*
***Green Shaded** = Non-Detect Value < RL/MDL Exceeds USEPA SG (COM TCR = 1E-05, THQ = 0.1)*
NE = Not Established
N = Normal environmental sample
FD = Field duplicate

Qualifier Definition
J = Estimated concentration.
J- = The result is an estimated concentration, but may be biased low.
U = The analyte was analyzed for but was not detected at or above the referenced reporting limit.
UJ = The analyte was analyzed for, but was not detected. The reporting limit is approximate and may be inaccurate or imprecise.

Table 18: OU-1 HAS and DPT Soil Boring Methane Readings
West Lake Landfill OU-3
2021 Annual Hydrogeologic and Site Characterization Report

				Methane Readings % in Air (min/max readings)																							
				Top of Borehole		5 ft BGS		6 ft BGS		7 ft BGS		8 ft BGS		9 ft BGS		10 ft BGS		11 ft BGS		12 ft BGS		13 ft BGS		14 ft BGS		15 ft BGS		16 ft BGS	
Date	Boring Location ID	Boring Type	Approximate Total Depth of Boring (ft)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
9/12/2021	**A1-PB-106A**	**DPT**	5	0.1	0.6	2.1	5.0																						
9/12/2021	**A1-PB-107A**	**DPT**	4	0.0	2.3	0.1	1.1																						
9/12/2021	**A1-PB-111A**	**DPT**	5	0.1	0.7	0.0	2.5																						
9/12/2021	**A1-PB-111B**	**DPT**	4	0.7	4.7	8.1	15.3																						
9/12/2021	**A1-PB-111C**	**DPT**	4	0.0	0.6	0.0	0.0																						
9/19/2021	**A1-PB-110A**	**HSA**	25	6.7	7.5	1.0	5.7	#	#	0.2	8.2	0.1	8.3	#	#	#	#	#	#	#	#	#	#	#	#	0.1	2.9	X	X
9/12/2021	**A1-PB-110D**	**HSA**	27	0.0	0.0	0.0	0.0	0.0	0.0	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes:

1) Methane readings collected with a Landtec GEM-2000 meter, which was allowed to remain at the screening interval for +/-2 minutes.

2) If methane readings exceeed 5,000 ppmv (5% methane in air) at the 5 ft bgs interval, then additional readingswere collected at 1 to 2 foot bgs until readings were less than 5,000 ppmv (5% methane in air) or the precieved water table was encountered, whichever occured first.

BGS or bgs = below ground surface

DPT = direct push technology boring

HSA = Hollow Stem Auger Boring

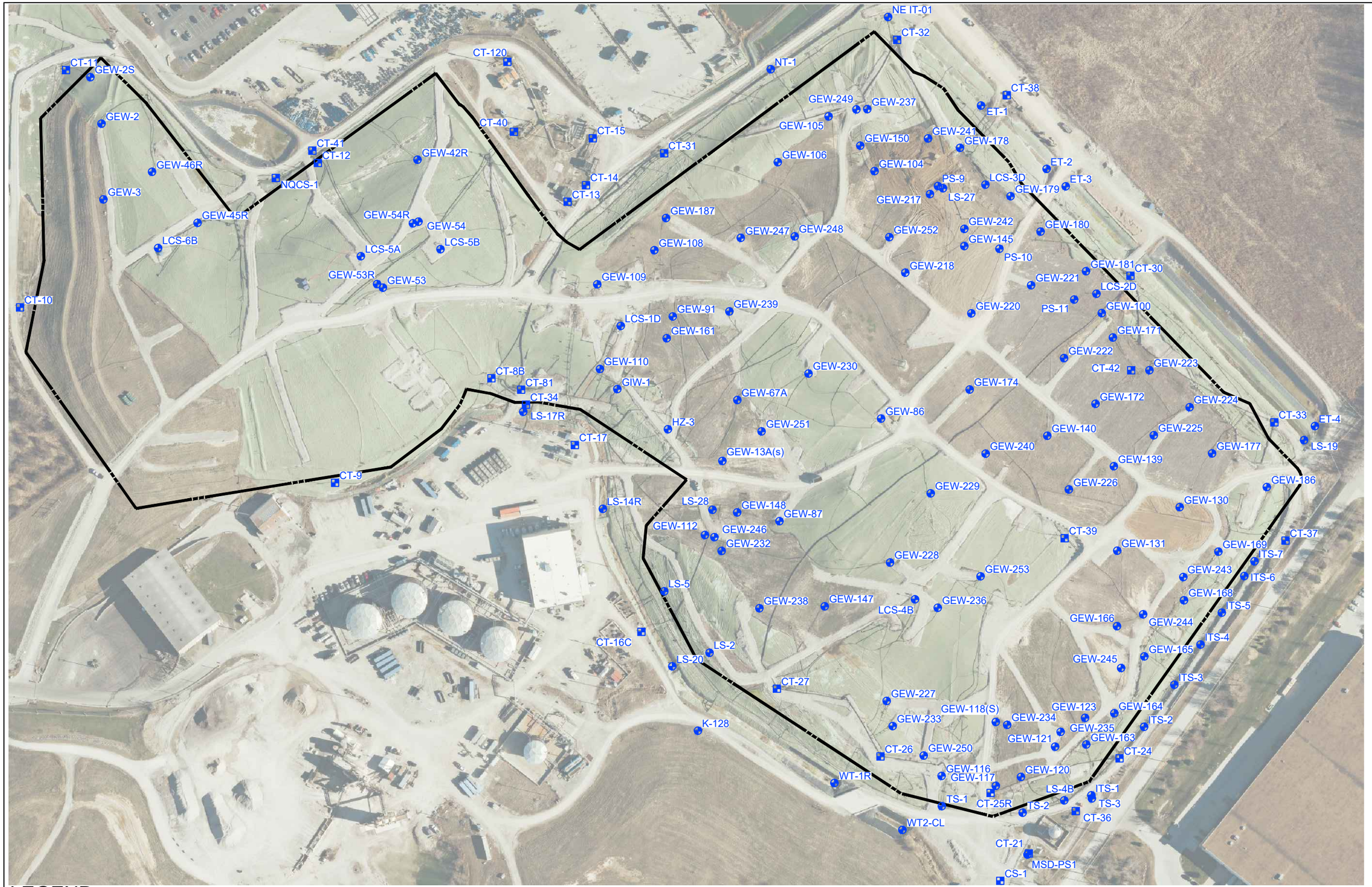
See the accompaning 2 September 2021 SOP Memo for methane reading collection procedures and locations.

X *No readings collected at this depth due to the previous depth interval was less than 5,000 ppmv (5% methane in air)*

"#" - Readings for these intervals fluctuated wildly and never stabilized; therefore the readings were deemed not to be representative and were not recorded.

Boring terminated at 5 feet below ground surface. No data collected.

FIGURES



0 200 400 Feet

SCALE - 1" = 200'

LEGEND

	PERMITTED WASTE BOUNDARY	LS-#/K-#	LIQUID COLLECTION SUMP
GEW-#	DUAL GAS EXTRACTION WELL	WT-#/ET-#	TRENCH SUMP
SEW-#	SURFACE EXTRACTION WELL	IT-#	INTERCEPTION TRENCH RISER
GIW-#	GAS INTERCEPTOR WELL	ITS-#/TS-#/ NT/NE IT/ MSD-PS-1	INTERCEPTION TRENCH SUMP
PS-#	PERIMETER SUMP		
LCS-#	LEACHATE COLLECTION SUMP		
HZ-#	HORIZONTAL COLLECTION SUMP	CT-#/CS-#/ NQCS-#	LANDFILL GAS CONDENSATE TRAP

PREPARED BY

Engineering for a Better World
FEEZOR ENGINEERING, INC.
3377 Hollenberg Dr, Bridgeton, MO 63044, Ph: 217-483-3118
Missouri State Certificate Of Authority #: E-200912211

PROJECT

BRIDGETON LANDFILL
BRIDGETON, ST. LOUIS COUNTY, MO

PREPARED FOR

BRIDGETON LANDFILL
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI 63044

JANUARY 2022
DESIGNED BY: AMR
APPROVED BY: DRF

DRAWING #
001

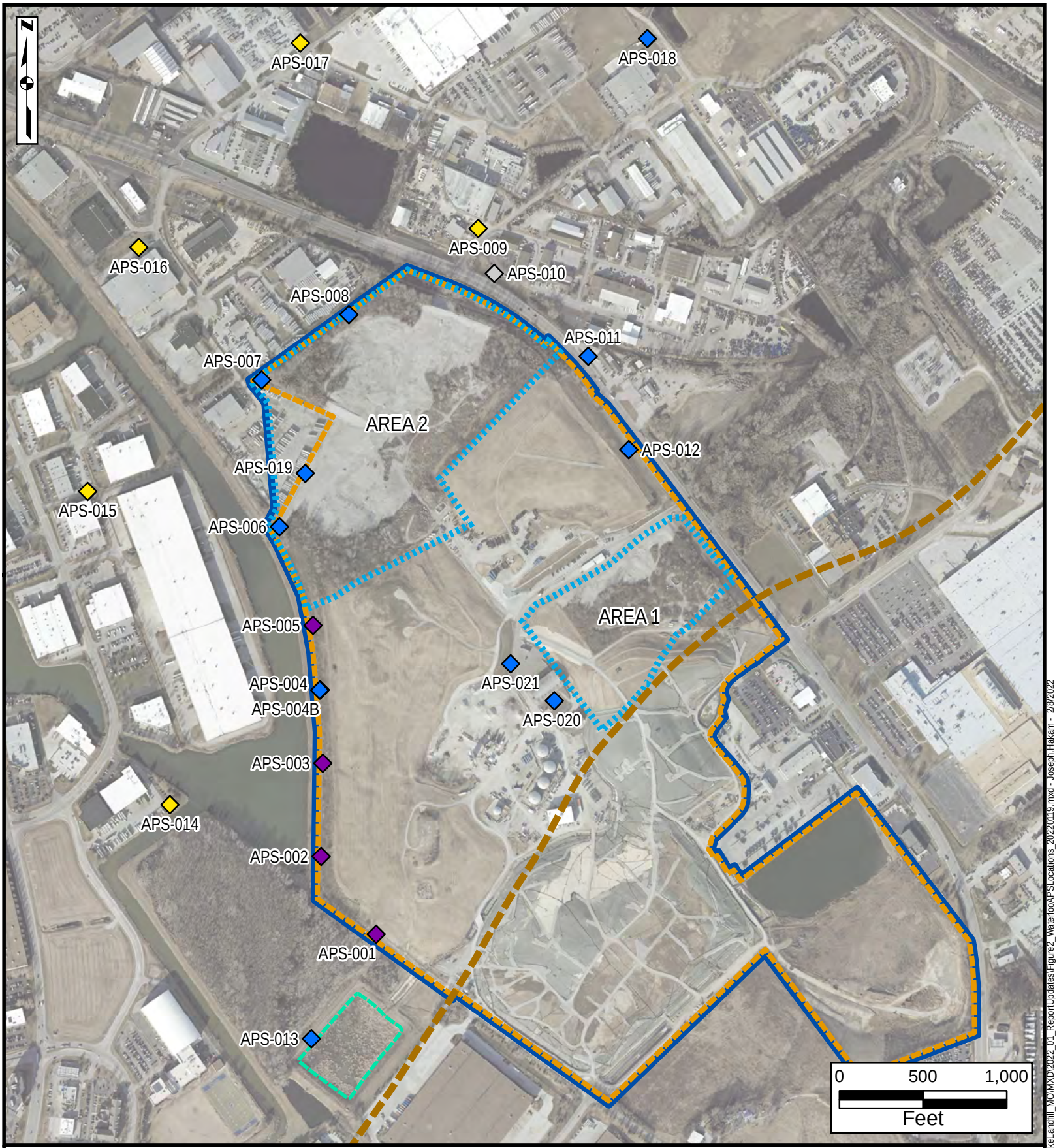
REVISIONS:	DATE	DSN.	APV.
REV	121522	AMR	DRF

DRAWING TITLE

BRIDGETON LANDFILL Q3 2021 ACTIVE PUMPING LOCATIONS

PROJECT NUMBER: BT-131-22

C:\Users\arobe\Dropbox (Feezor Engineering)\Bridgeton\100-149\BT-131 (2017 Surveying And Autocadd Support)\2022\1 - OU-3 Figure



Legend

- WATERLOO APS Sampling Location Completed in 2020
- WATERLOO APS Sampling Location Completed in 2021
- WATERLOO APS Sampling Location Pending Access
- WATERLOO APS Sampling Location Incomplete
- Edge of Alluvium (approx)
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

Figure 2: WATERLOO APS Locations

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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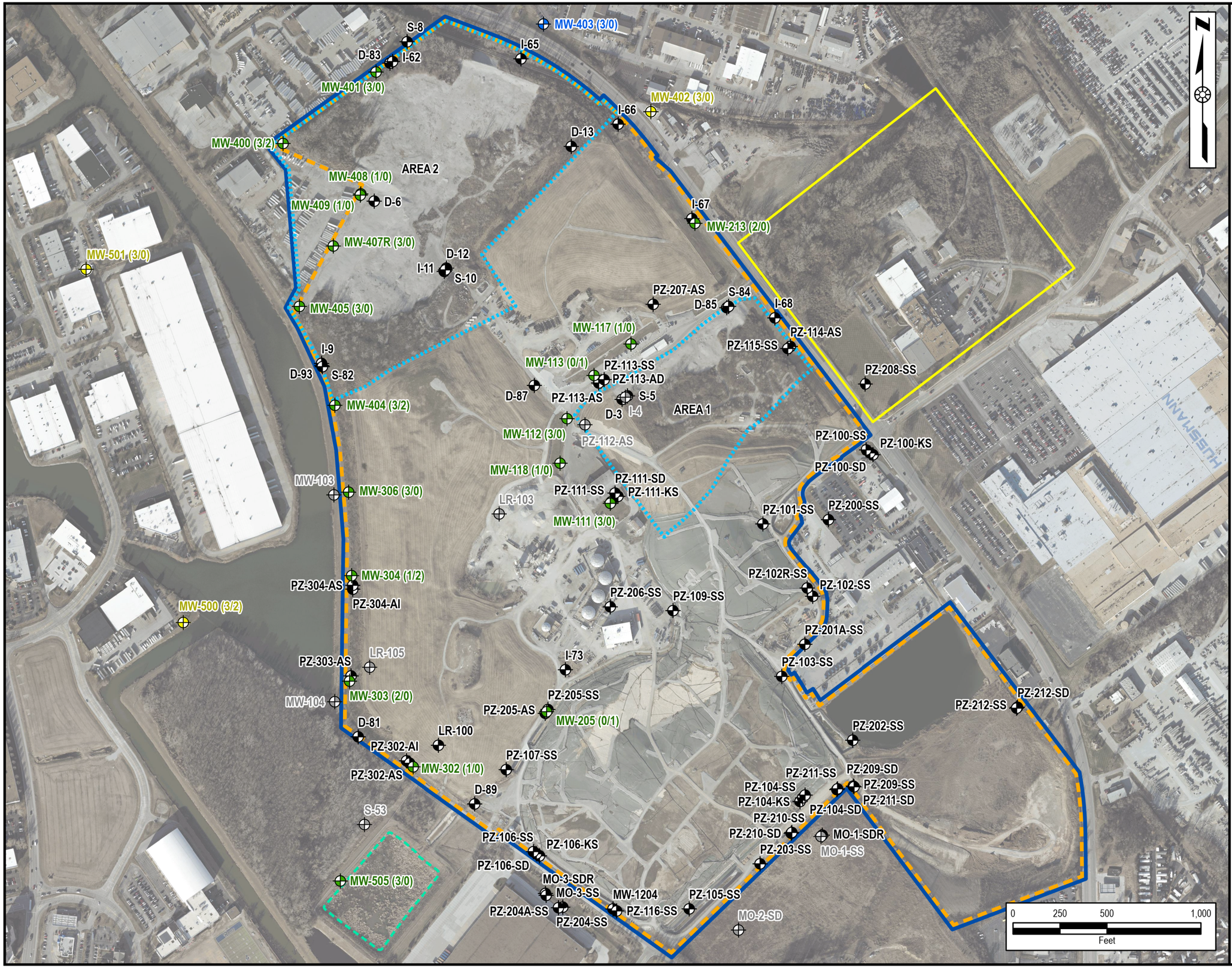
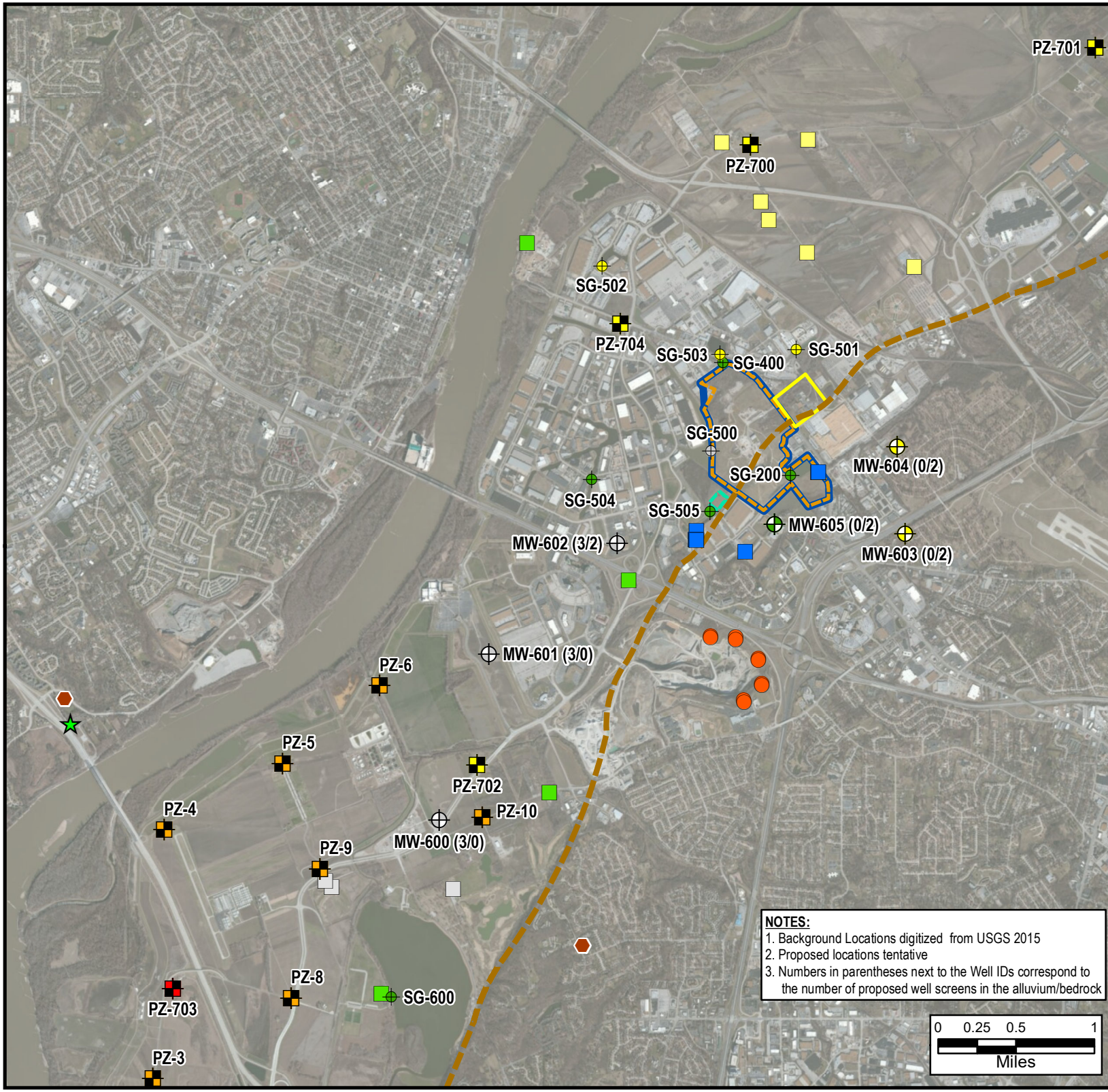


NOTES:

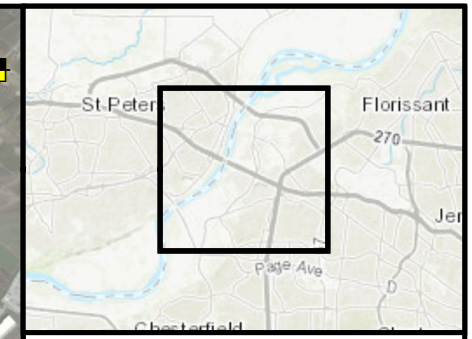
1. Numbers in parentheses next to the Well IDs correspond to the number of proposed well screens in the alluvium/bedrock.
2. Geophysical logging was completed at all newly installed monitoring wells, with the exceptions of MW-112, MW-117, MW-118, MW-408, and MW-409, and only a subset of tools at MW-213 for the reasons described in the 2021 Annual Report.
3. Additional geophysical logging was completed at existing wells D-6, D-12, D-85, D-87, MW-1204, PZ-100-KS, PZ-101-SS, PZ-104-SD, PZ-106-SD, and PZ-109-SS in 2021.

Figure 3: OU-3 Monitoring Well Network
West Lake Landfill OU-3
Bridgeton, Missouri

ERM



NOTES:
1. Background Locations digitized from USGS 2015
2. Proposed locations tentative
3. Numbers in parentheses next to the Well IDs correspond to the number of proposed well screens in the alluvium/bedrock



ERM Locations

- Stilling Well
- Piezometer
- Background Monitoring Well

ERM Location Status

- Installed
- Not Installed
- Access Pending
- Access Denied
- Howard Bend Levee District

USGS Background Data Source

- WLL Respondents 2013 Sample
- USEPA 2013 Alluvial Well
- USGS-RP 2013 Alluvial Well Sample
- USGS-RP 2013 Bedrock Sample
- MDNR Champ Landfill Expansion Sample
- Historical USGS Data
- MDNR Public-Drinking Water Branch
- Edge of Alluvium (approximate)
- PM Resources Site Boundary
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

Figure 4: Offsite Monitoring Well, Piezometer, and Stilling Well Locations

West Lake Landfill OU-3

ERM

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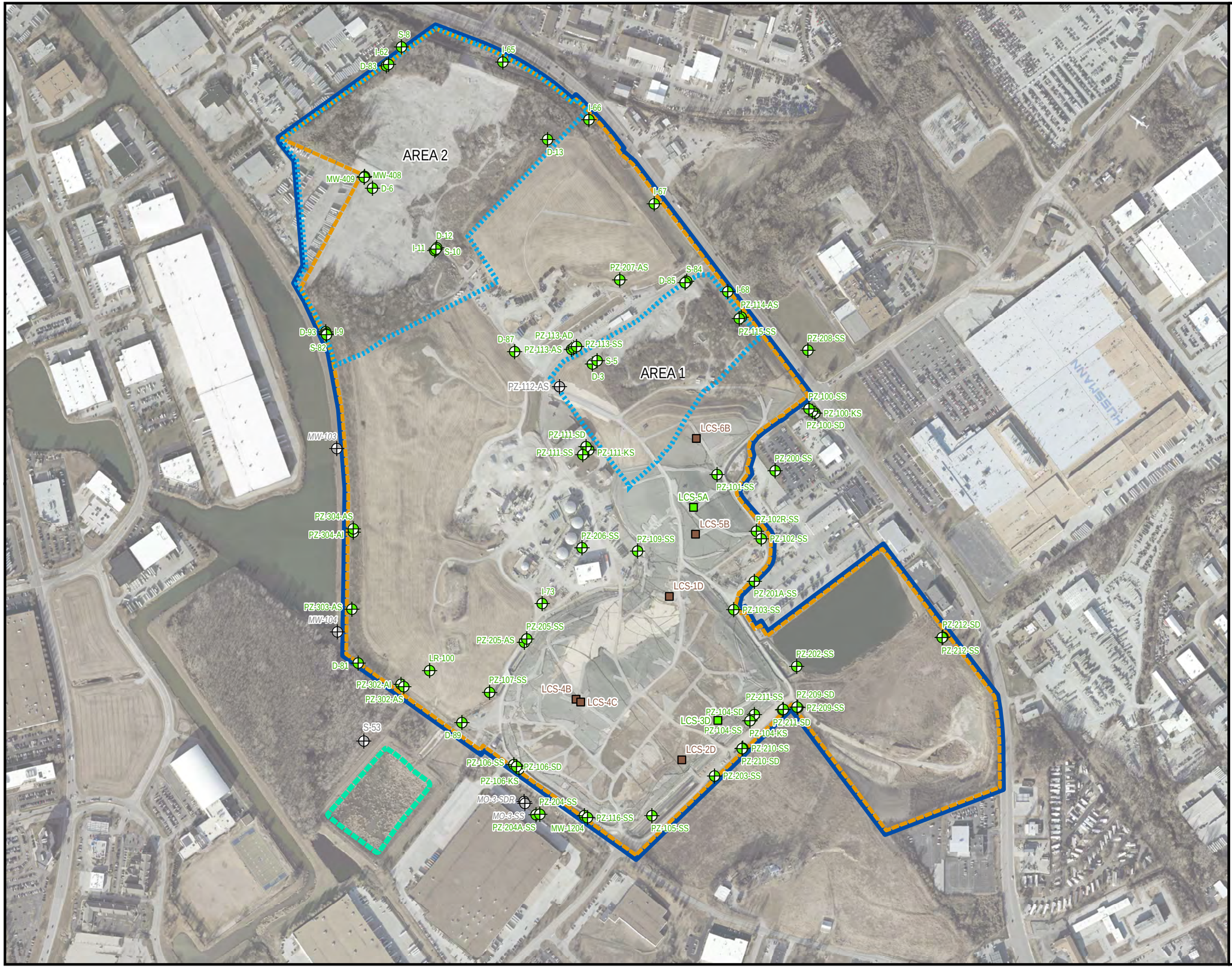
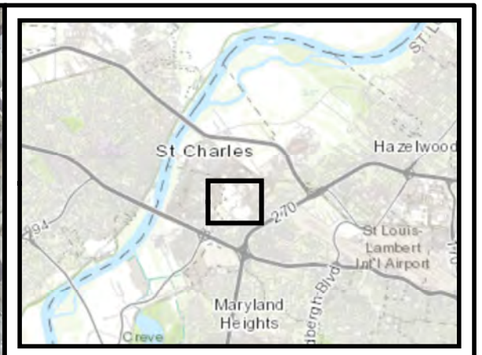




Legend

Q1 Groundwater Sampling Field Status

- Sampled
- Not Sampled
- LCS Well - Sampled
- LCS Well - Not Sampled
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

N

0 250 500 1,000

Feet

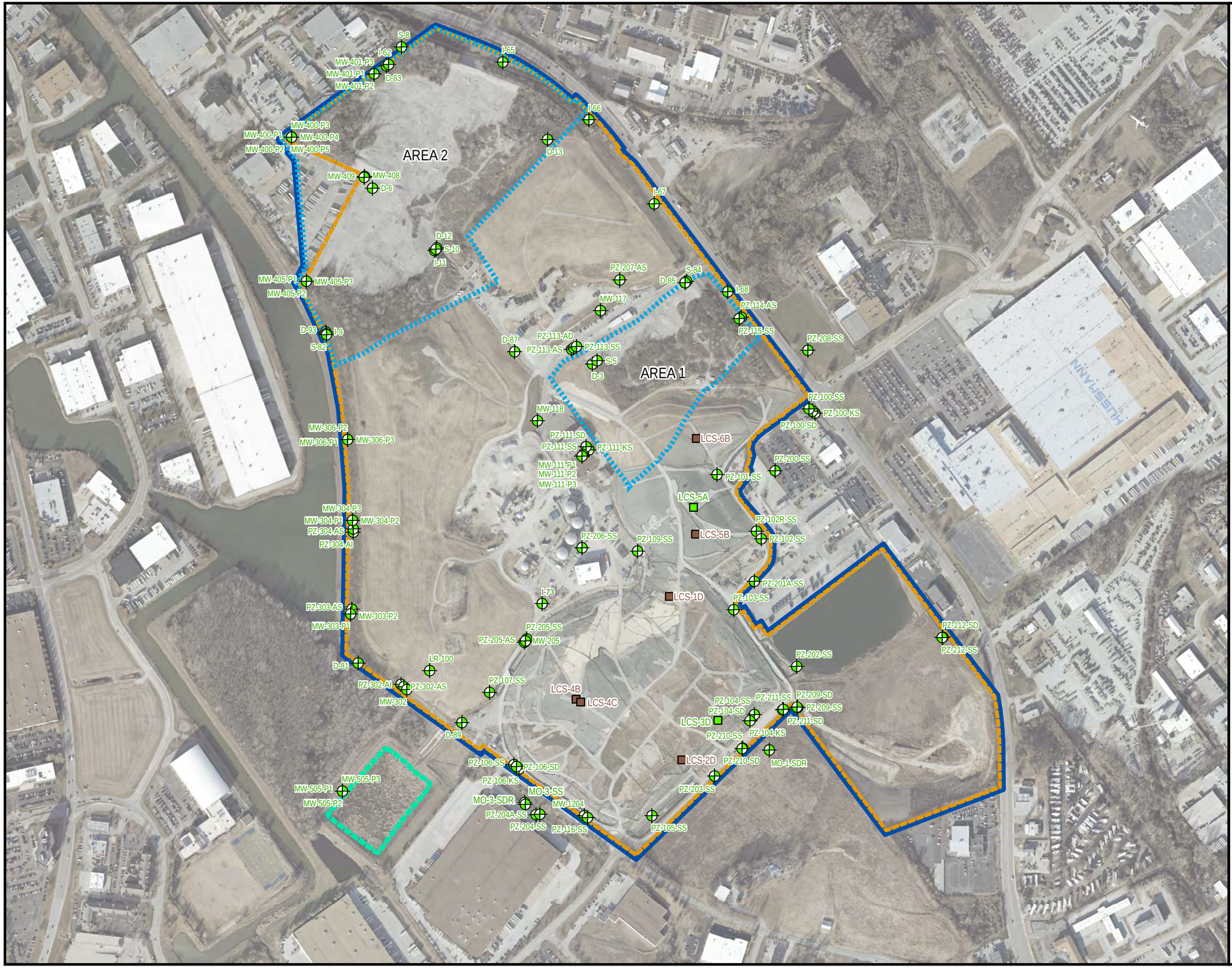
Figure **5**a: Q1 2021 Groundwater and Leachate Sampling Locations

West Lake Landfill OU-3

Bridgeton, Missouri

ERM

Q:\Boston\team\MW\Clients_C_E\WestLake\WestLake\Landfill_MO\MXD\Status\Updates\GW_Sampling\GWSampling_Q1_2021_FieldStatus_Update20220111.mxd - Kelly.Mazeko - 1/12/2022



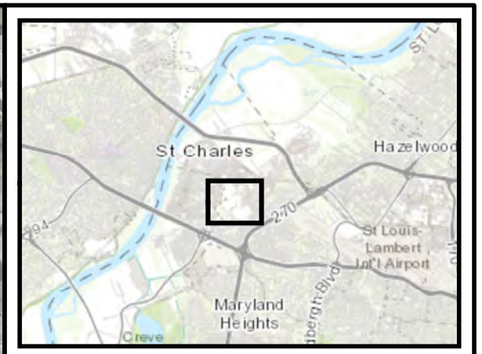


Figure **5**b: Q2 2021 Groundwater and Leachate Sampling Locations

West Lake Landfill OU-3

Bridgeton, Missouri

ERM

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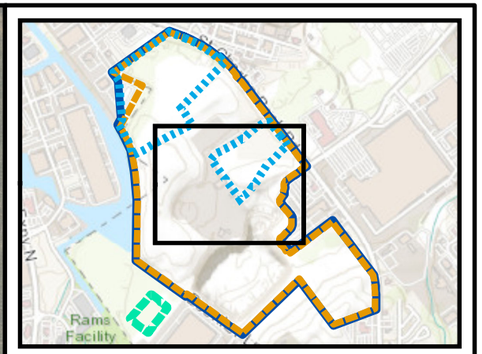
Figure **5**c: Q3 2021 Groundwater and Leachate Sampling Locations

West Lake Landfill OU-3

Bridgeton, Missouri

ERM

Q:\Boston\Team\DMW\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\Status\Updates\GW_Sampling\GW Sampling_Q3_2021_FieldStatus_Update20220112.mxd - Kelly.Mizeko - 1/12/2022



Legend

- Indoor Air/Soil Vapor Sampling Location
- Ambient Air Sampling Location
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December, 2020

N

0 112.5 225 450

Feet

Figure 6a: Vapor Intrusion Sampling Locations

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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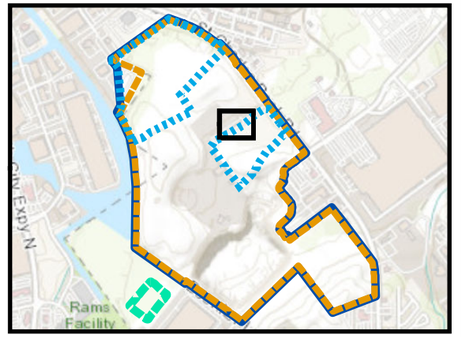

Legend

- Vapor Intrusion Sampling Location
- Ambient Air Sampling Location
- Building
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. AI = Indoor Air, AO = Ambient Air, GB = Sub-Slab Soil Gas

N

0 25 50 100

Feet

Figure 6b: Vapor Intrusion Sampling Locations - Engineering Building

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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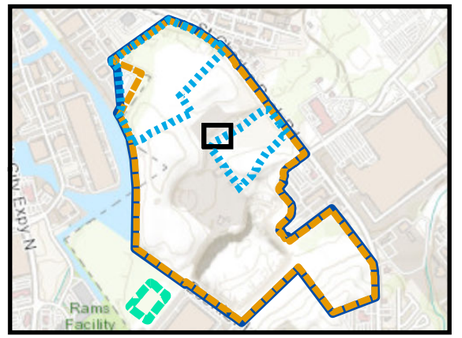

Legend

- Vapor Intrusion Sampling Location
- Ambient Air Sampling Location
- Building
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. AI = Indoor Air, AO = Ambient Air, GB = Sub-Slab Soil Gas

N

0 20 40 80

Feet

Figure 6c: Vapor Intrusion Sampling Locations - Scale House

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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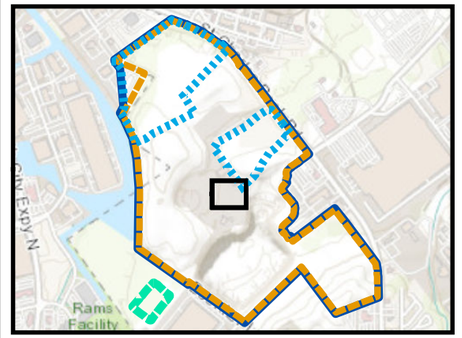
AREA 1

AO-004
(January and April 2021)

GB-005/AI-005

AO-004
(July and October 2021)

AO-003
(January, April, October 2021)



Legend

- Vapor Intrusion Sampling Location
- Ambient Air Sampling Location
- Building
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. AI = Indoor Air, AO = Ambient Air, GB = Sub-Slab Soil Gas
2. AO-003 is the ambient air sample associated with the pre-treatment building

N

0 25 50 100
Feet

Figure 6d: Vapor Intrusion Sampling Locations - Pump House
West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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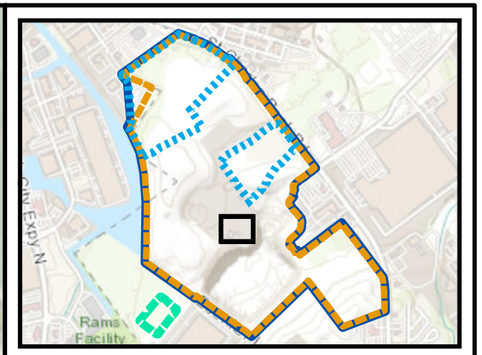

Legend

- Vapor Intrusion Sampling Location
- Ambient Air Sampling Location
- Building
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. AI = Indoor Air, AO = Ambient Air, GB = Sub-Slab Soil Gas

N

0 25 50 100

Feet

Figure 6e: Vapor Intrusion Sampling Locations - Pretreatment Building Office

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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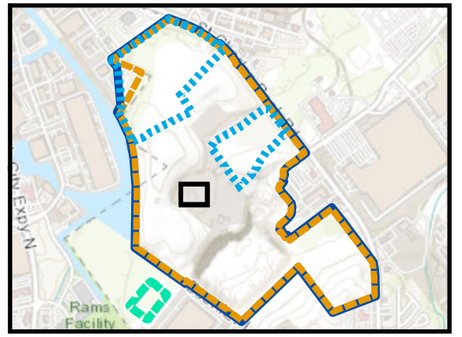


Legend

- Vapor Intrusion Sampling Location
- Ambient Air Sampling Location
- Building
- OU-1
- Former Leachate Lagoon
- Landfill Property Boundary
- Superfund Site Boundary

NOTES:

1. AI = Indoor Air, AO = Ambient Air, GB = Sub-Slab Soil Gas

N

0 20 40 80

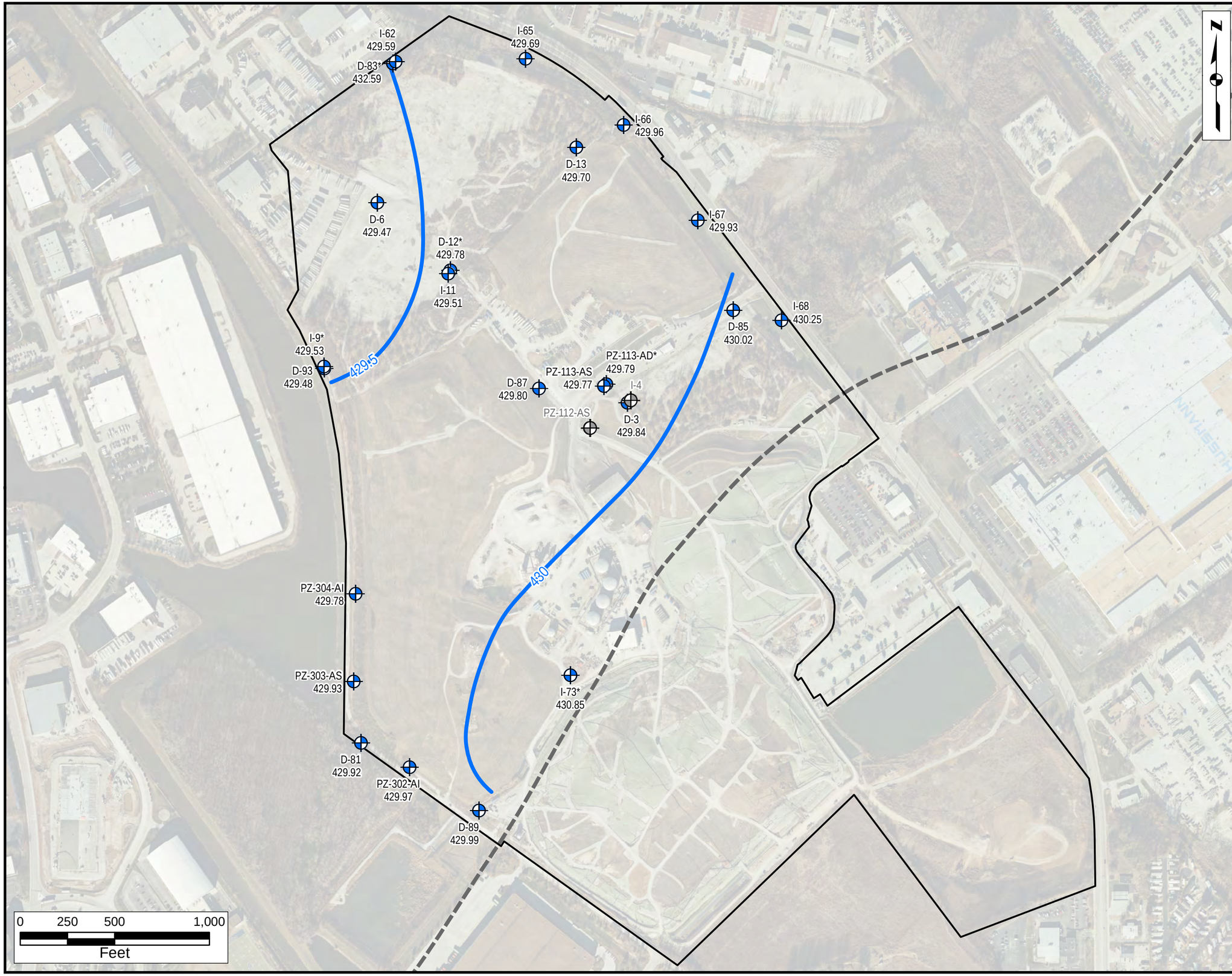
Feet

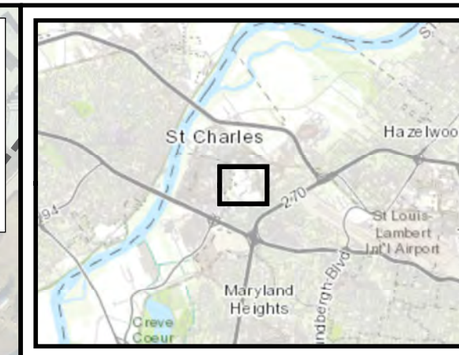
Figure 6f: Vapor Intrusion Sampling Locations - Missouri Asphalt Plant Building

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\team\MMW\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\SiteLayout\SoilVaporSampling\Locations\WestLake_VI_MissouriAsphaltPlantBldg_20211123.mxd - nathan.roberts - 2/25/2022





Legend

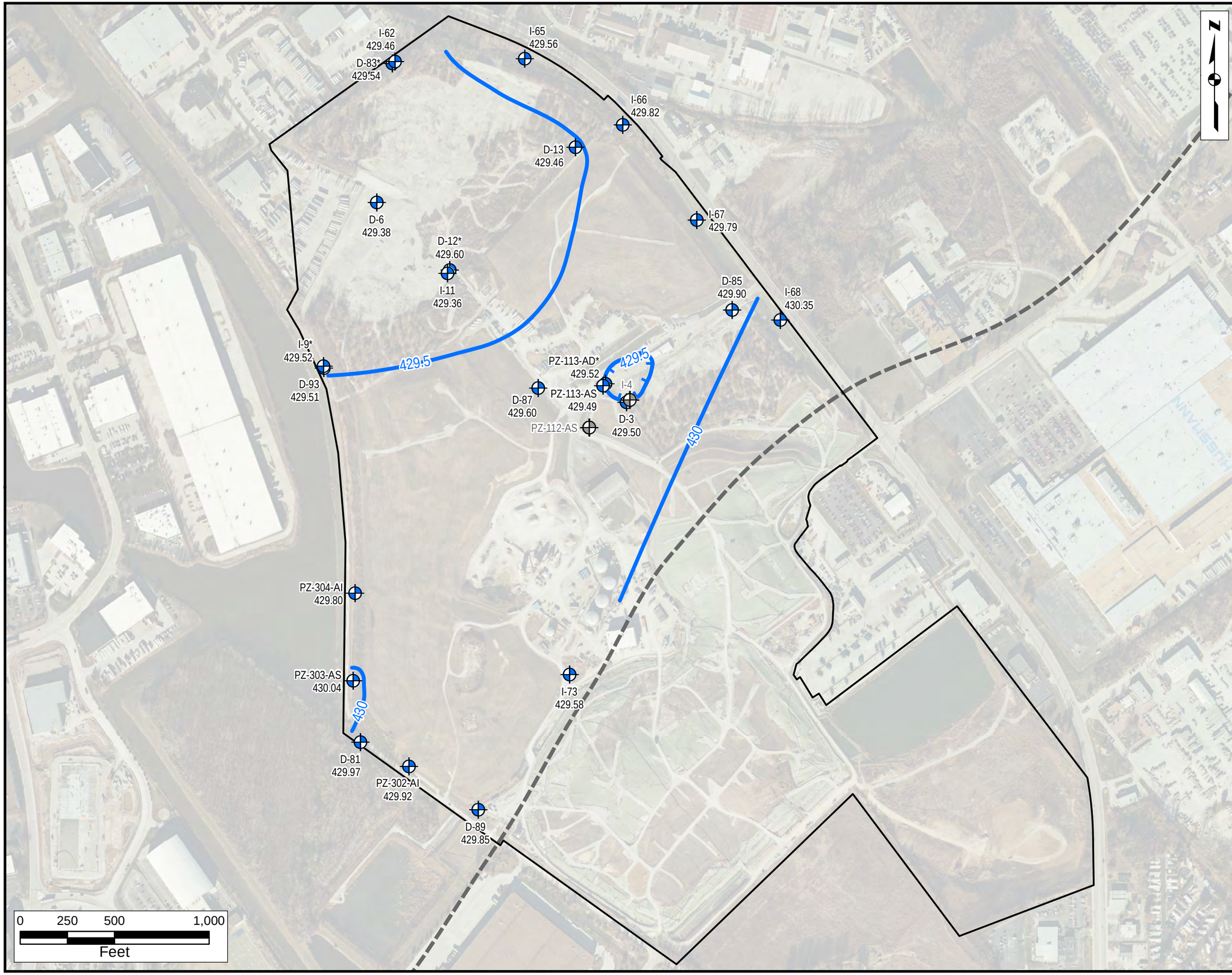
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

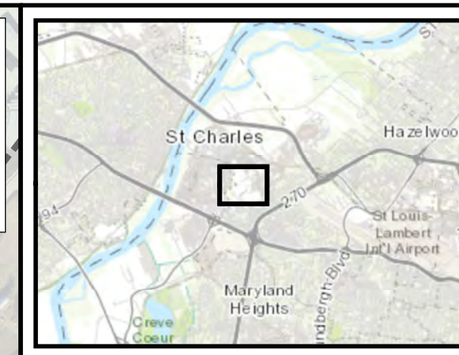
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7a: Alluvium Potentiometric Surface Map
January 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

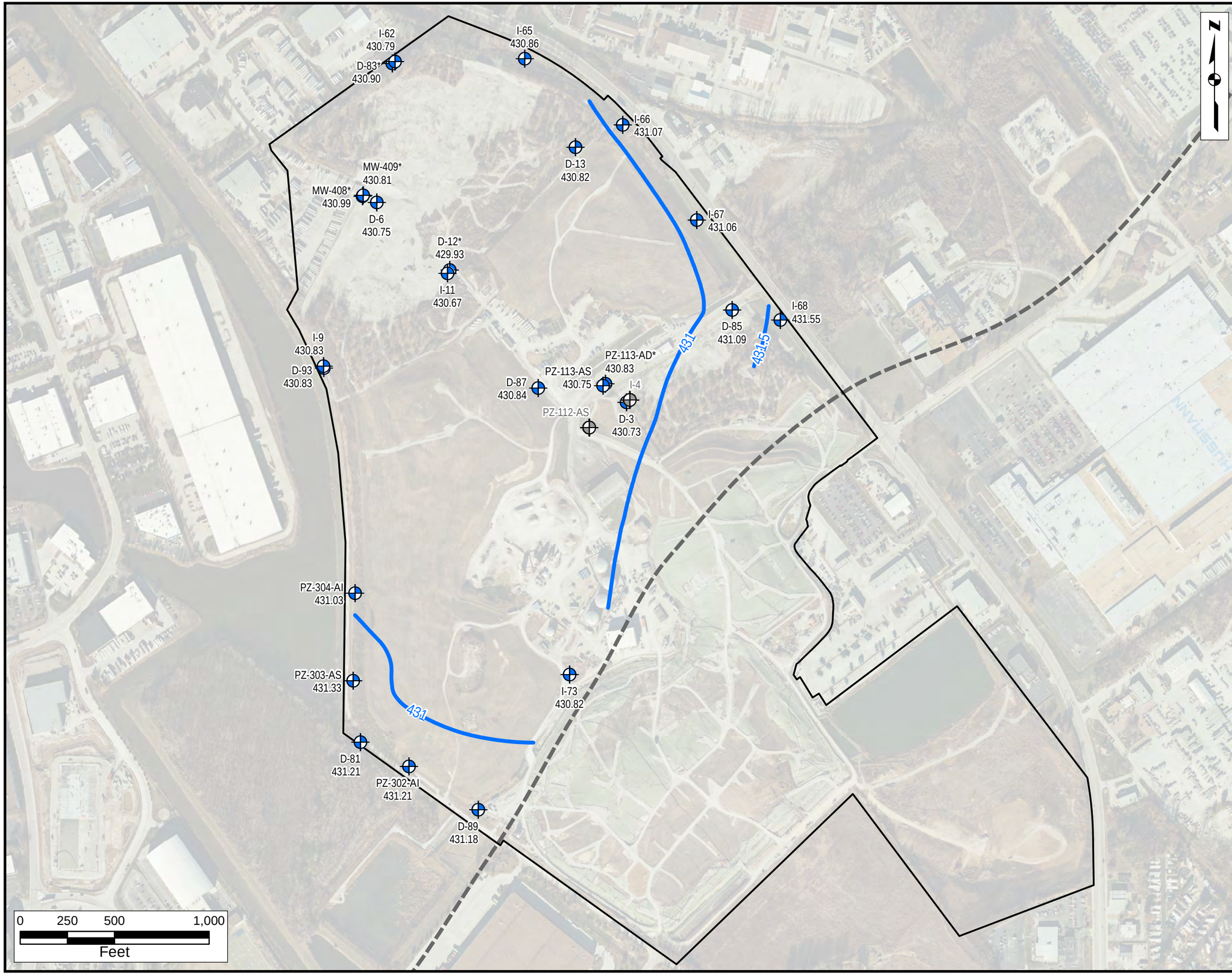
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

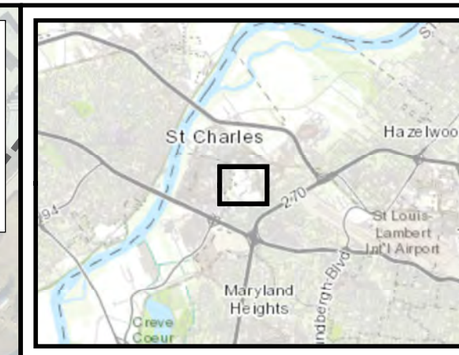
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7b: Alluvium Potentiometric Surface Map
February 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

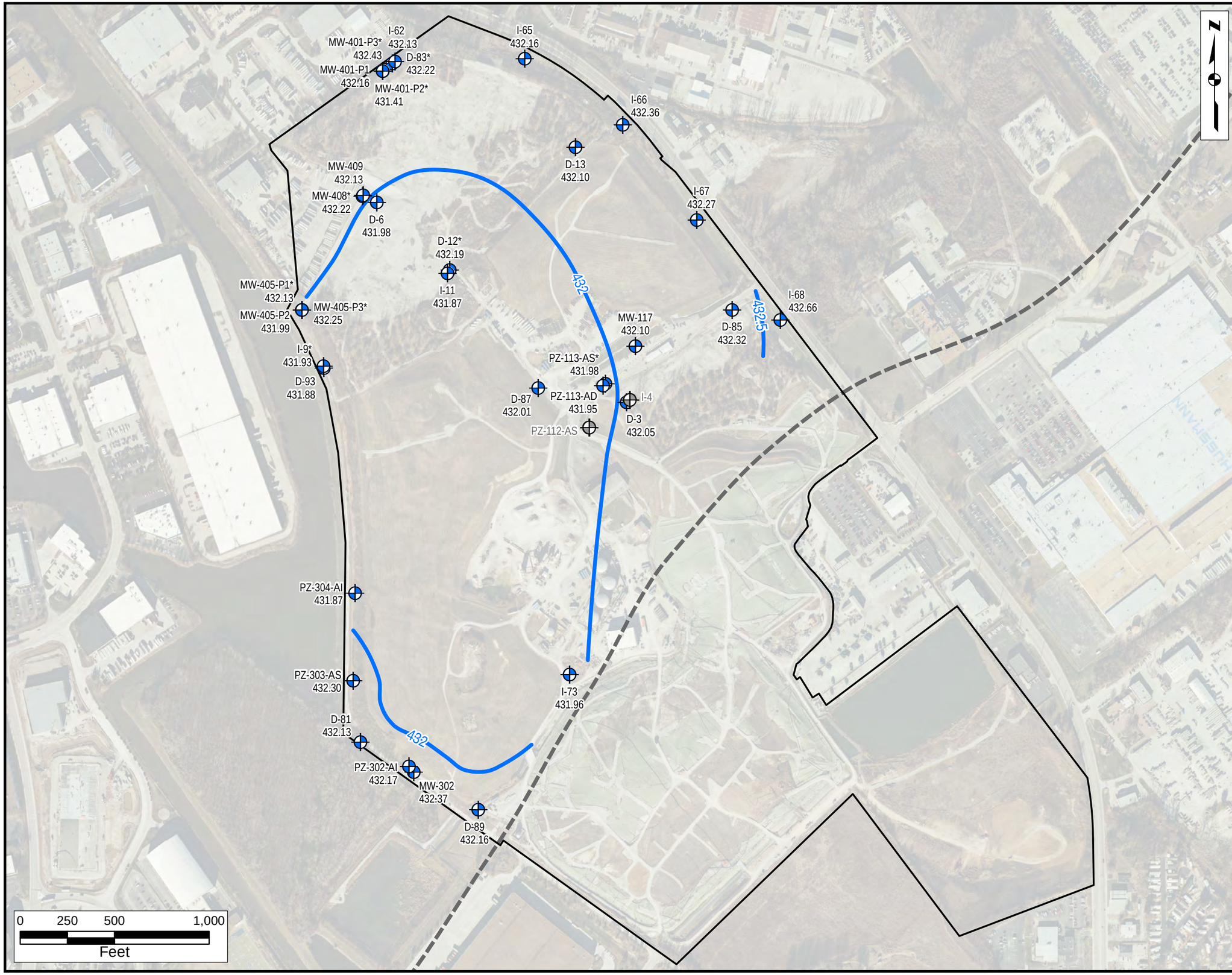
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

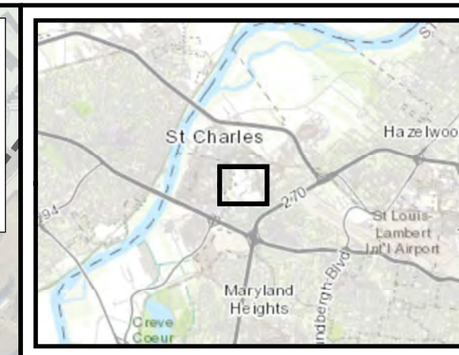
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7c: Alluvium Potentiometric Surface Map
March 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

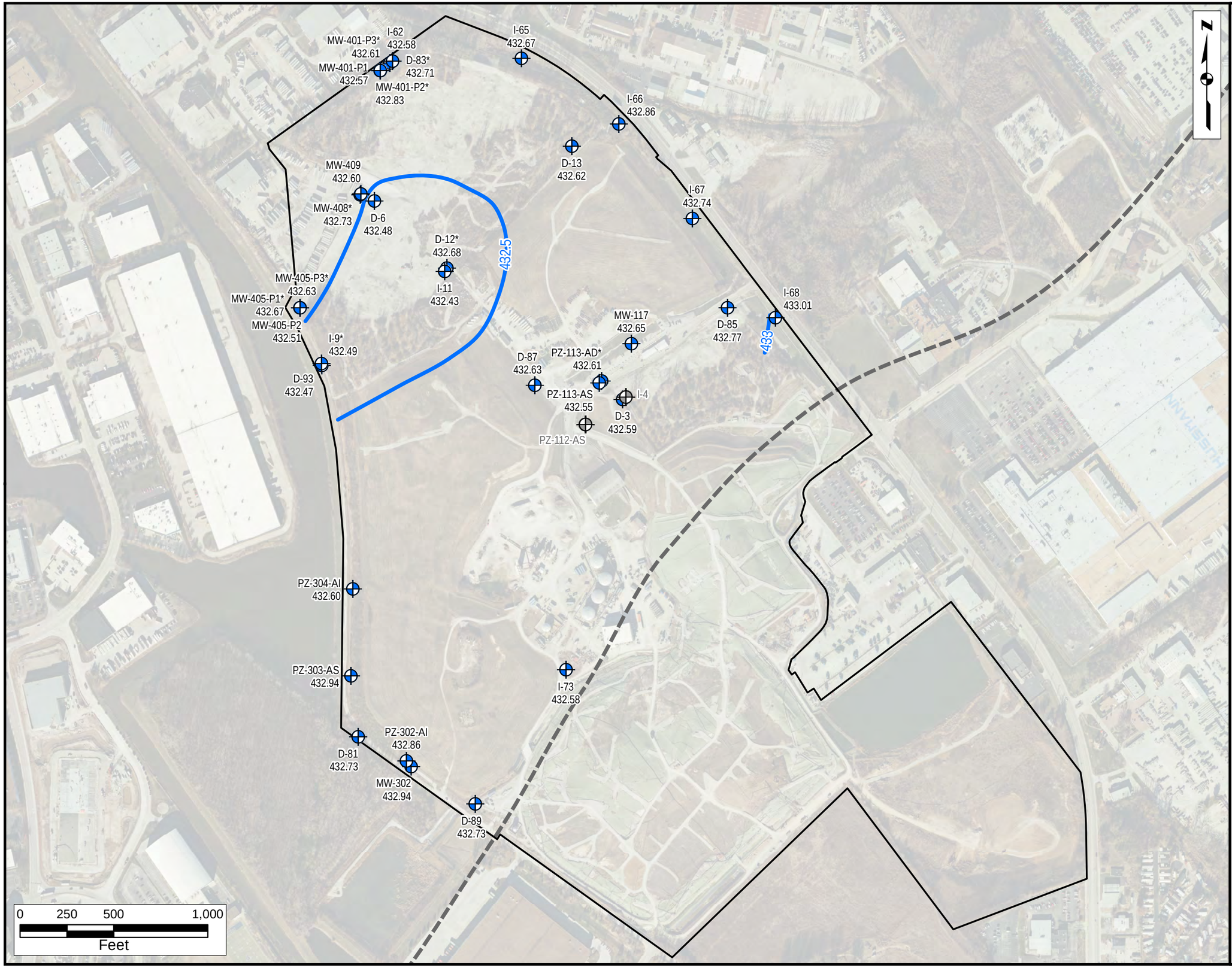
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7d: Alluvium Potentiometric Surface Map
April 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM



NOTES:

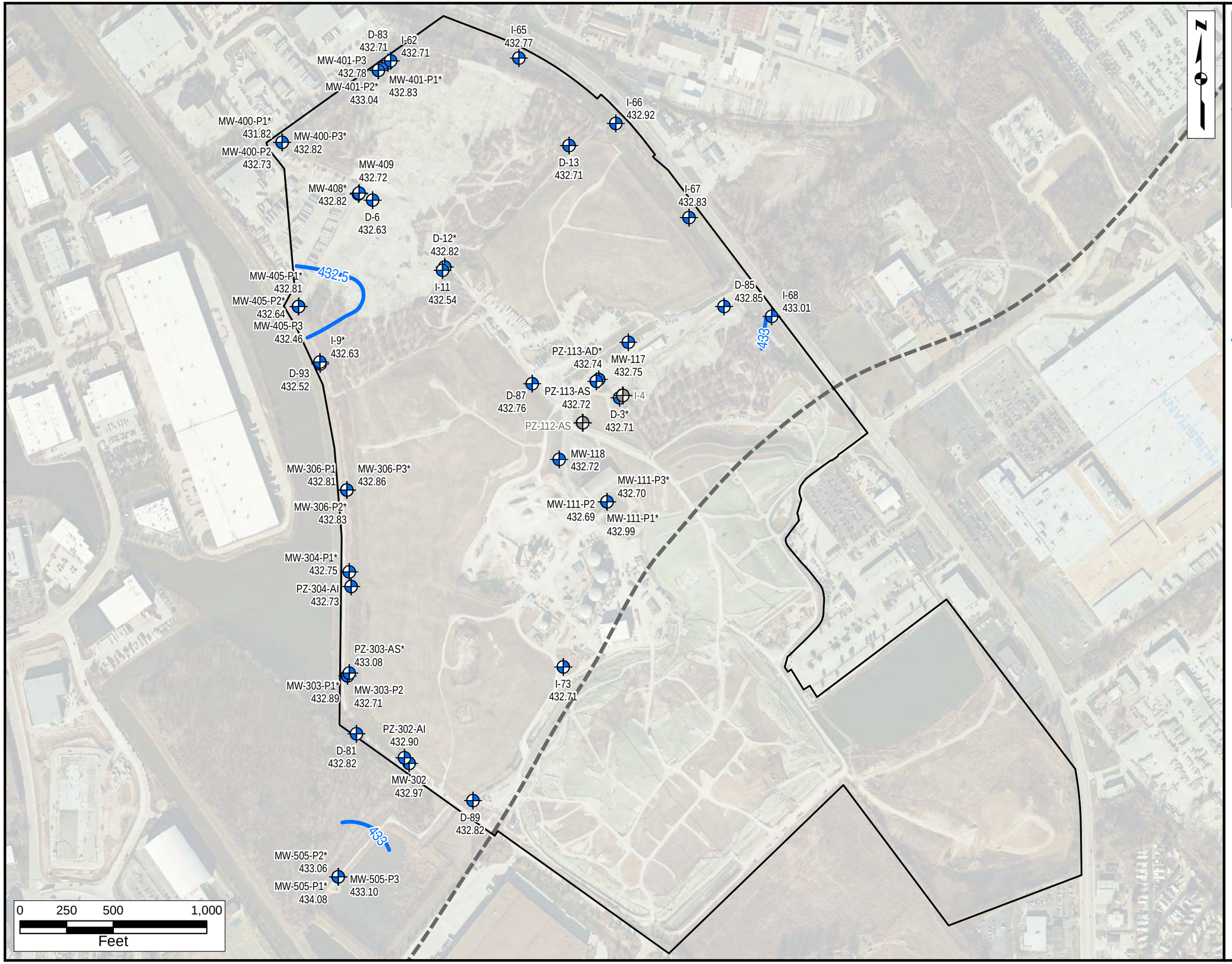
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7e: Alluvium Potentiometric Surface Map May 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMW\Clients_V_Z\WestLake\WestLake6\mxd_MXD\KD\GW_Contours\2021\5_May\WestLake_GWContours_May2021_Alluvium_20220121.mxd - Kelly.Mozko - 2/17/2022



NOTES:

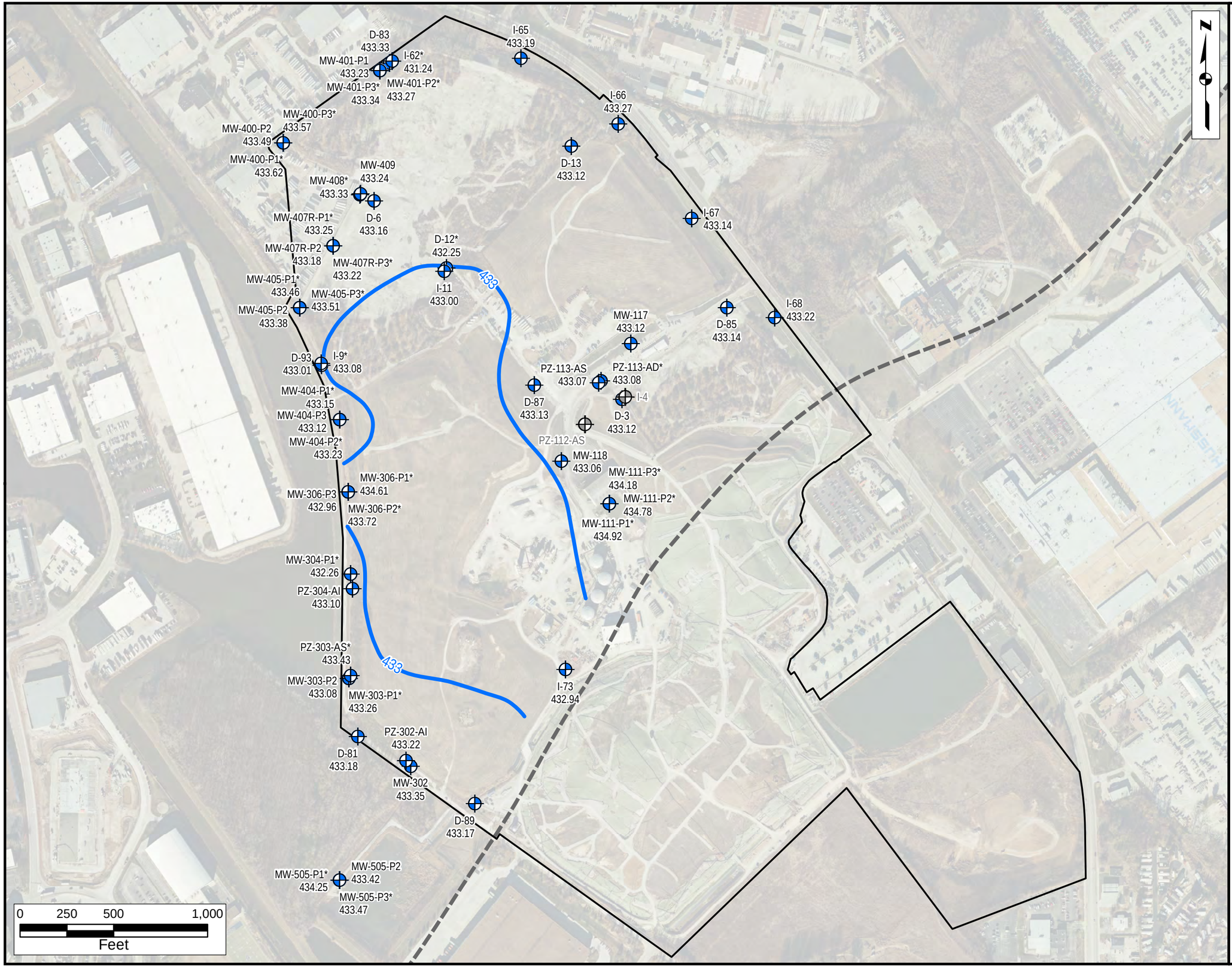
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

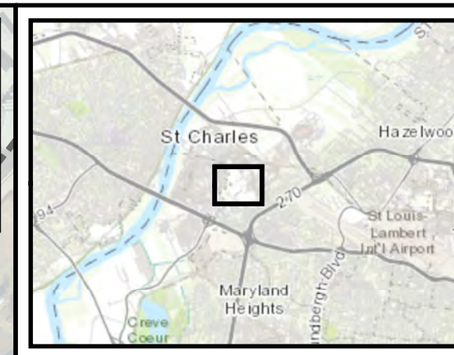
Figure 7f: Alluvium Potentiometric Surface Map June 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMW\Clients_Y_Z\WestLake\WestLakeLandfill_MO\MXD\GW_Contours\2021\6_June\WestLake_GWContours_June2021_Alluvium_20220121.mxd - Kelly.Mizeko - 2/17/2022





Legend

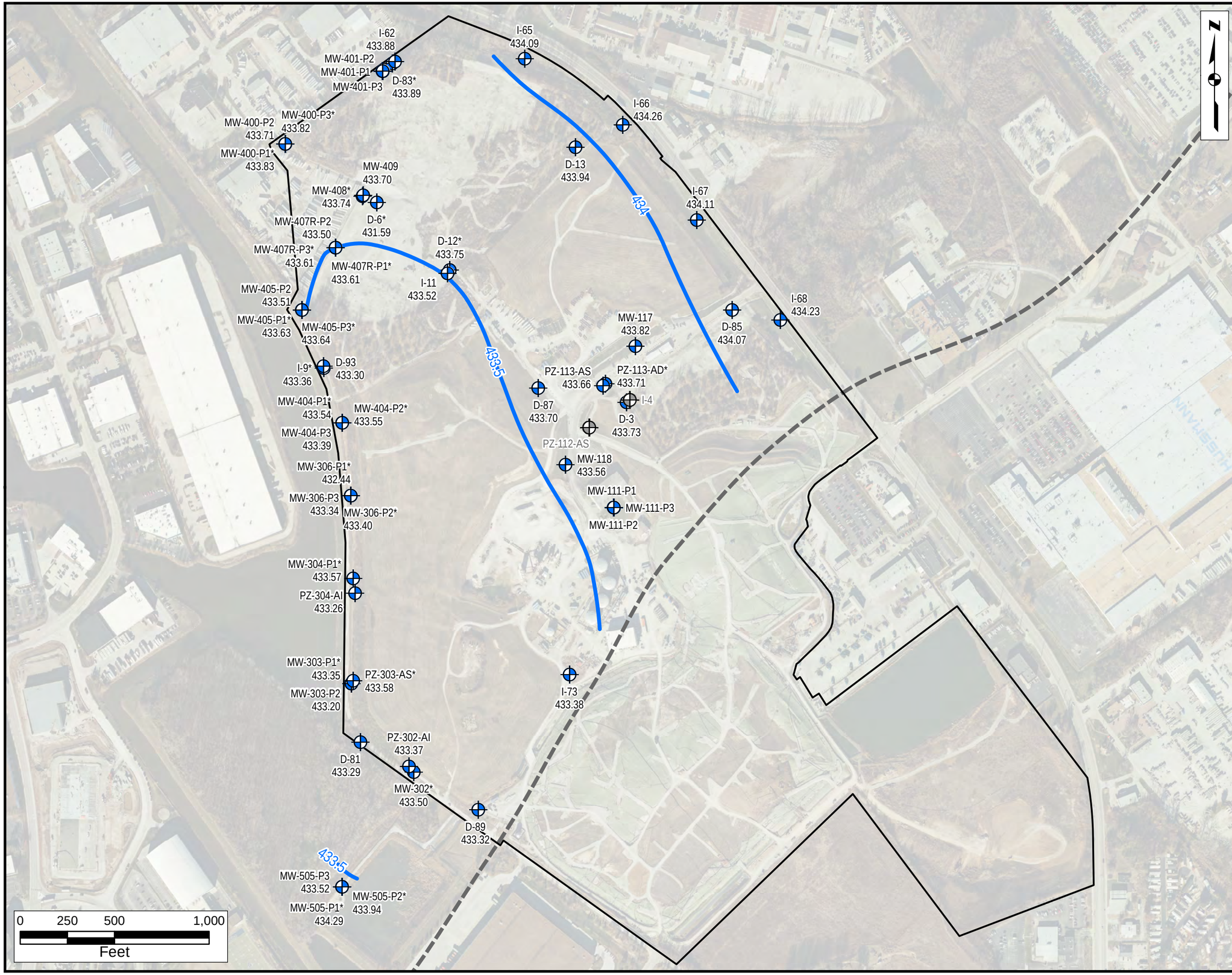
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

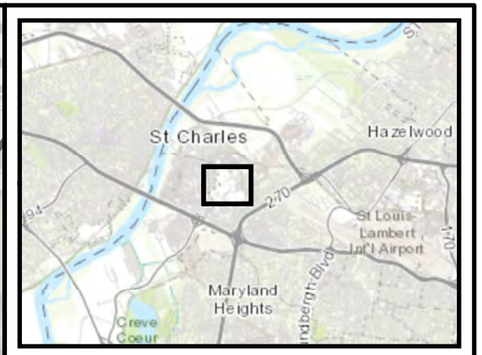
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7g: Alluvium Potentiometric Surface Map
July 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

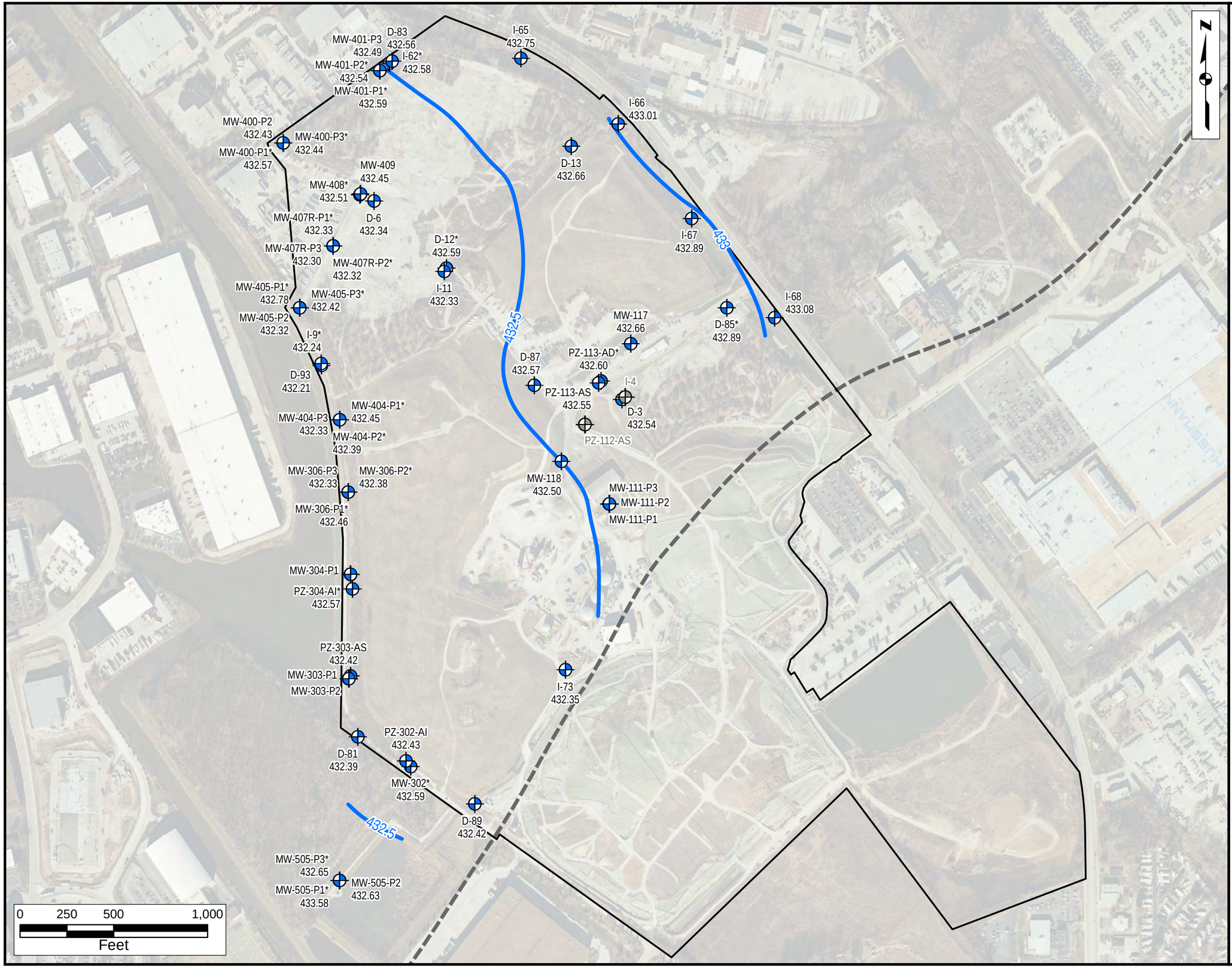
- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

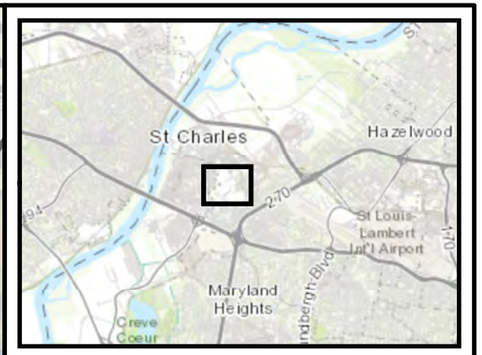
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 7h: Alluvium Potentiometric Surface Map
August 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

- Well Location
- Inactive Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Edge of Alluvium (approximate)
- Superfund Site Boundary

NOTES:

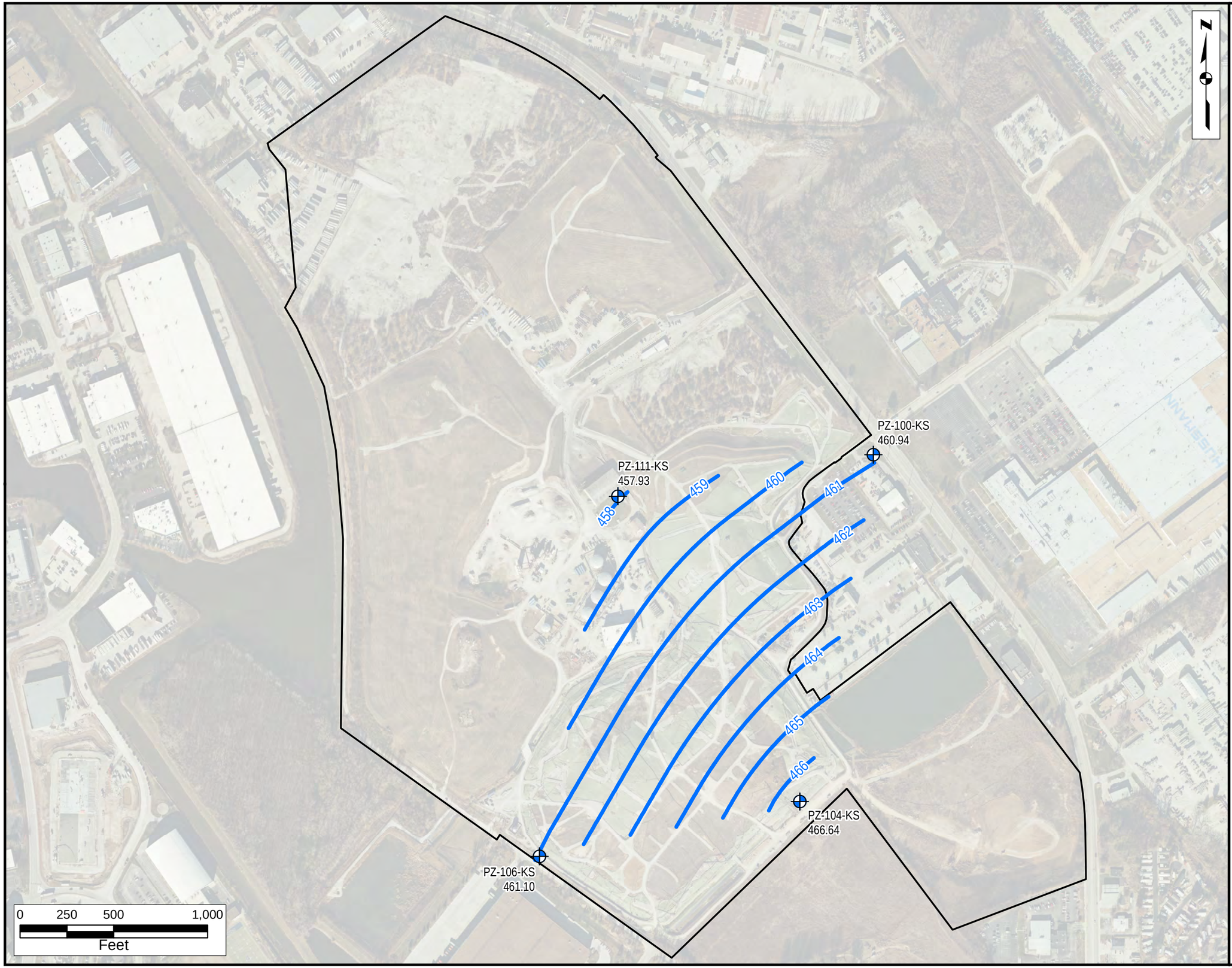
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. For well clusters, the lowest value was included during contouring.
5. The 2021 alluvium potentiometric maps were prepared based on a limited data set which did not include any surface water elevation data.
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

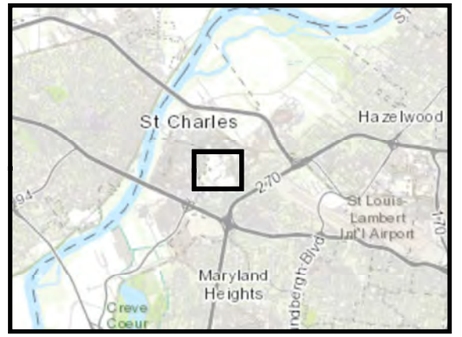
Figure 7i: Alluvium Potentiometric Surface Map September 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMMV\Clients_V_Z\WestLake\WestLakeLandfill_MOMXD\GW_Contours\2021g_SeptemberWestLake_GWContours_September2021_Alluvium_20221021.mxd - KellyMolzko - 2/17/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

NOTES:

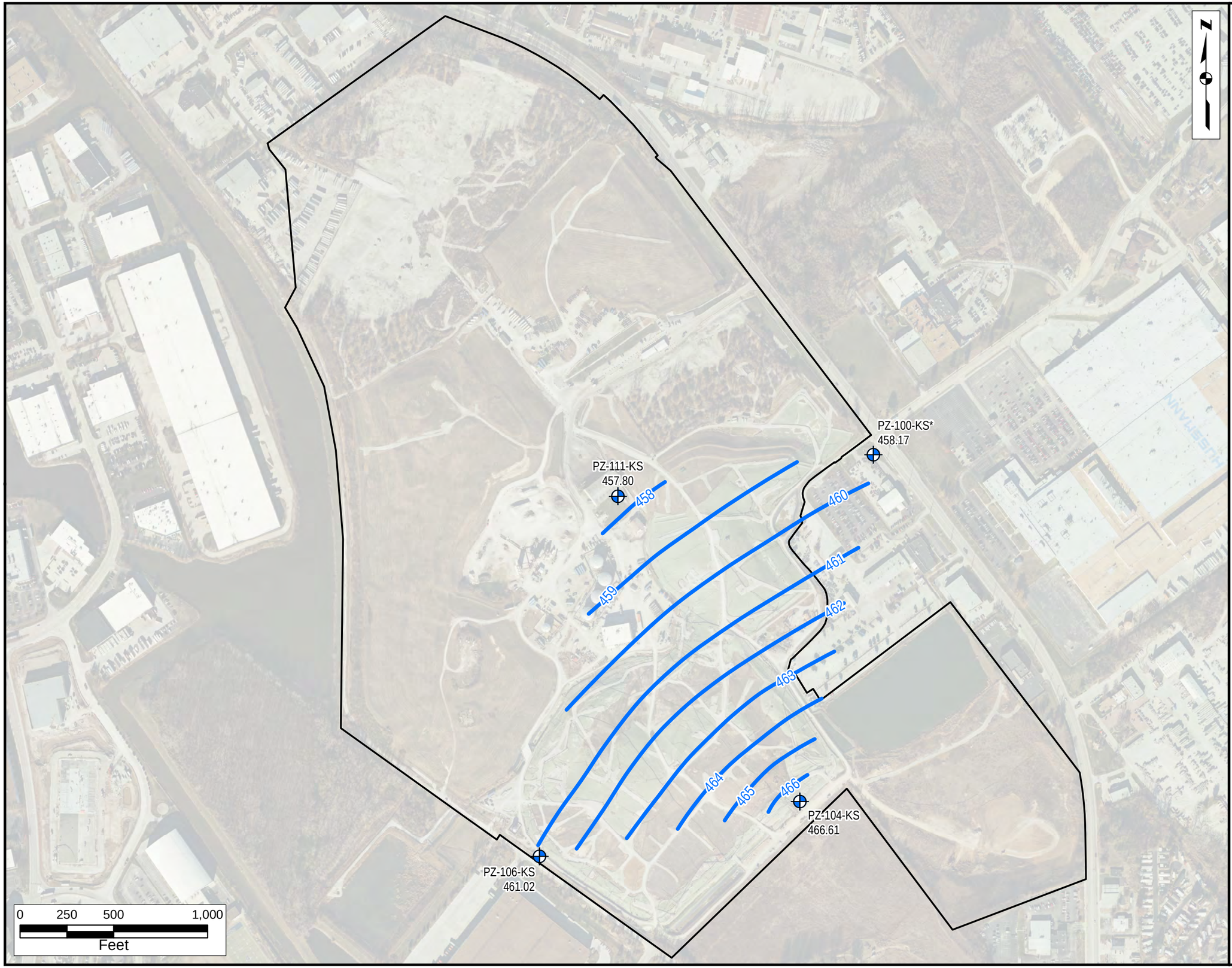
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

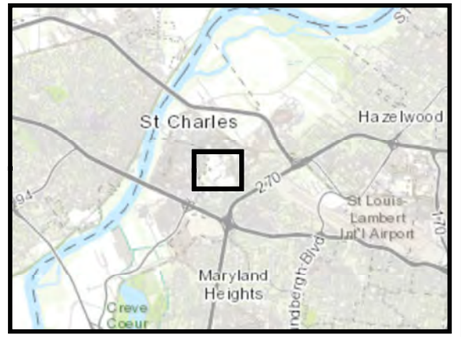
Figure 8a: Bedrock (Keokuk Formation) Potentiometric Surface Map January 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\GW_Contours\2021\1_January\WestLake_GWContours_January2021_Keokuk_20220107.mxd - Kelly.Mizikar - 2/1/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

NOTES:

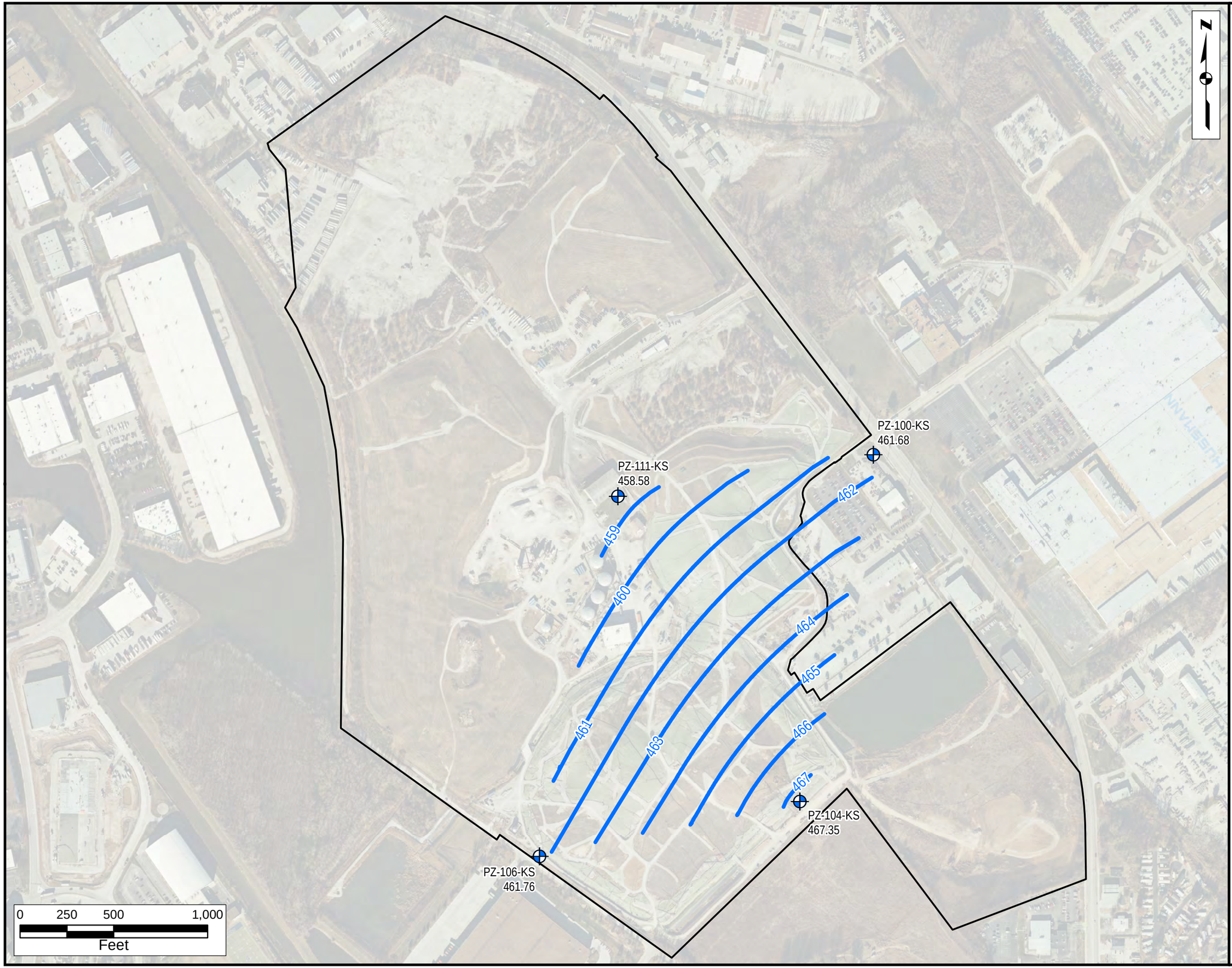
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. * = Well measurement not used in contouring.
4. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

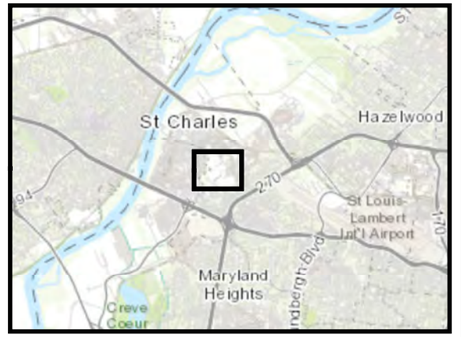
Figure 8b: Bedrock (Keokuk Formation) Potentiometric Surface Map February 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\GW_Contours\2021\2_February\WestLake_GWContours_February2021_Keokuk_20220107.mxd - Kelly.Motzko - 2/1/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

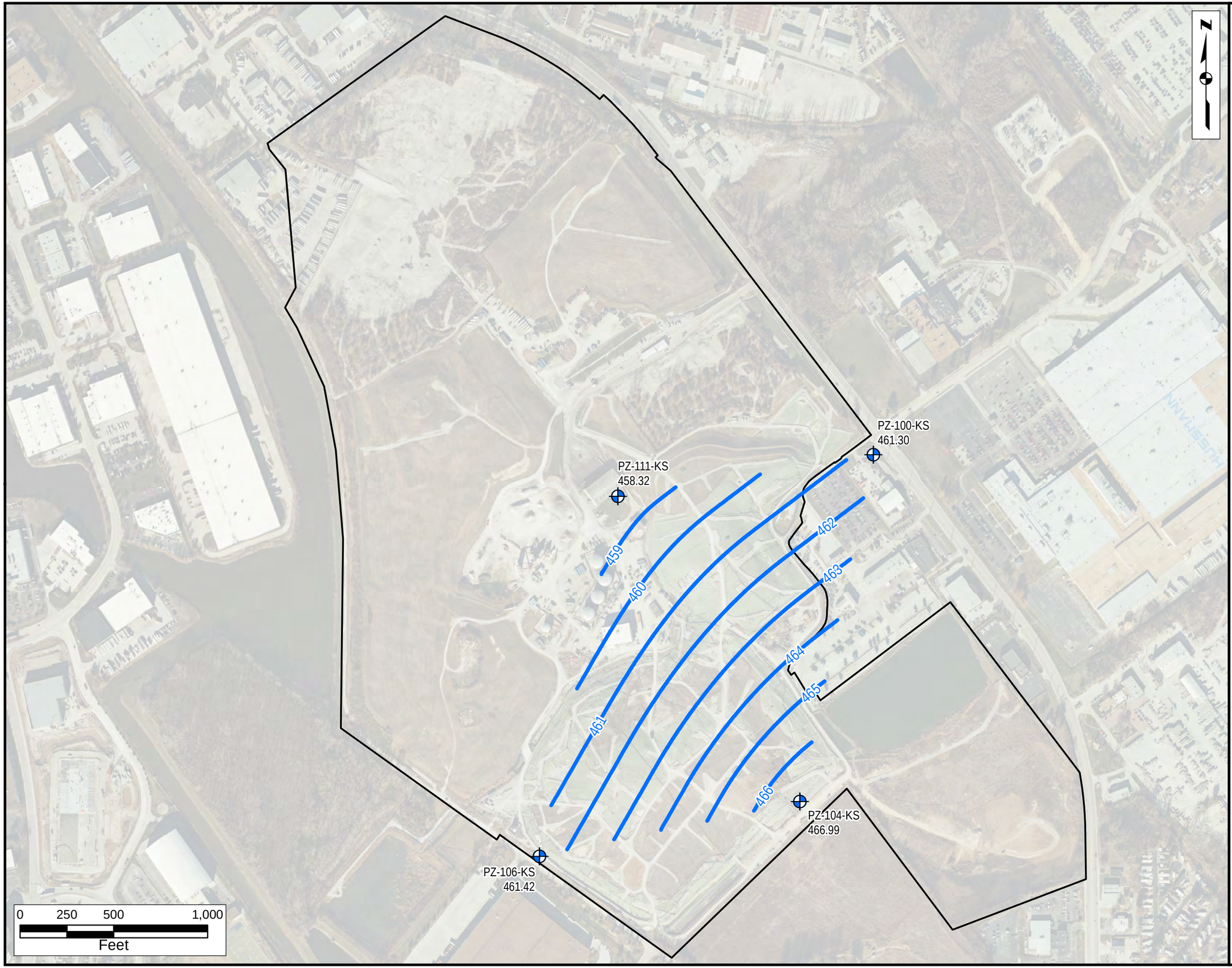
NOTES:

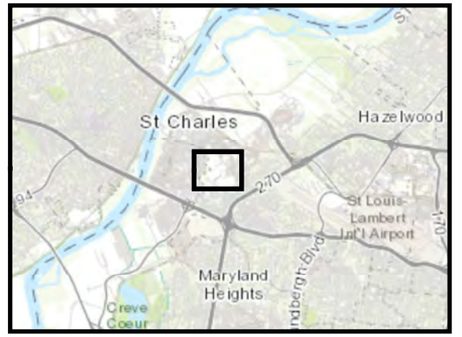
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8c: Bedrock (Keokuk Formation) Potentiometric Surface Map
March 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\GW_Contours\2021\3_March\WestLake_GWContours_March2021_Keokuk_20220107.mxd - Kelly.Matzko - 2/1/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

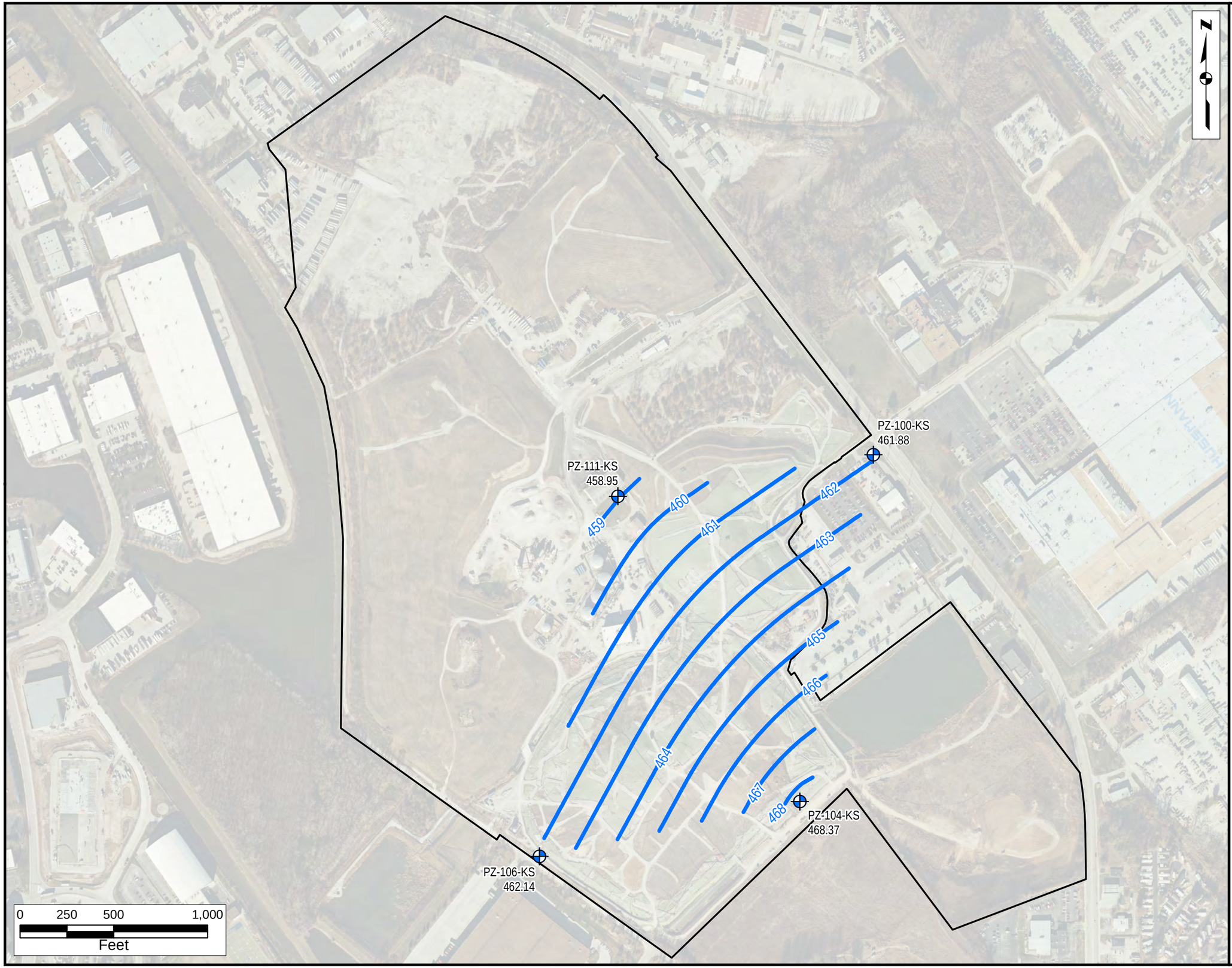
NOTES:

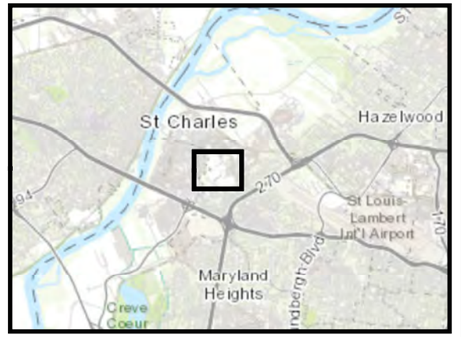
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8d: Bedrock (Keokuk Formation) Potentiometric Surface Map
April 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Bosstm\team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_WOW\MXD\GW_Contours\2021\4_April\WestLake_GWContours_April2021_Keokuk_20220121.mxd - Kelly.Mizak - 2/1/2022





Legend

Well Location

456.87 Groundwater Elevation (ft. amsl)

Groundwater Elevation Contour

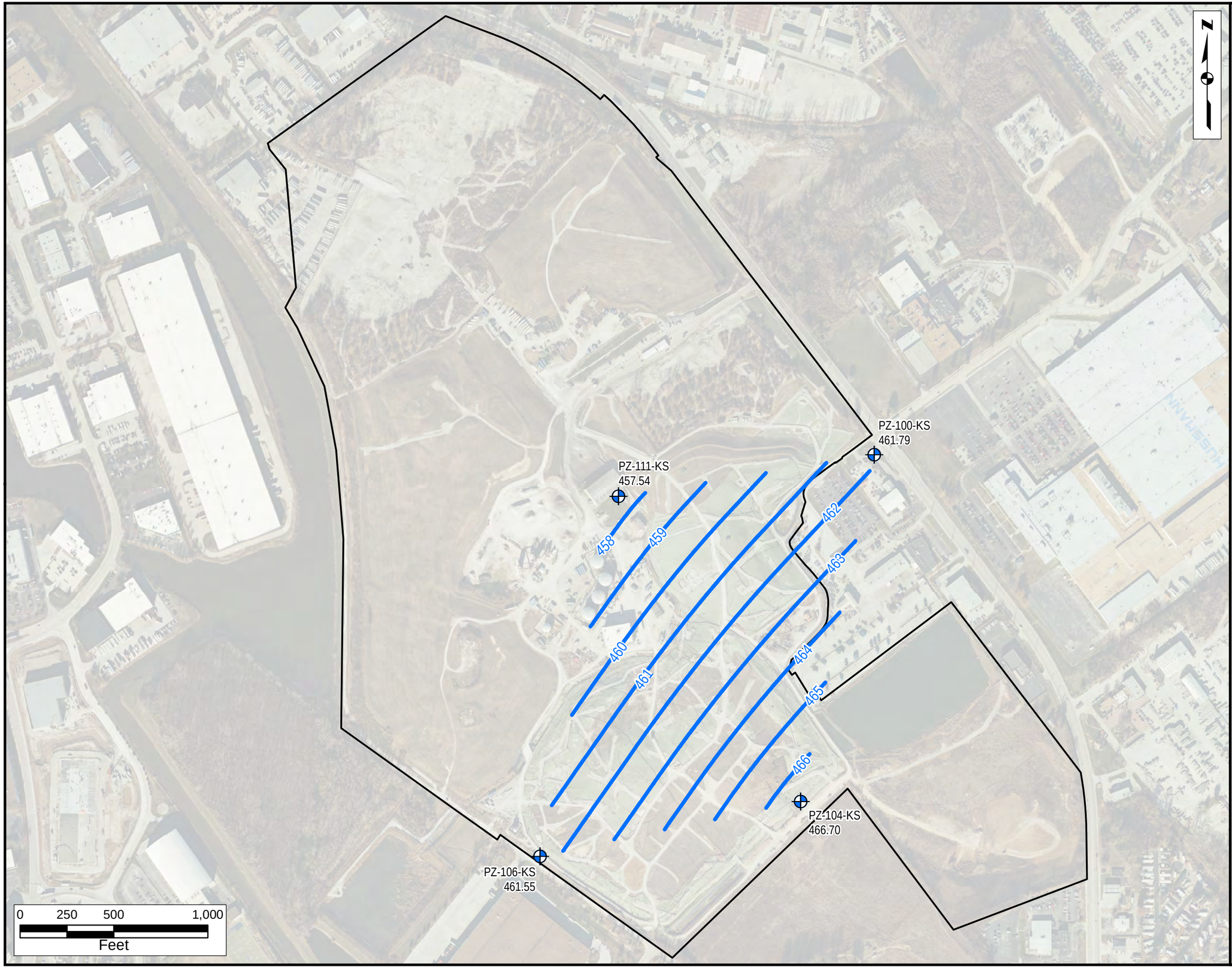
Superfund Site Boundary

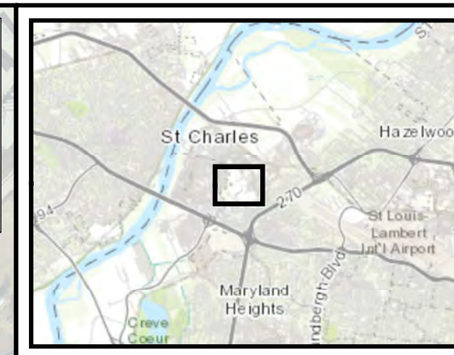
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8e: Bedrock (Keokuk Formation) Potentiometric Surface Map
May 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

Well Location

456.87 Groundwater Elevation (ft. amsl)

Groundwater Elevation Contour

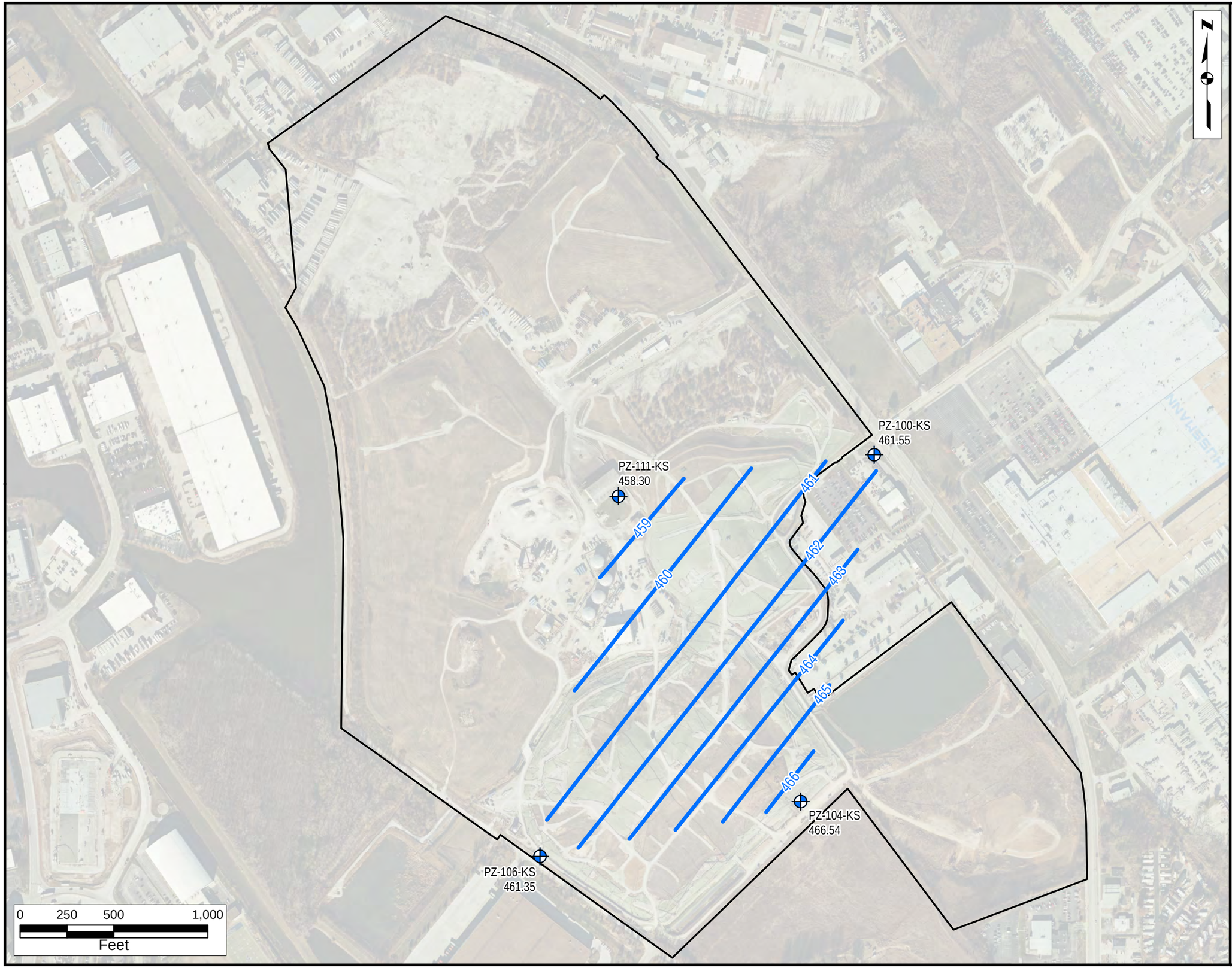
Superfund Site Boundary

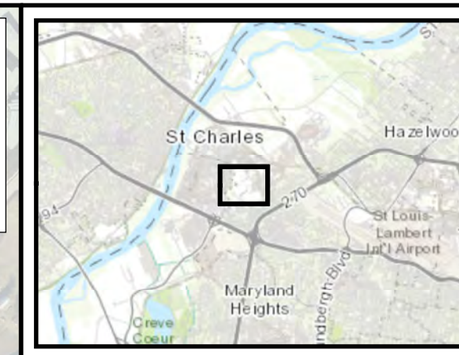
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8f: Bedrock (Keokuk Formation) Potentiometric Surface Map
June 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





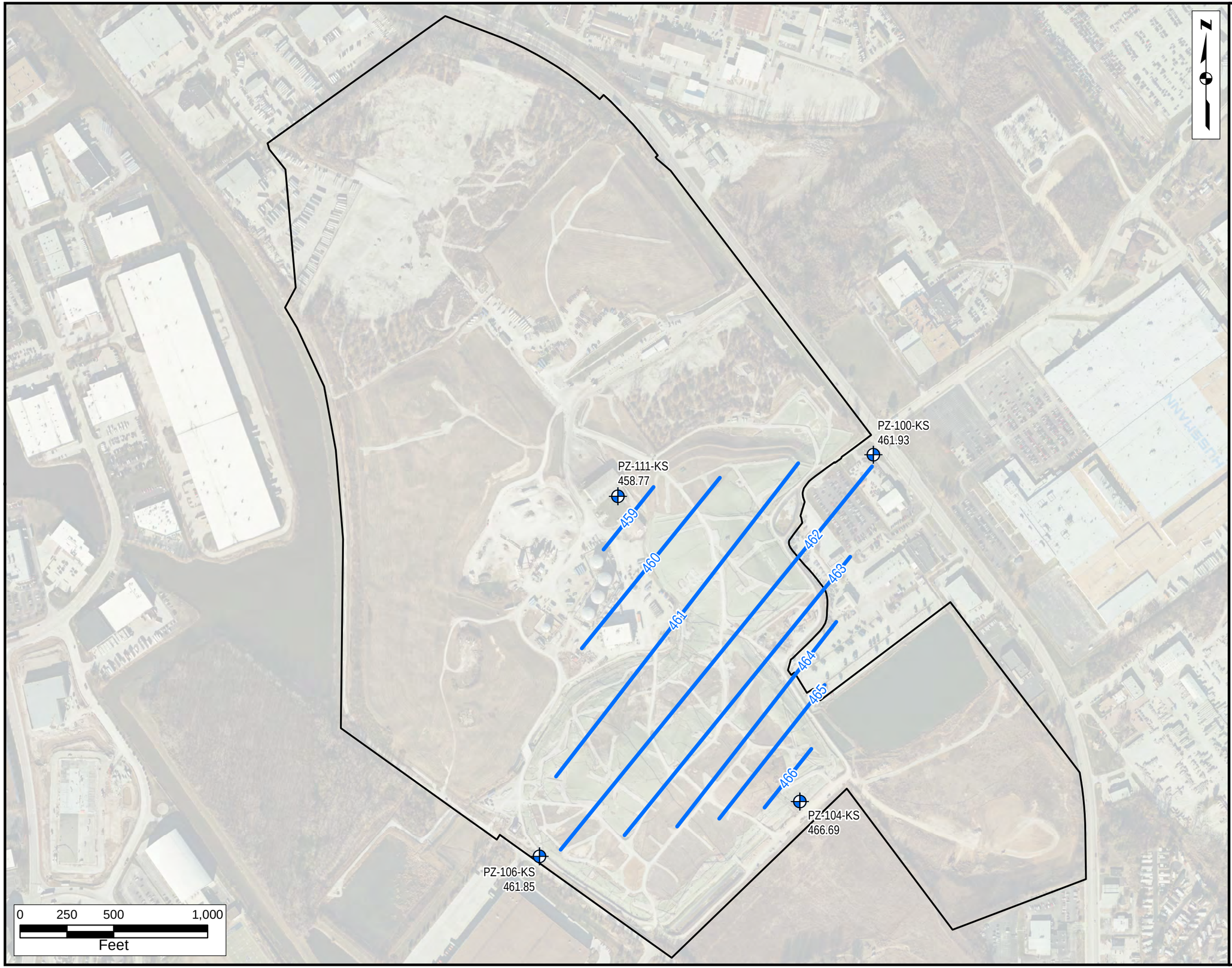
Legend

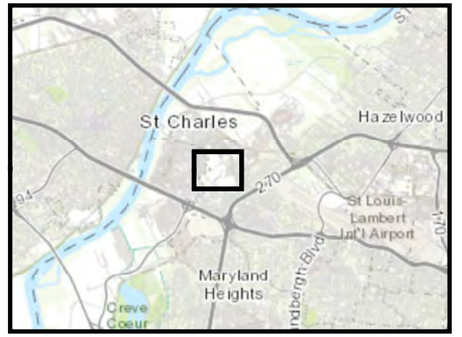
- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8g: Bedrock (Keokuk Formation) Potentiometric Surface Map
July 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

NOTES:

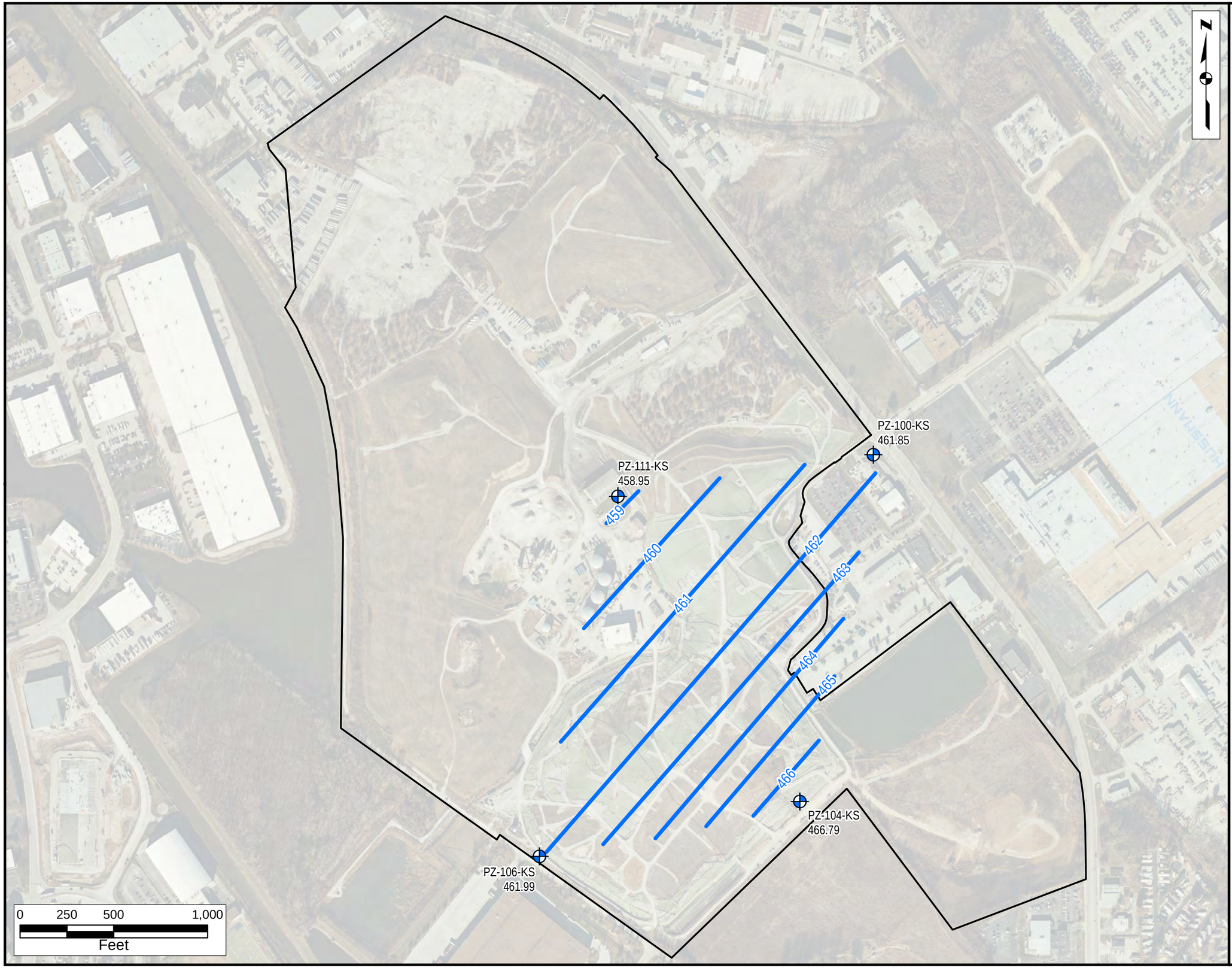
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

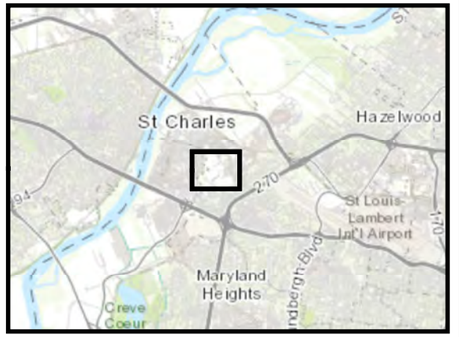
Figure 8h: Bedrock (Keokuk Formation) Potentiometric Surface Map August 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_WOW\MXD\GW_Contours\2021\0_AugustWestLake_GWContours_August2021_Keokuk_20220120.mxd - Kelly.Mottzo - 2/1/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary

NOTES:

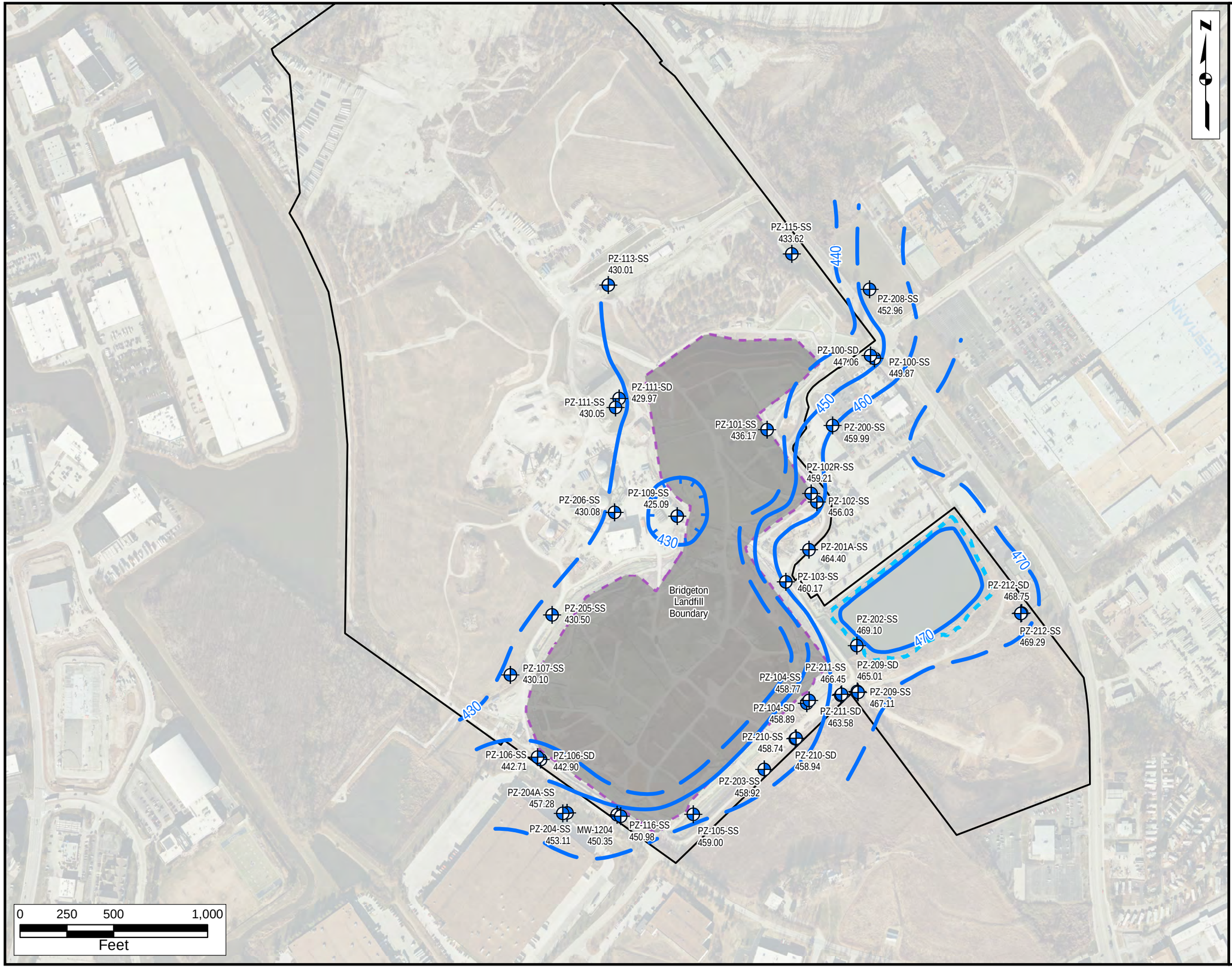
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. The Quarry of Bridgeton Landfill Boundary is not shown, as the Quarry did not encounter/penetrate the Keokuk Formation.

Figure 8i: Bedrock (Keokuk Formation) Potentiometric Surface Map September 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLake\Landfill_MXD\MXD\GW_Contours\2021Q3_September\WestLake_GWContours_September2021_Keokuk_20220126.mxd - Kelly.Mizeko - 2/1/2022



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9a: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map January 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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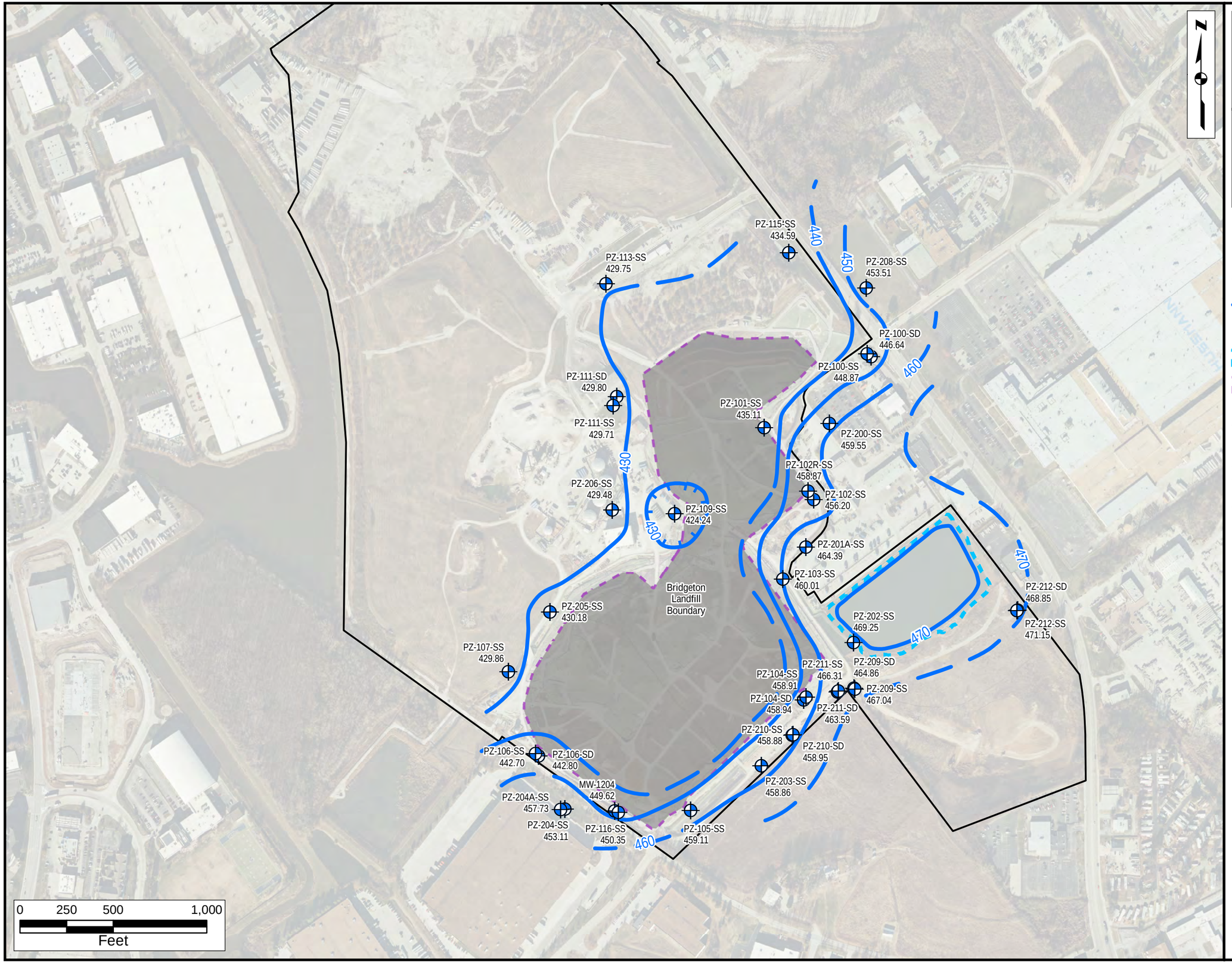
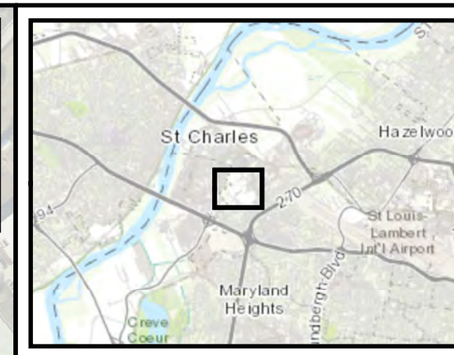




Legend

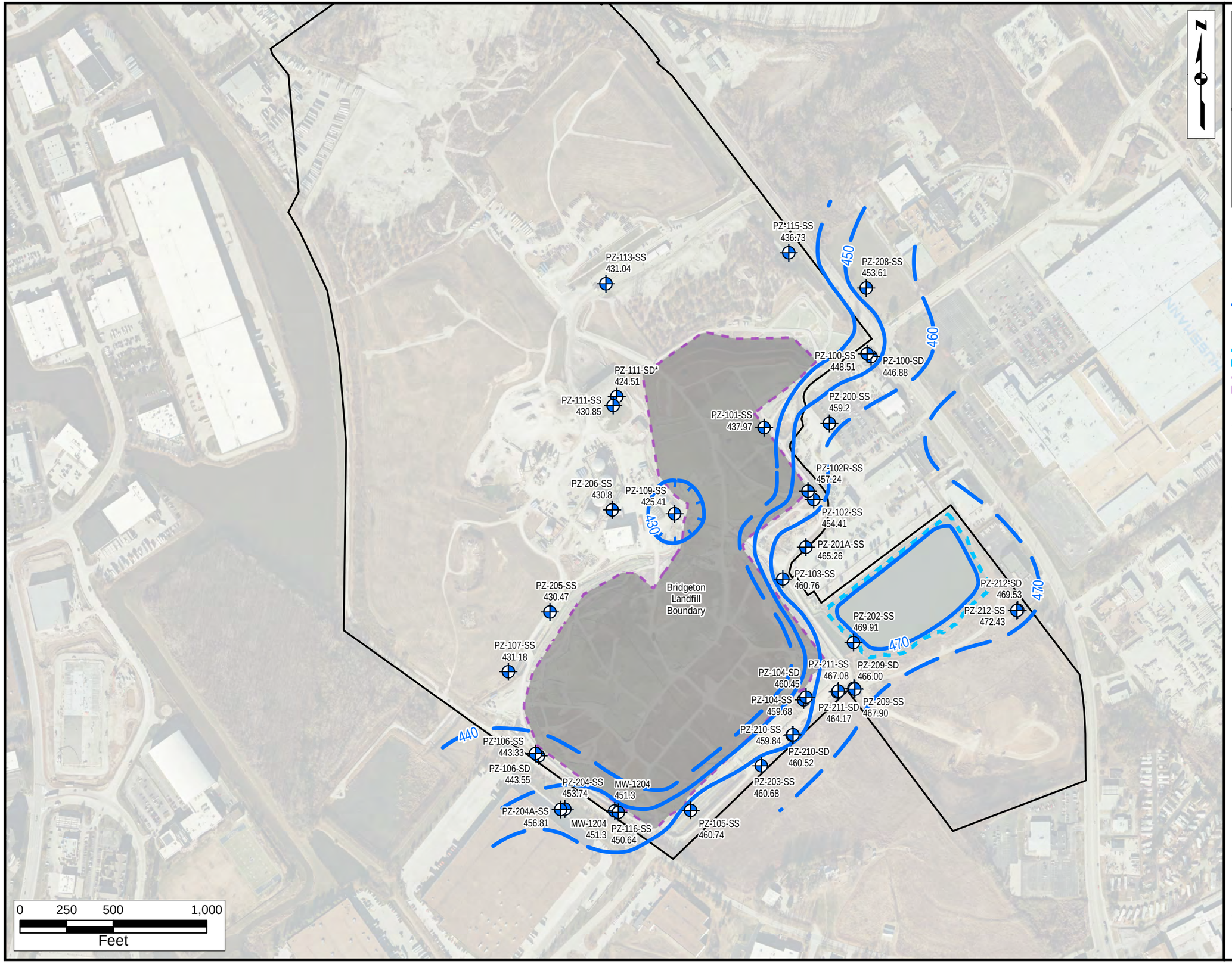
- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary
- Stormwater Retention Pond
- Bridgeton Landfill Boundary

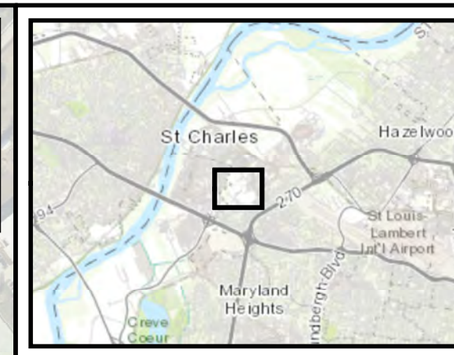
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9b: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map
February 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM





Legend

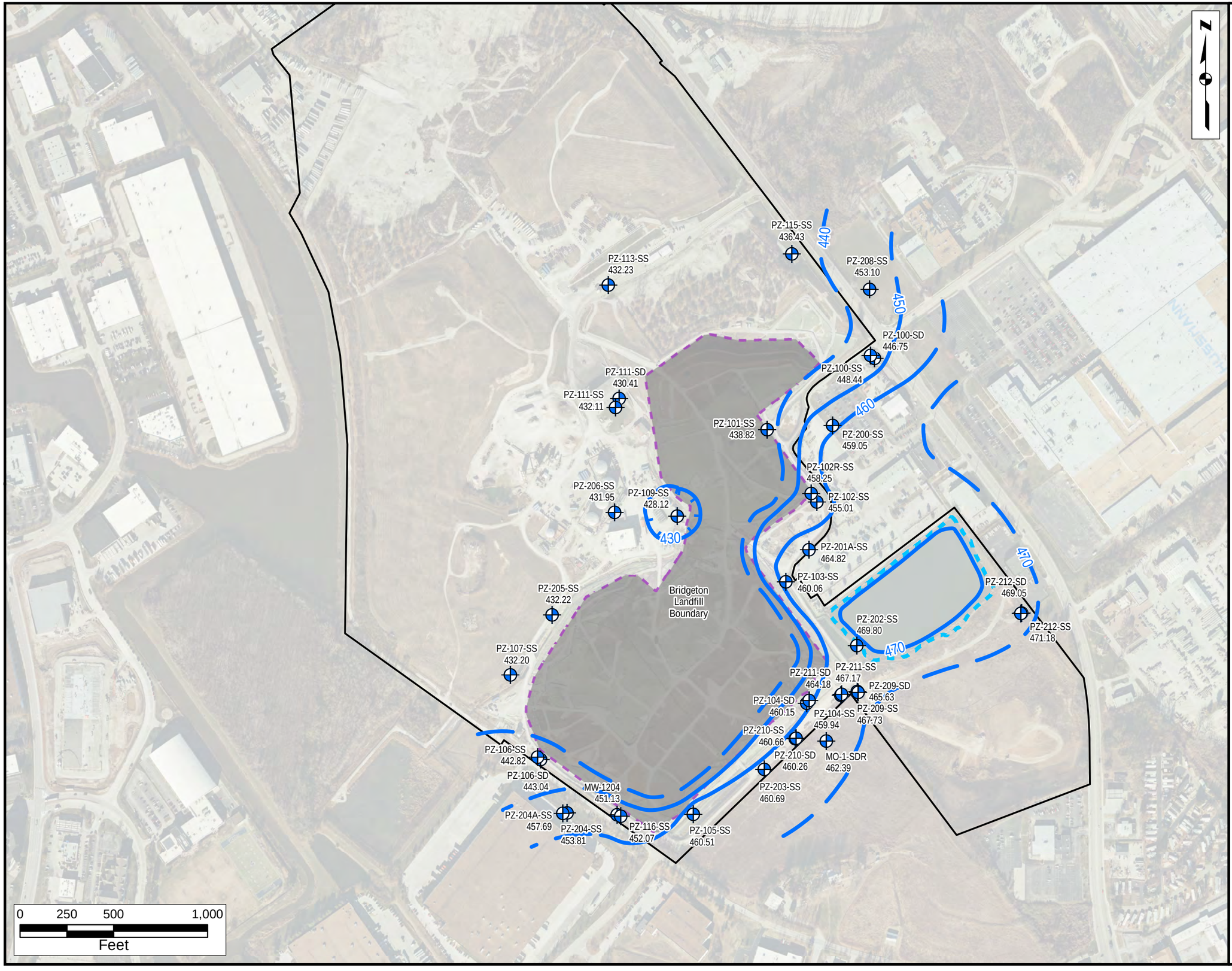
- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary
- Stormwater Retention Pond
- Bridgeton Landfill Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9c: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map
March 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9d: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map April 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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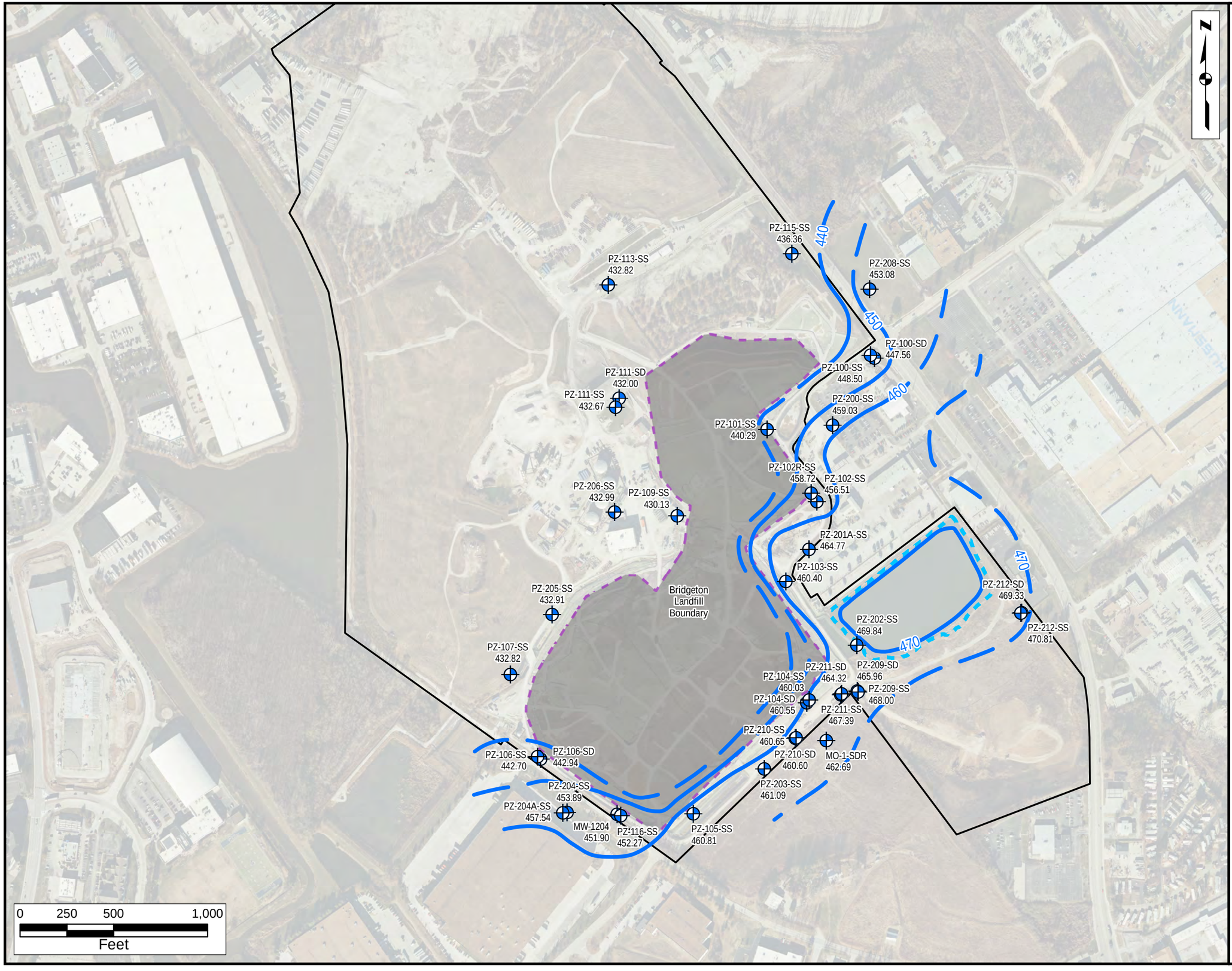
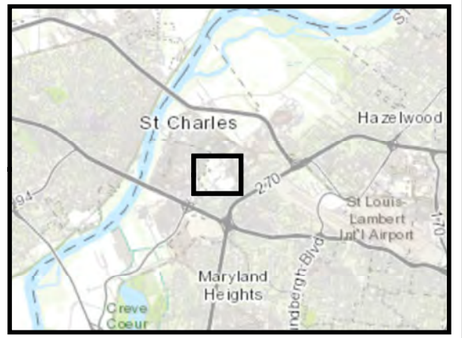




Legend

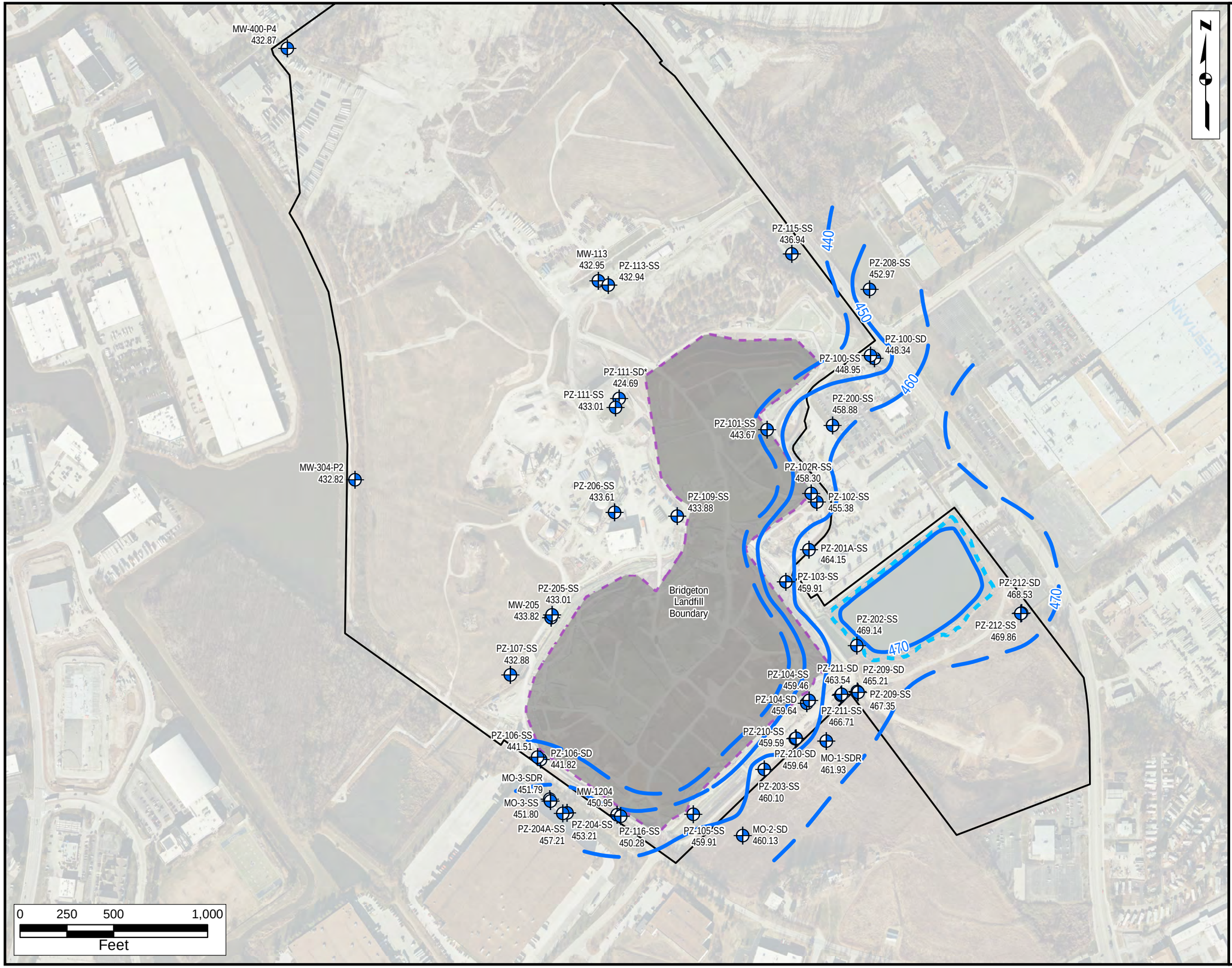
- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary
- Stormwater Retention Pond
- Bridgeton Landfill Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9e: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map
May 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM



Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary
- Stormwater Retention Pond
- Bridgeton Landfill Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9f: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map June 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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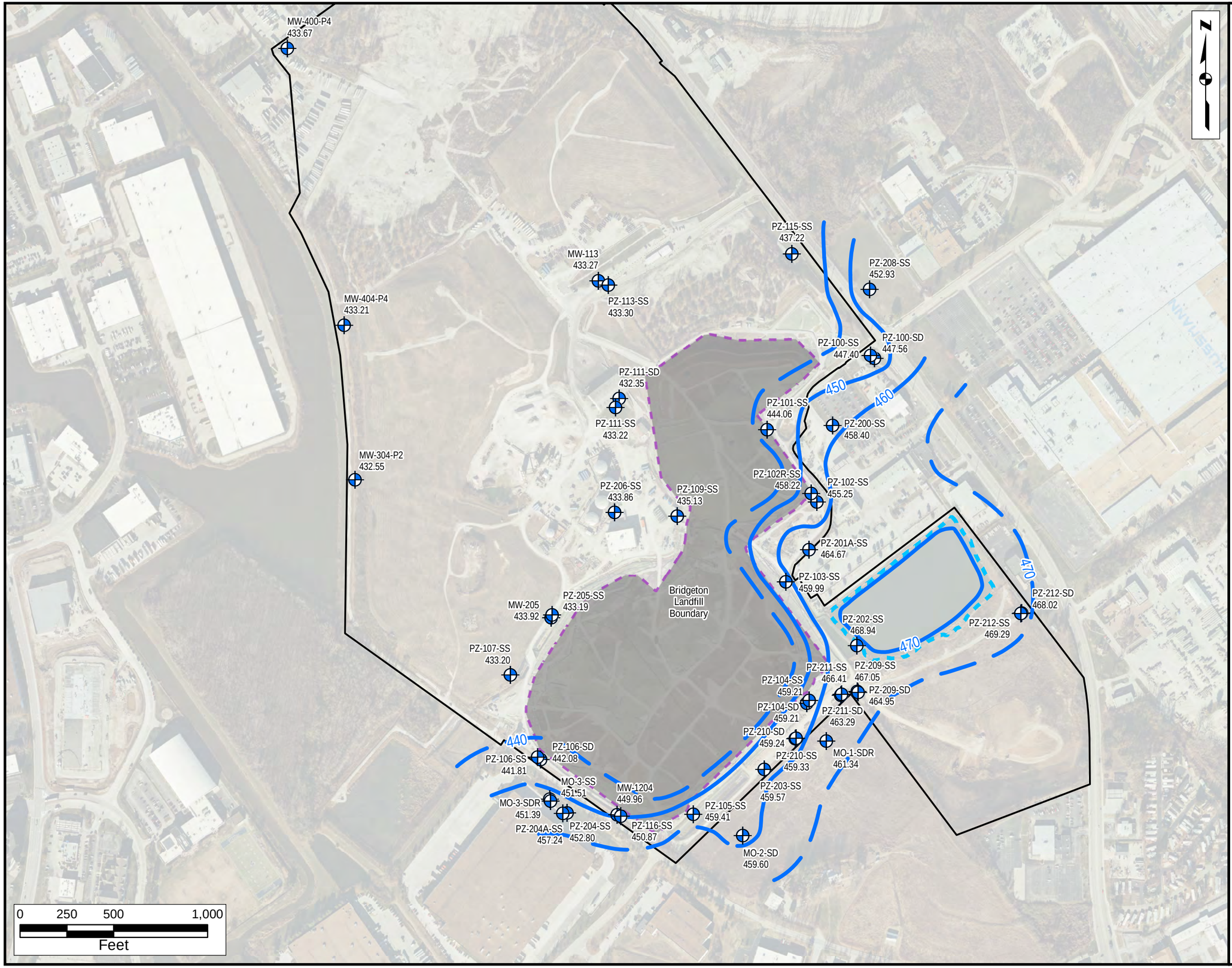


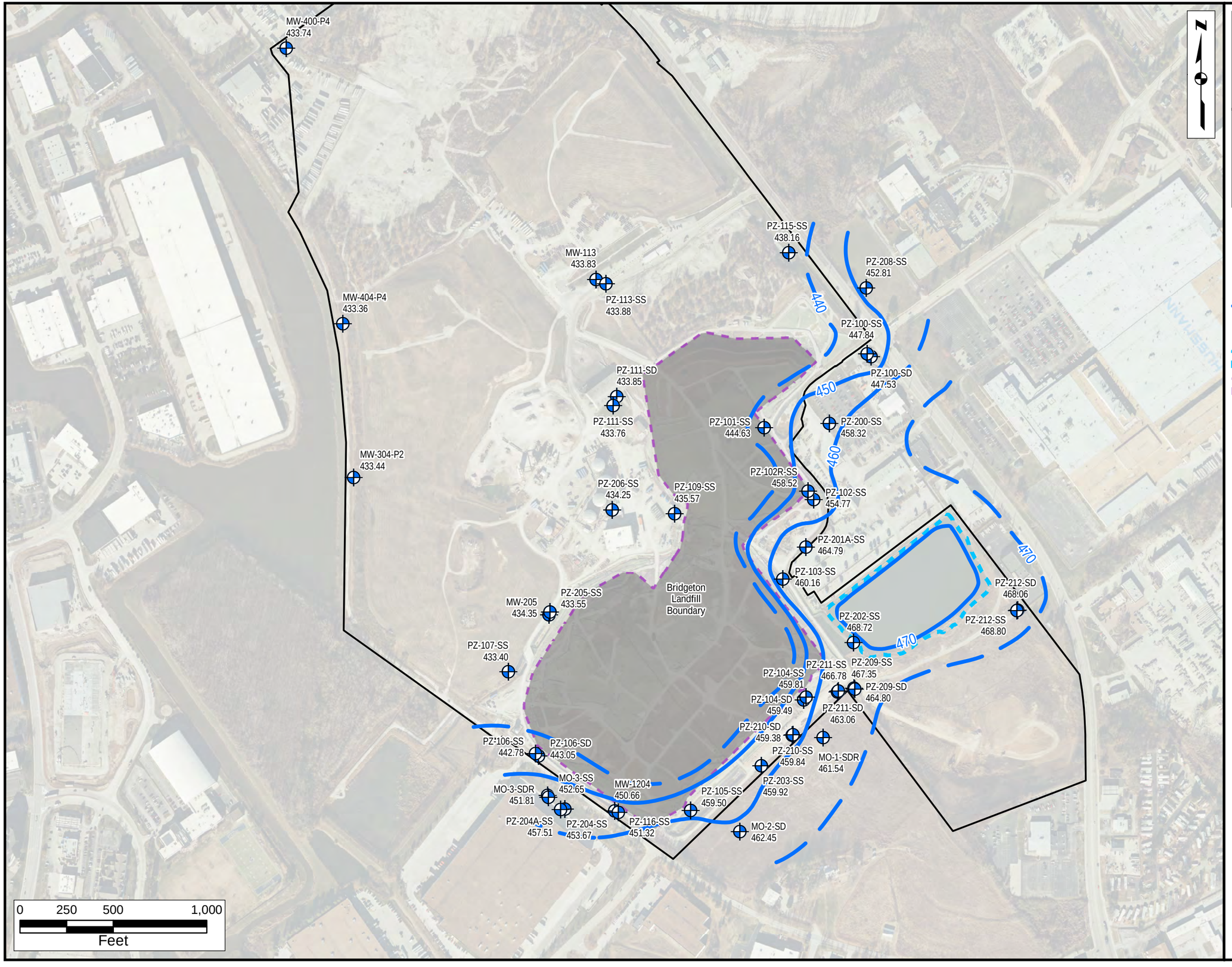
NOTES:

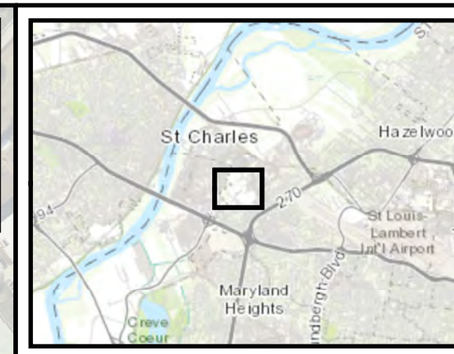
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9g: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map
July 2021
West Lake Landfill OU-3
Bridgeton, Missouri

ERM

Q:\Boston\Team\MW\Clients_V_Z\WestLake\WestLakeLandfill_MOMW\GW_Contours\2021\7_July\WestLake_GWContours_July2021_SalemStLouisFormation_20220202.mxd - Kelly.Mizzo - 2/2/2022





Legend

- Well Location
- 456.87 Groundwater Elevation (ft. amsl)
- Groundwater Elevation Contour
- Superfund Site Boundary
- Stormwater Retention Pond
- Bridgeton Landfill Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
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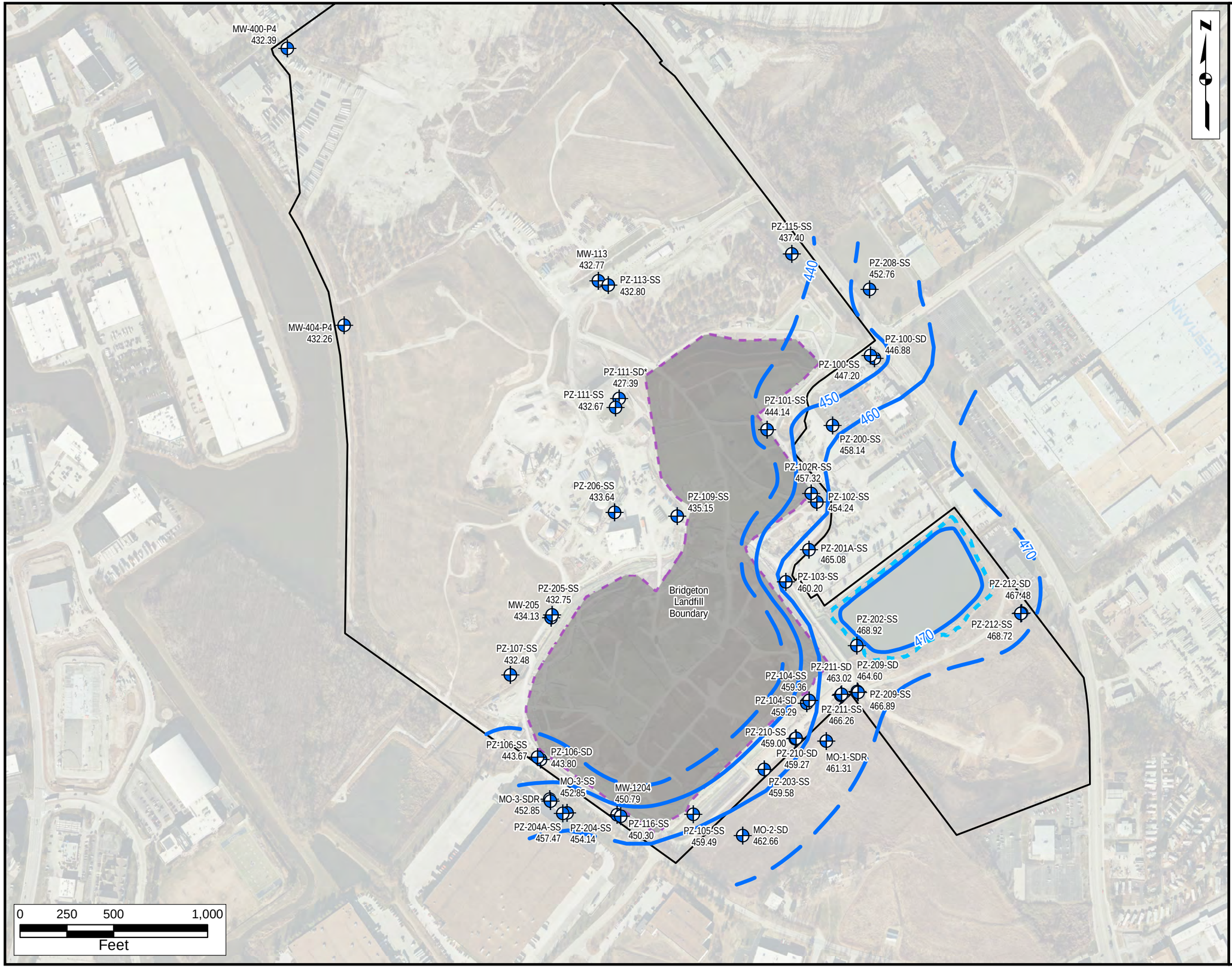
Figure 9h: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map August 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. amsl = Above Mean Sea Level
3. For well clusters, the lowest value was included during contouring.
4. Bedrock wells screened within the St. Louis and Salem Formations were primarily arrayed around the perimeter of the former quarries (i.e., the Bridgeton Landfill) until late 2021. Effects of landfill characteristics and leachate removal on bedrock water levels are currently being investigated, and bedrock groundwater elevation maps are considered preliminary.
5. The elevation of the stormwater retention pond generally varies between 474' and 475' (based on stilling well SG-200).
6. At the time of 2021 reporting, groundwater elevation data within the alluvium were plotted as a single hydrostratigraphic unit; therefore, the shallow, intermediate, and deep alluvium wells were combined. During 2021, significant subsurface characterization activities were completed, generating a high-resolution dataset that was interpreted to define environmental sequence stratigraphy at the site. Detailed evaluation of the influence of the stratigraphic units on groundwater flow is in progress.

Figure 9i: Bedrock (St. Louis and Salem Formations) Potentiometric Surface Map September 2021

West Lake Landfill OU-3
Bridgeton, Missouri

ERM

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Alluvium

S-8 1.90
I-62 12.6
D-83 0.760J
I-65 0.970J
I-66 1.80
D-13 0.230J
I-67 2.20
MW-409 1.40
D-6 0.270J
MW-408 0.450J
S-10 51.0
I-11 10.6
D-12 0.450J
PZ-207-AS 5.80
D-85 32.1
S-84 406
I-68 0.760J
PZ-114-AS 99.4
I-9 27.1
D-93 0.770J
S-82 201
PZ-113-AS 18.6
PZ-113-AD 1.80
S-5 15.9
D-87 1.50
D-3 7.40
PZ-304-AS 213
PZ-304-AI 1.10
PZ-303-AS 81.7
I-73 282
I-73 286
PZ-302-AI 2.10
PZ-205-AS 60.6
D-81 8.80
PZ-302-AS 136
D-89 46.5

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

PZ-113-SS 1.00
PZ-115-SS 5.70
PZ-208-SS <1.00
PZ-100-SD 0.940J
PZ-100-SS <1.00
PZ-111-SD 1.40
PZ-111-SS 2.00
PZ-101-SS 68.5
PZ-200-SS 7.30
PZ-109-SS 1.20
PZ-102R-SS 0.750J
PZ-102-SS <1.00
PZ-206-SS 1.80
PZ-201A-SS 0.780J
PZ-205-SS 0.330J
PZ-103-SS 10.1
PZ-202-SS 31.1
PZ-107-SS 4.20
PZ-104-SS 2.70
PZ-212-SS 2.50
PZ-104-SD 16.8
PZ-209-SS 1.10
PZ-209-SD 1.70
PZ-212-SD 1.70
PZ-106-SS 0.930J
PZ-106-SD 0.860J
PZ-116-SS 0.620J
PZ-203-SS 2.70
PZ-211-SS 1.10
PZ-211-SD 2.90
PZ-204A-SS 10.4
MW-1204 2.90
PZ-105-SS 3.00
PZ-210-SS 2.00
PZ-204-SS 0.430J
PZ-210-SD 0.320J

Warsaw/Keokuk Formations

PZ-100-KS <1.00
PZ-111-KS 2.30
PZ-104-KS 0.420J
PZ-106-KS 1.80

Legend

Arsenic Concentration (ug/L)

Arsenic Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-10	10-20	20-100	>100

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

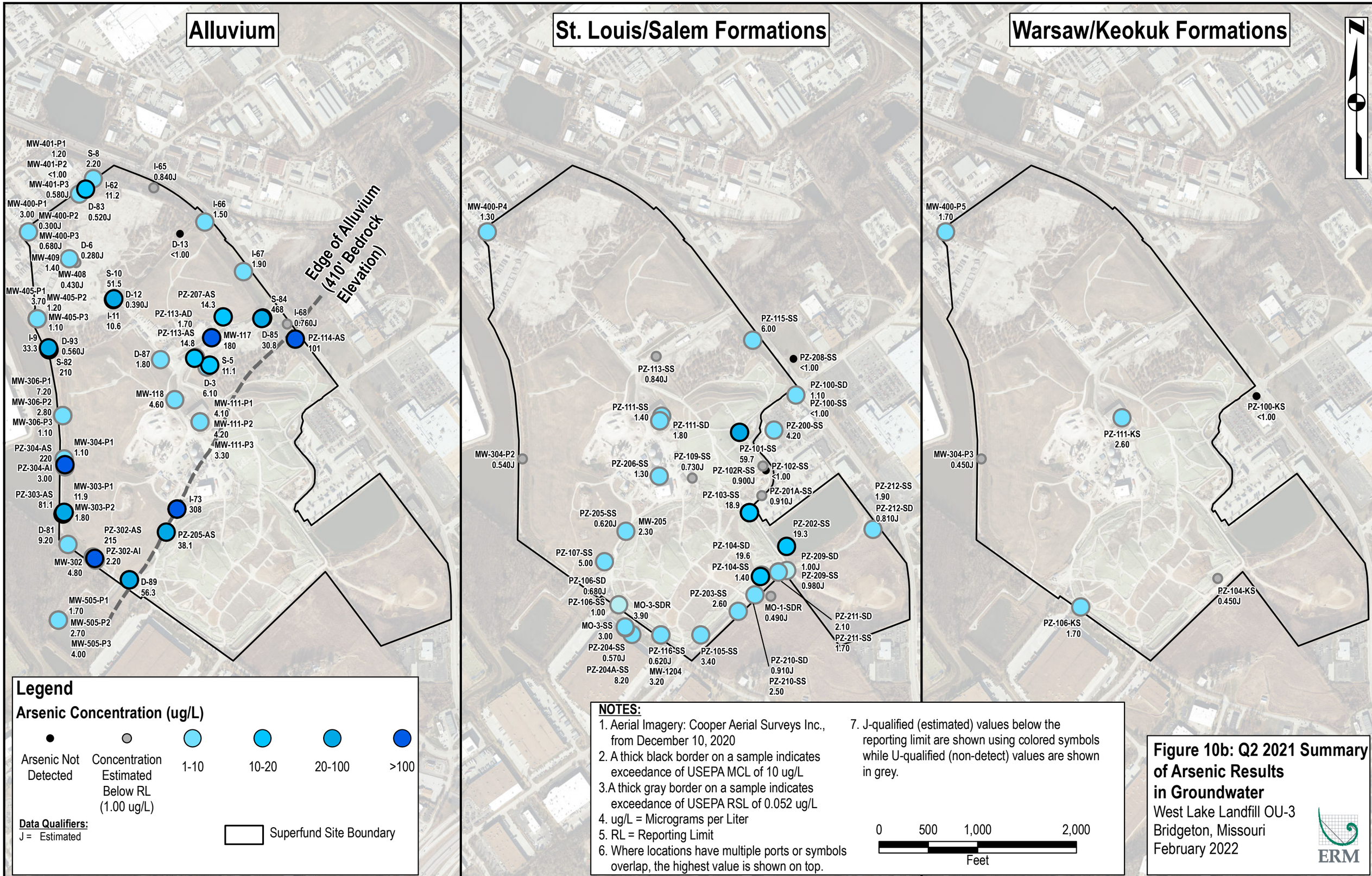
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using gray symbols while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 10a: Q1 2021 Summary of Arsenic Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\orgbcdfile01\data\Bostom\Team\DMW\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\2022-01-Report\Updates\CHEMISTRY\Planview_Q1 2021_Arsenic_20220224.mxd - Kelly.Libero - 2022/02/24



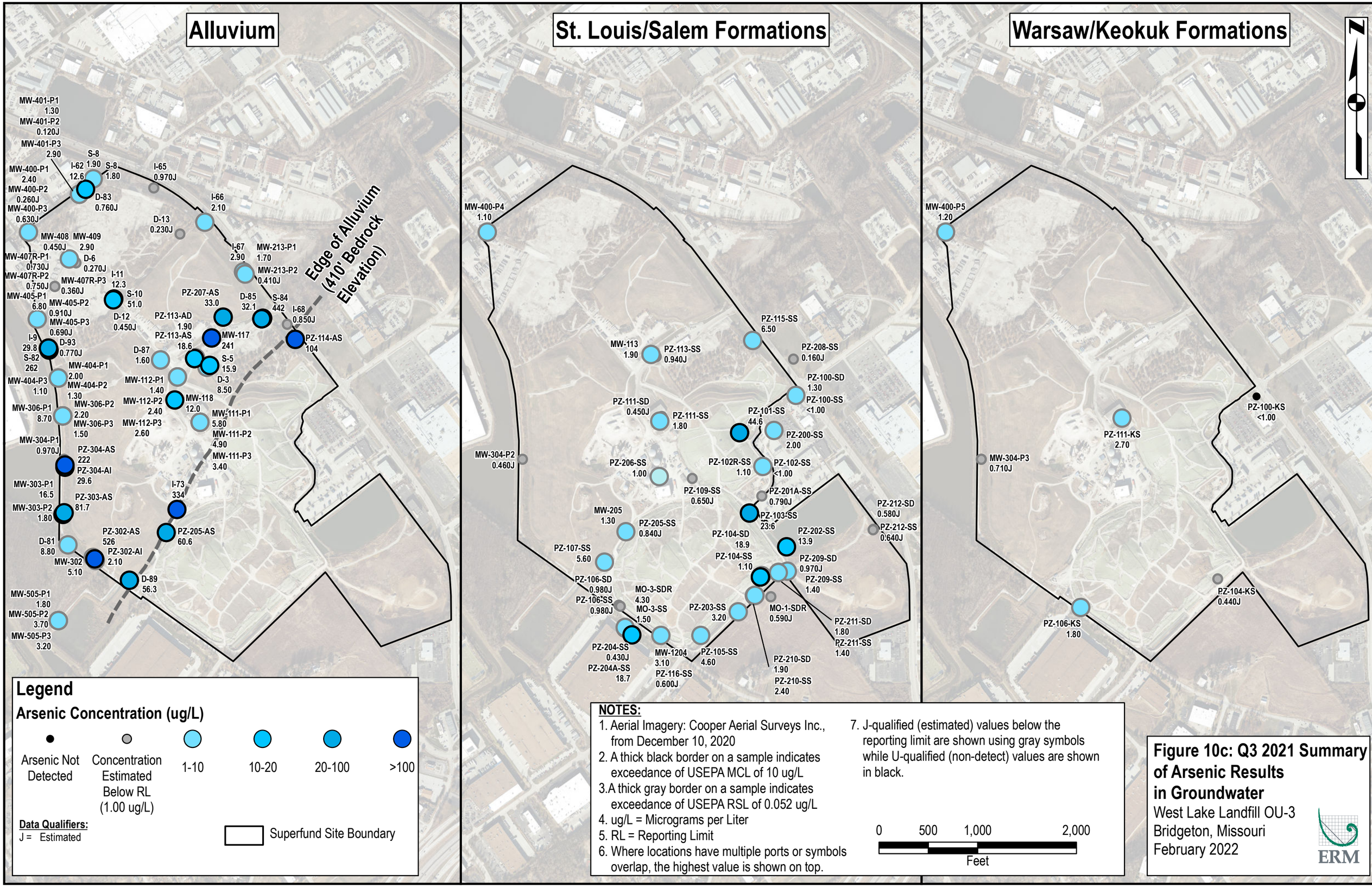
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.

Figure 10b: Q2 2021 Summary of Arsenic Results in Groundwater

West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using gray symbols while U-qualified (non-detect) values are shown in black.

Figure 10c: Q3 2021 Summary of Arsenic Results in Groundwater

West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

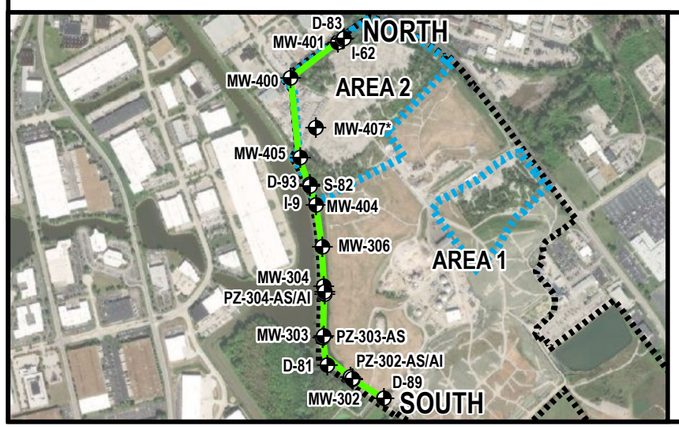
470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

12.6 | NS | 0.760J | NS | NS | NS | NS | NS | 201 | 27.1 | 0.770J | NS | NS | NS | NS | NS | NS | NS | NS | NS | 213 | 1.10 | NS | NS | 81.7 | NS | NS | 8.80 | 136 | 2.10 | NS | 46.5

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Arsenic Concentration (ug/L)

- >100
- 20-100
- 10-20
- 1-10
- Concentration Estimated Below RL (1.00 ug/L)
- Arsenic Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

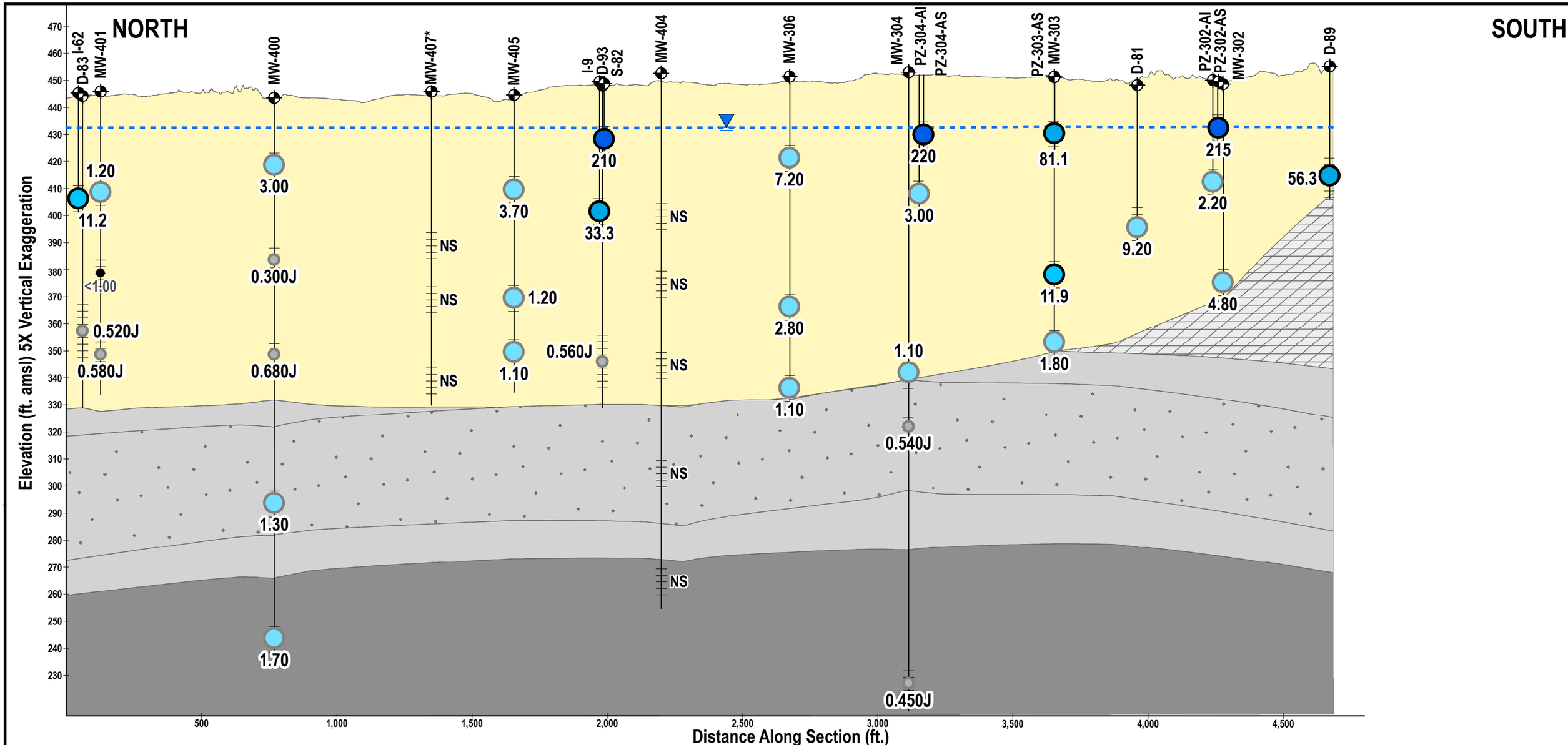
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

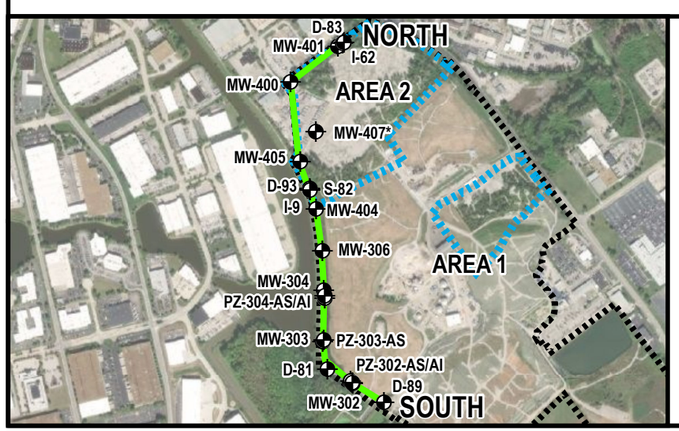
Figure 11a: Q1 2021 Summary of Arsenic Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

G:\Boston\Team\DMW\Clients_V_Z\WestLake\WestLakeLandfill_MO\WXD\2022_01_Report\updates\CHEMISTRY\XSec\crossSection_CSZ_Arsenic_2021Q1_20220203.mxd -- Joseph.Hakam -- 2/24/2022





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Arsenic Concentration (ug/L)

- >100
- 20-100
- 10-20
- 1-10
- Concentration Estimated Below RL (1.00 ug/L)
- Arsenic Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 11b: Q2 2021 Summary of Arsenic Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

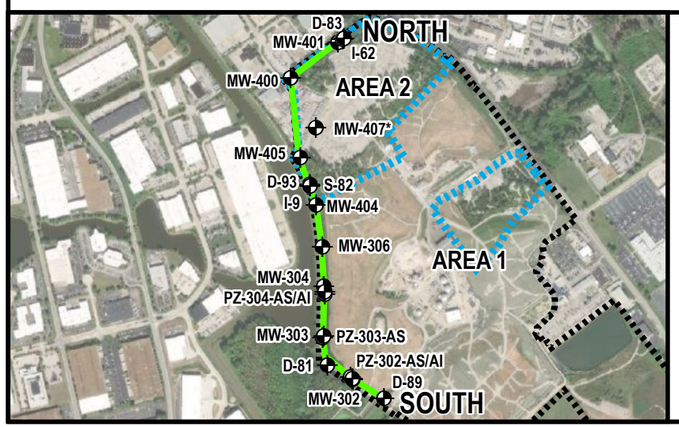
470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

1.30
10.6
0.120J
0.240J
2.90
2.40
0.260J
0.630J
1.10
1.20
0.730J
0.750J
0.360J
6.80
0.910J
0.690J
262
29.8
0.580J
2.00
1.30
1.10
NS
NS
8.70
2.20
1.50
222
29.6
0.970J
0.460J
0.710J
76.3
16.5
1.80
8.50
526
2.10
5.10
56.3

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Arsenic Concentration (ug/L)

- >100
- 20-100
- 10-20
- 1-10
- Concentration Estimated Below RL (1.00 ug/L)
- Arsenic Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 10 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.052 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 11c: Q3 2021 Summary of Arsenic Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

G:\Boston\Team\MW\Clients_V_Z\WestLake\WestLakeLandfill_MO\WXD\2022_01_Report\updates\CHEMISTRY\XSec\crossSection_CSZ_Arsenic_2021Q3_20220223.mxd -- Joseph.Hakam -- 2/24/2022

Alluvium

S-8 <1.00
I-65 <1.00
I-62 <1.00
D-83 <1.00
I-66 <1.00
D-13 <1.00
MW-408 <1.00
MW-409 <1.00
D-6 <1.00
D-12 <1.00
S-10 0.400J
I-11 <1.00
I-67 <1.00
PZ-207-AS 1.10
S-84 <1.00
I-68 <1.00
PZ-113-AD <1.00
D-85 <1.00
PZ-114-AS 0.200J
I-9 <1.00
PZ-113-AS <1.00
D-93 <1.00
S-82 <1.00
S-5 4.30
D-87 <1.00
D-3 2.70
PZ-304-AS 8.10
PZ-304-AI 4.00
PZ-303-AS 51.5
I-73 435
PZ-302-AI 13.7
PZ-205-AS 774
D-81 0.680J
PZ-302-AS 179
D-89 126

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

PZ-115-SS <1.00
PZ-113-SS <1.00
PZ-208-SS <1.00
PZ-100-SD <1.00
PZ-111-SD <1.00
PZ-100-SS <1.00
PZ-111-SS <1.00
PZ-101-SS <1.00
PZ-200-SS <1.00
PZ-111-SS <1.00
PZ-102R-SS <1.00
PZ-206-SS <1.00
PZ-109-SS <1.00
PZ-102-SS <1.00
PZ-103-SS 51.5
PZ-201A-SS <1.00
PZ-212-SD <1.00
PZ-202-SS 277
PZ-212-SS <1.00
PZ-107-SS 2.50
PZ-205-SS <1.00
PZ-104-SD 23.3
PZ-209-SD <1.00
PZ-104-SS <1.00
PZ-209-SS <1.00
PZ-106-SS <1.00
PZ-106-SD <1.00
PZ-116-SS <1.00
PZ-211-SD 7.60
PZ-204A-SS 2.10
PZ-203-SS <1.00
PZ-211-SS <1.00
PZ-204-SS <1.00
MW-1204 1.70
PZ-105-SS <1.00
PZ-210-SD <1.00
PZ-210-SS 3.50

Warsaw/Keokuk Formations

PZ-100-KS <1.00
PZ-111-KS <1.00
PZ-104-KS <1.00
PZ-106-KS <1.00

N

Legend

Benzene Concentration (ug/L)

Benzene Not Detected
Concentration Estimated Below RL (1.00 ug/L)
1-5
5-10
10-50
50-200
>200

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 5 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 12a: Q1 2021 Summary of Benzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
S-8 <1.00
MW-400-P1 <1.00
I-65 <1.00
MW-400-P2 <1.00
I-62 <1.00
D-83 <1.00
MW-400-P3 <1.00
I-66 <1.00
MW-409 <1.00
D-13 <1.00
MW-408 <1.00
D-6 <1.00
I-67 <1.00
MW-405-P1 <1.00
D-12 <1.00
PZ-207-AS 0.750J
D-85 <1.00
S-84 <1.00
MW-405-P2 <1.00
S-10 0.440J
I-11 <1.00
I-68 <1.00
MW-405-P3 <1.00
PZ-113-AD <1.00
MW-117 <1.00
S-82 <1.00
I-9 0.390J
PZ-113-AS <1.00
PZ-114-AS <1.00
D-87 <1.00
D-93 <1.00
S-5 3.50
D-3 2.80
MW-306-P1 1.60
MW-118 1.50
MW-306-P2 <1.00
MW-111-P1 0.740J
MW-306-P3 <1.00
MW-111-P2 0.590J
MW-304-P1 <1.00
MW-111-P3 1.30
PZ-304-AS 8.40
PZ-304-AI 8.20
MW-303-P1 16.0
PZ-303-AS 37.6
I-73 538
MW-303-P2 225
D-81 <1.00
PZ-205-AS 557
PZ-302-AS 73.9
PZ-302-AI 35.5
MW-302 684
D-89 176
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
PZ-115-SS <1.00
PZ-113-SS <1.00
PZ-208-SS <1.00
PZ-100-SD <1.00
PZ-100-SS <1.00
PZ-111-SD <1.00
PZ-101-SS <1.00
PZ-111-SS <1.00
PZ-200-SS <1.00
PZ-102R-SS <1.00
MW-304-P2 <1.00
PZ-109-SS <1.00
PZ-102-SS <1.00
PZ-206-SS <1.00
PZ-201A-SS <1.00
PZ-103-SS 52.4
PZ-212-SS <1.00
PZ-205-SS <1.00
PZ-212-SD <1.00
PZ-202-SS 169
MW-205 <5.00
PZ-104-SS <1.00
PZ-107-SS 3.00
PZ-104-SD 42.3
PZ-209-SS <1.00
PZ-106-SS <1.00
PZ-209-SD <1.00
PZ-106-SD <1.00
PZ-203-SS <1.00
MO-1-SDR <1.00
PZ-116-SS <1.00
PZ-211-SS <1.00
MO-3-SS <1.00
PZ-211-SD 5.30
MO-3-SDR <1.00
PZ-105-SS <1.00
PZ-204A-SS 2.30
MW-1204 1.50
PZ-210-SS 4.10
PZ-204-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

MW-400-P5 <1.00
PZ-100-KS <1.00
PZ-111-KS <1.00
MW-304-P3 <1.00
PZ-104-KS <1.00
PZ-106-KS <1.00

Legend

Benzene Concentration (ug/L)

Benzene Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-5	5-10	10-50	50-200	>200

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 5 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 12b: Q2 2021 Summary of Benzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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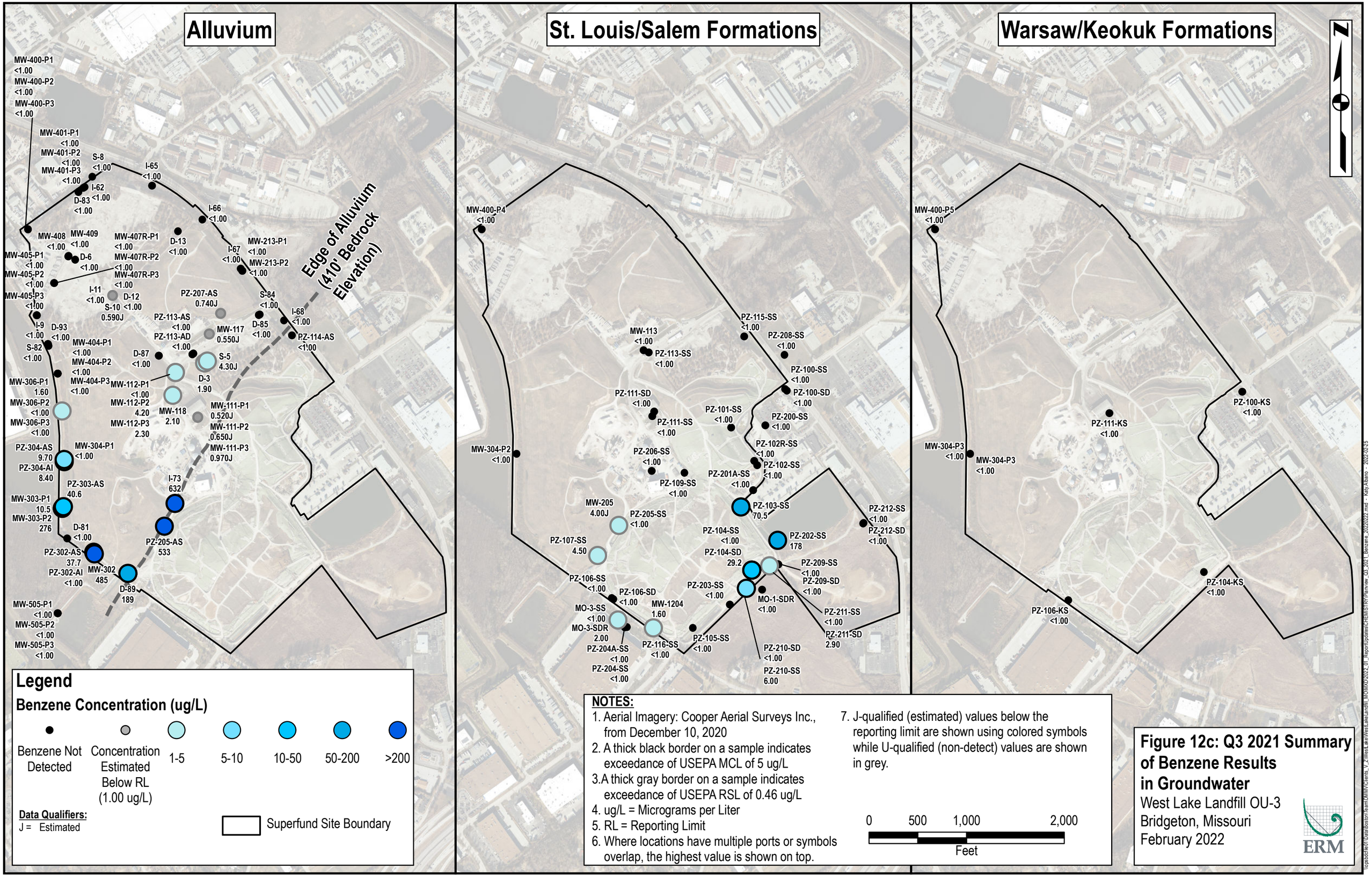
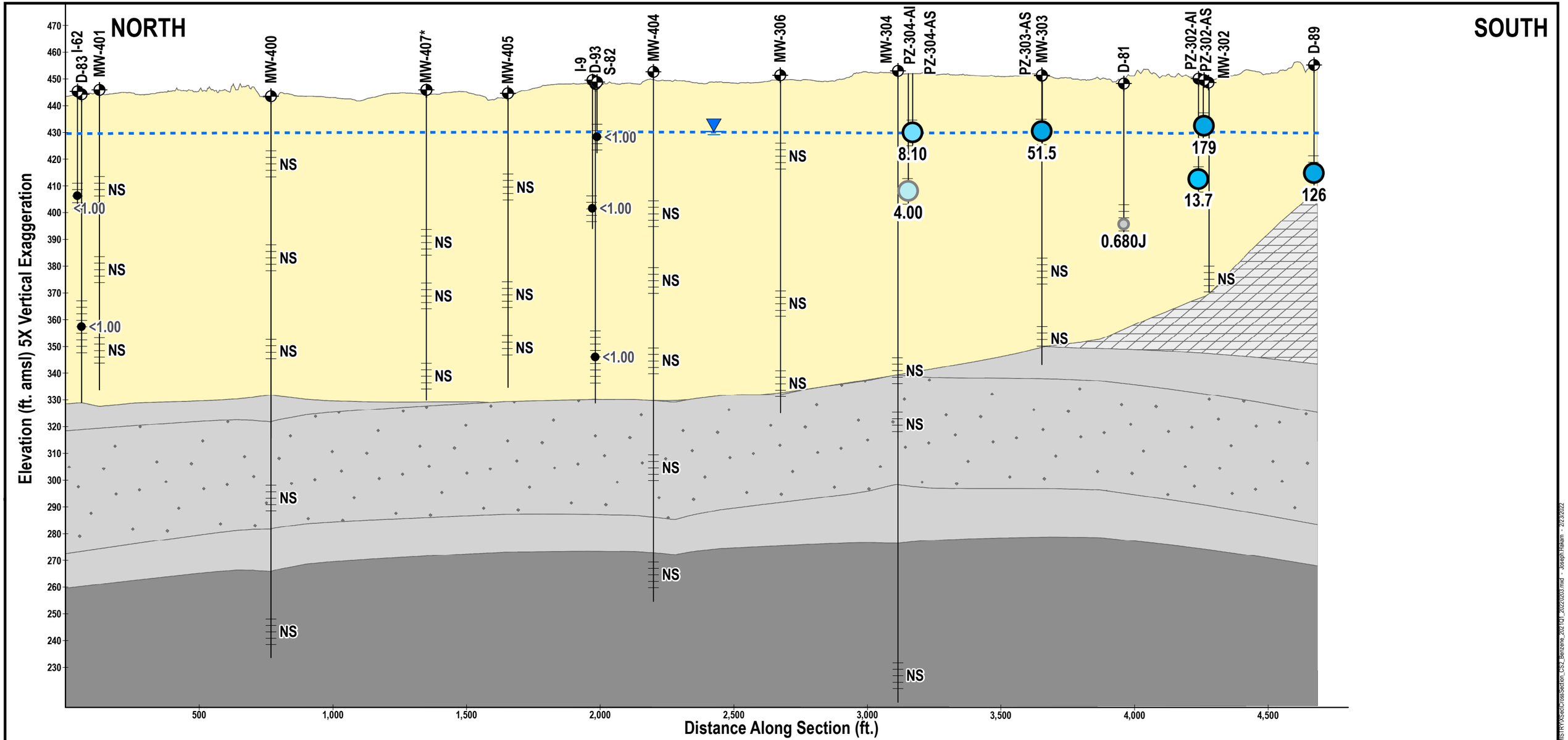
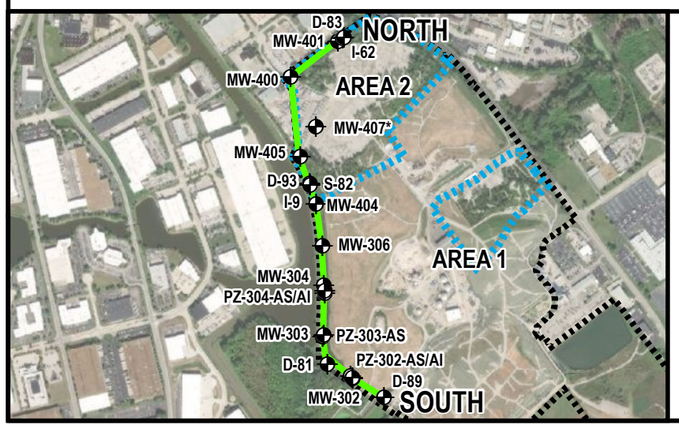


Figure 12c: Q3 2021 Summary of Benzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\gisshare01\Data\stlouis\Learn\MW\Clients_V_Z\West Lake Landfill_MOMW0022.01_Report\Updates\FIGURES\FIGRev 03_2021 Benzene_20220222.mxd - kelly.kiano - 2022/02/25





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Benzene Concentration (ug/L)

- >200
- 50-200
- 10-50
- 5-10
- 1-5
- Concentration Estimated Below RL (1.00 ug/L)
- Benzene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

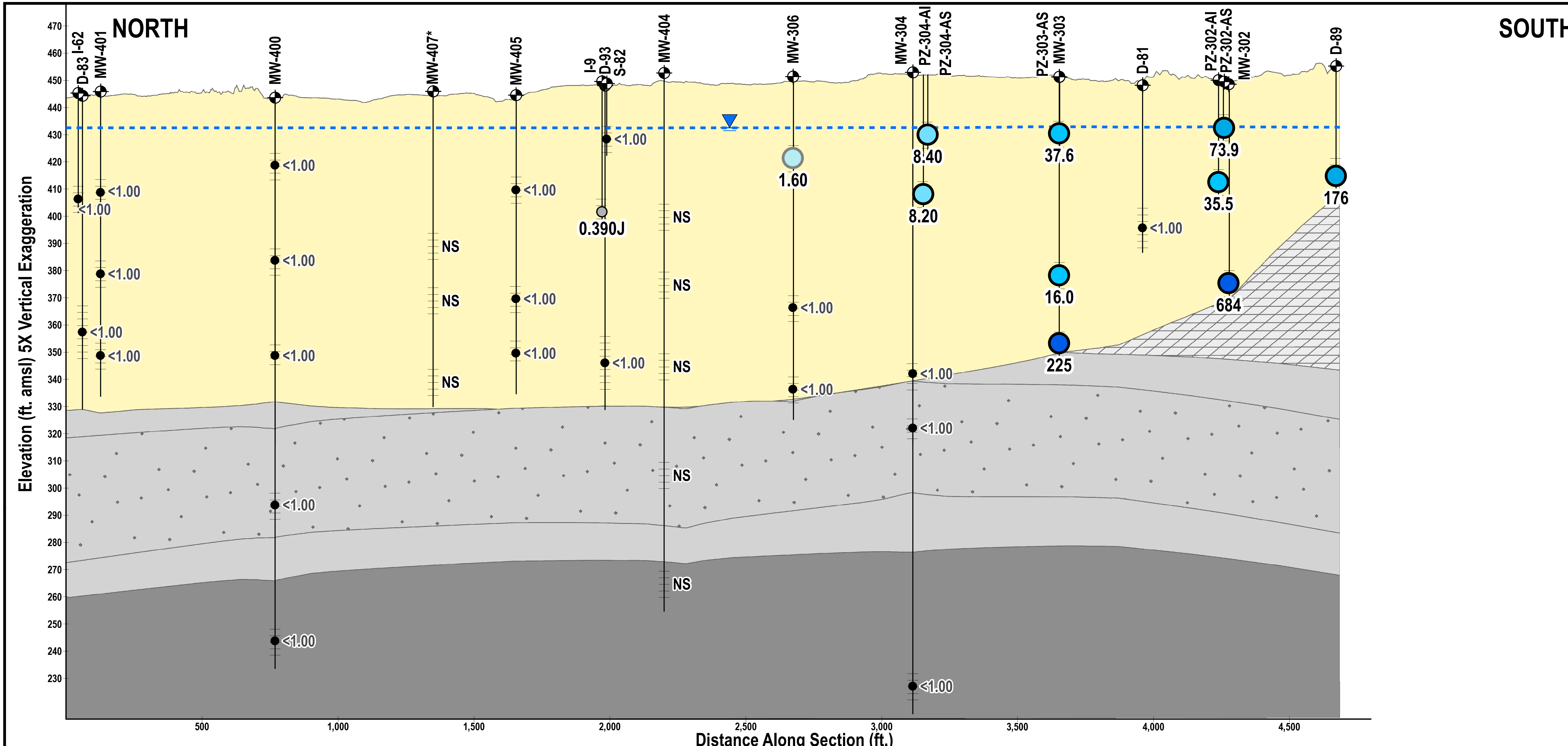
NOTES:

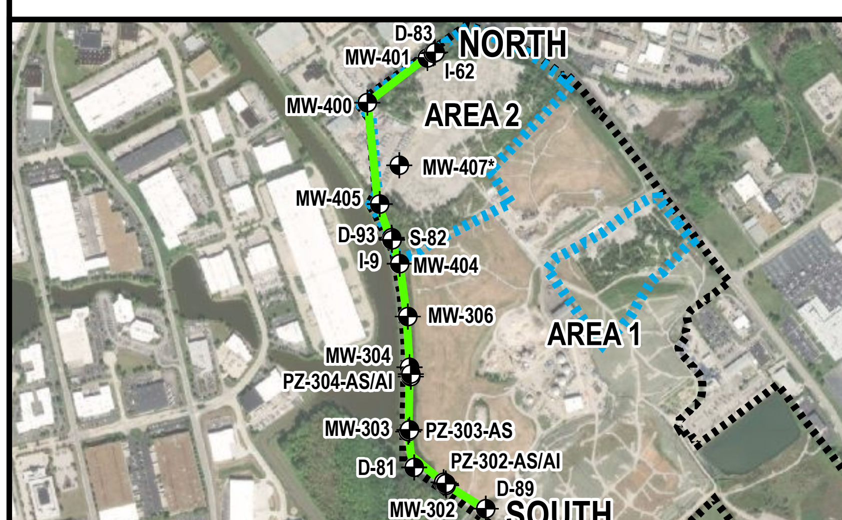
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 5 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 13a: Q1 2021 Summary of Benzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Benzene Concentration (ug/L)

- >200
- 50-200
- 10-50
- 5-10
- 1-5
- Concentration Estimated Below RL (1.00 ug/L)
- Benzene Not Detected

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:

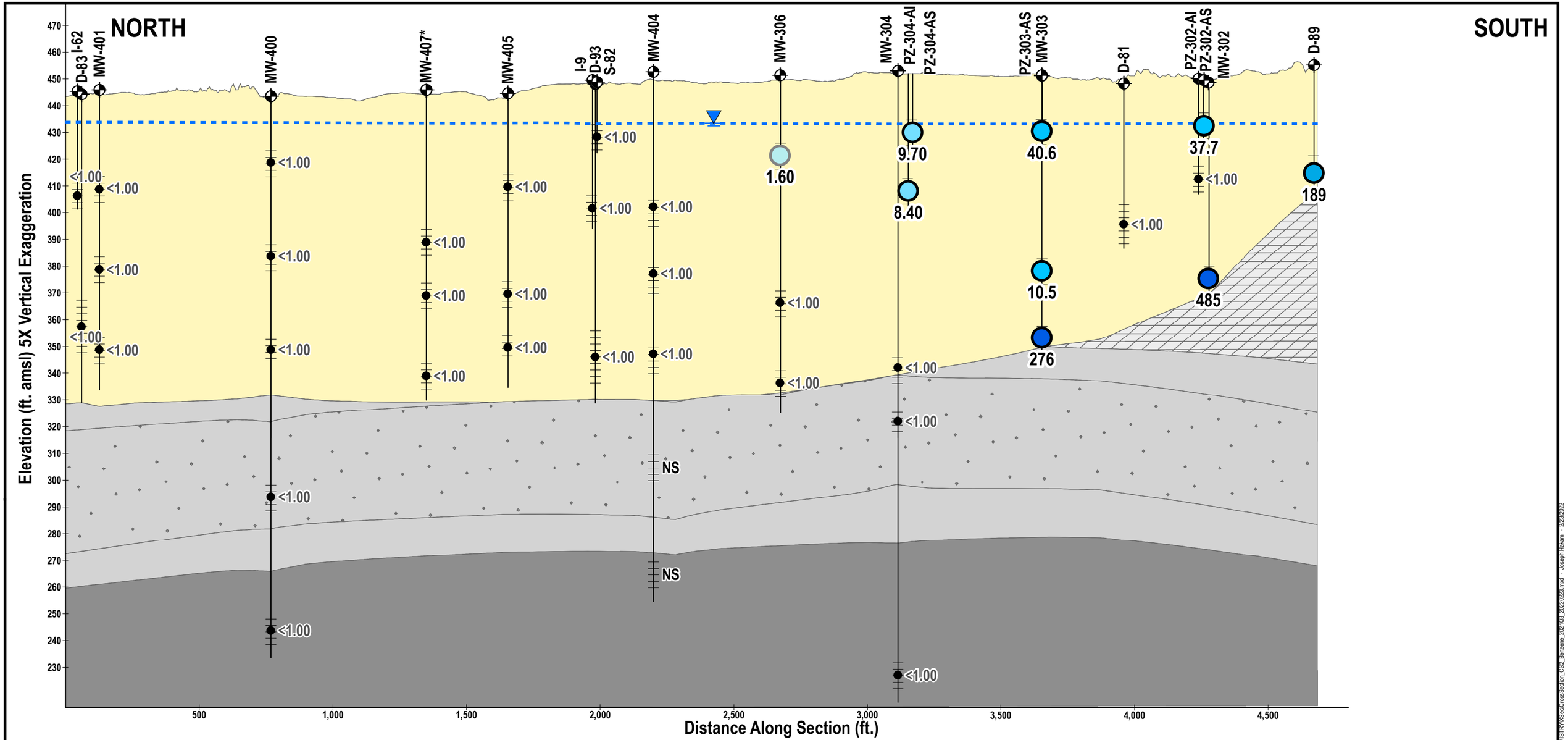
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 5 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

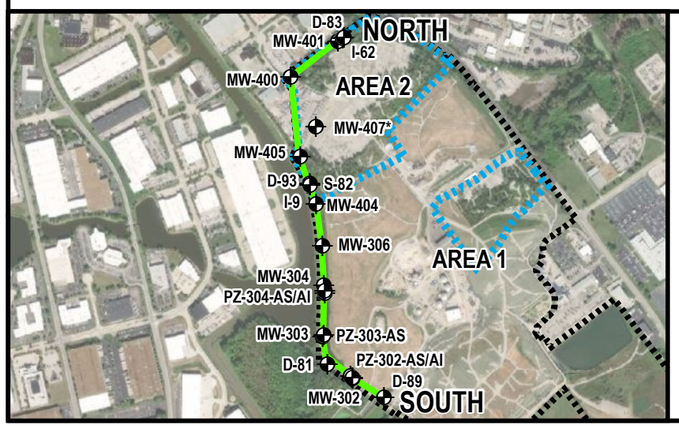
Figure 13b: Q2 2021 Summary of Benzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\2022_01_ReportUpdates\CHEMISTRY\XSec\CrossSection_CS2_Benzene_2021Q2_20220223.mxd - Joseph.Hakam - 2/23/2022





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Benzene Concentration (ug/L)

- >200
- 50-200
- 10-50
- 5-10
- 1-5
- Concentration Estimated Below RL (1.00 ug/L)
- Benzene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

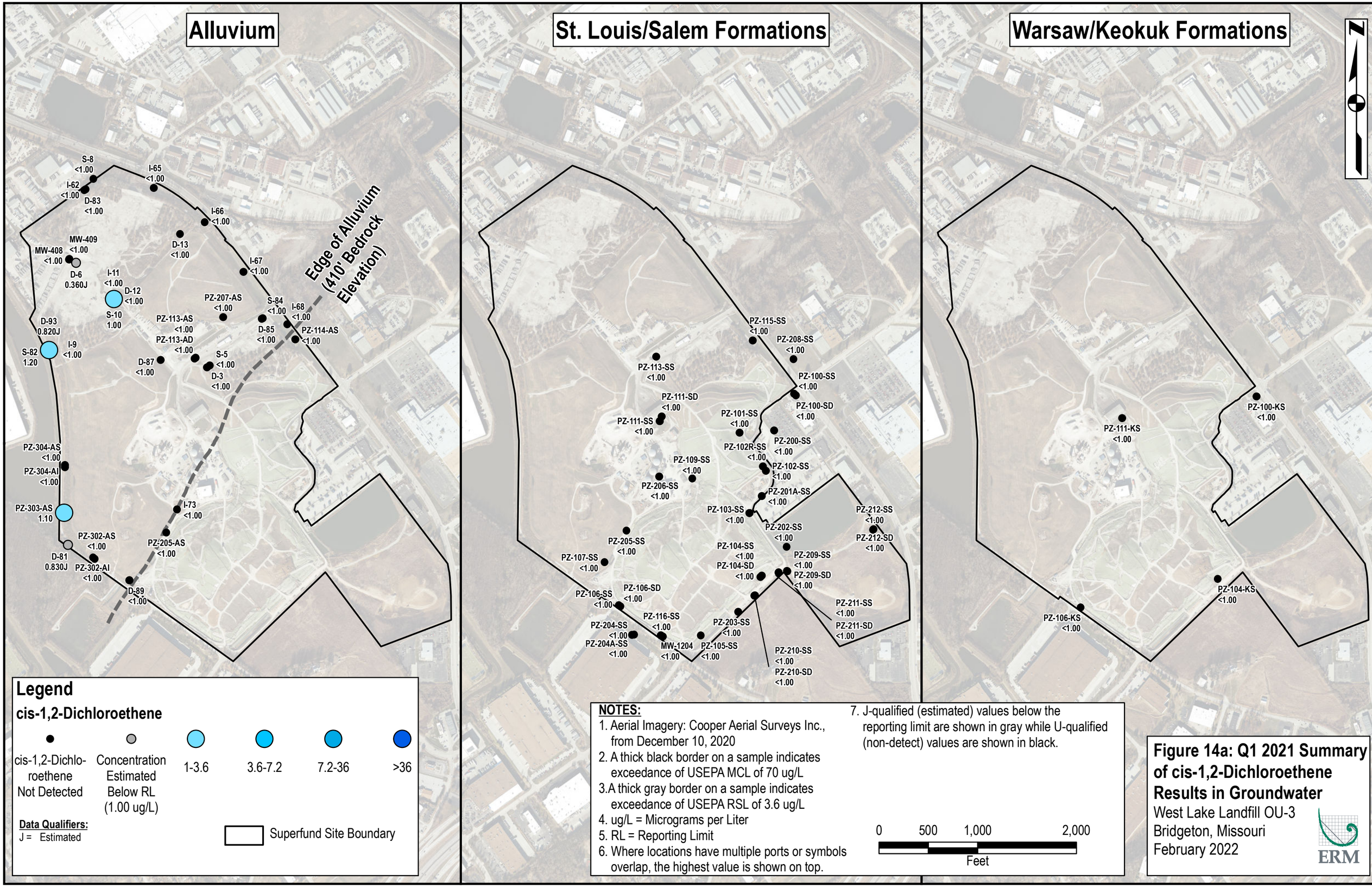
NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 5 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 13c: Q3 2021 Summary of Benzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

Figure 14a: Q1 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater

West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Alluvium

MW-400-P1 0.310J
MW-400-P2 <1.00
MW-400-P3 <1.00
MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
S-8 <1.00
I-62 <1.00
D-83 <1.00
I-65 <1.00
I-66 <1.00
D-13 <1.00
MW-409 <1.00
MW-408 0.400J
D-6 0.330J
I-67 <1.00
MW-405-P1 <1.00
MW-405-P2 <1.00
I-11 <1.00
D-12 0.280J
S-10 0.710J
PZ-207-AS <1.00
S-84 <1.00
I-68 <1.00
PZ-113-AS <1.00
MW-117 <1.00
D-85 <1.00
MW-405-P3 0.950J
PZ-113-AD <1.00
PZ-114-AS <1.00
D-93 0.580J
I-9 <1.00
S-82 1.00
S-5 <1.00
D-87 <1.00
D-3 <1.00
MW-306-P1 1.10
MW-118 <1.00
MW-306-P2 8.60
MW-111-P1 <1.00
MW-306-P3 6.70
MW-111-P2 <1.00
MW-111-P3 <1.00
PZ-304-AS <5.00
MW-304-P1 13.4
PZ-304-AI <1.00
MW-303-P1 11.3
MW-303-P2 1.40
PZ-303-AS <5.00
I-73 <5.00
PZ-302-AS <1.00
PZ-205-AS <5.00
D-81 0.640J
PZ-302-AI <1.00
MW-302 <1.00
D-89 <1.00
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-113-SS <1.00
PZ-100-SS <1.00
PZ-111-SD <1.00
PZ-100-SD <1.00
PZ-101-SS <1.00
PZ-111-SS <1.00
PZ-200-SS <1.00
MW-304-P2 <1.00
PZ-102R-SS <1.00
PZ-206-SS <1.00
PZ-102-SS <1.00
PZ-109-SS <1.00
PZ-103-SS <5.00
PZ-201A-SS <1.00
PZ-205-SS <1.00
PZ-212-SS <1.00
MW-205 <5.00
PZ-202-SS <1.00
PZ-212-SD <1.00
PZ-107-SS <1.00
PZ-104-SS <1.00
PZ-209-SS <1.00
PZ-104-SD <1.00
PZ-106-SS <1.00
PZ-209-SD <1.00
PZ-106-SD <1.00
PZ-203-SS <1.00
PZ-116-SS <1.00
MO-1-SDR <1.00
PZ-211-SS <1.00
MW-1204 <1.00
PZ-211-SD <1.00
MO-3-SS <1.00
MO-3-SDR <1.00
PZ-204-SS <1.00
PZ-105-SS <1.00
PZ-210-SS <1.00
PZ-204A-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

MW-400-P5 <1.00
PZ-100-KS <1.00
PZ-111-KS <1.00
MW-304-P3 <1.00
PZ-104-KS <1.00
PZ-106-KS <1.00

N

Legend

cis-1,2-Dichloroethene

- cis-1,2-Dichloroethene Not Detected
- Concentration Estimated Below RL (1.00 ug/L)
- 1-3.6
- 3.6-7.2
- 7.2-36
- >36

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.
8. Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution

0 500 1,000 2,000
Feet

Figure 14b: Q2 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\gbsfs01\Data\Boston\Learn\MMV\Clients_V_Z\West Lake Landfill_MOMW0022.01_Report\plots\cis-HEIRS KY\Plan view_Q2 2021 cDCE_20220227.mxd - Kelly.Albaro - 2022/02/27

Alluvium

MW-400-P1 1.20
MW-400-P2 <1.00
MW-400-P3 <1.00
MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
S-8 <1.00
I-62 <1.00
D-83 <1.00
I-65 <1.00
I-66 <1.00
MW-407R-P1 0.820J
MW-407R-P2 <1.00
MW-407R-P3 0.710J
D-13 <1.00
MW-408 <1.00
D-6 <1.00
MW-405-P1 <1.00
MW-405-P2 <1.00
MW-405-P3 1.20
S-10 0.920J
I-11 <1.00
D-12 <1.00
I-67 <1.00
MW-213-P1 <1.00
MW-213-P2 <1.00
D-85 <1.00
I-68 <1.00
S-84 <1.00
PZ-114-AS <1.00
PZ-207-AS <1.00
PZ-113-AS <1.00
PZ-113-AD <1.00
MW-117 <1.00
D-87 <1.00
S-5 <5.00
D-3 <1.00
MW-112-P1 <1.00
MW-112-P2 <1.00
MW-112-P3 <1.00
MW-118 <1.00
MW-111-P1 <1.00
MW-111-P2 <1.00
MW-111-P3 <1.00
I-73 <1.00
PZ-205-AS <1.00
S-82 <1.00
I-9 <1.00
D-93 <1.00
MW-404-P1 <1.00
MW-404-P2 <1.00
MW-404-P3 <1.00
MW-306-P1 <1.00
MW-306-P2 2.60
MW-306-P3 1.50
MW-304-P1 12.0
PZ-304-AS <1.00
PZ-304-AI <1.00
PZ-303-AS 1.60
MW-303-P1 14.5
MW-303-P2 1.60
D-81 <1.00
PZ-302-AS <1.00
PZ-302-AI <1.00
MW-302 <1.00
D-89 <1.00
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
MW-304-P2 2.40
MW-113 <1.00
PZ-113-SS <1.00
PZ-111-SD <1.00
PZ-111-SS <1.00
PZ-206-SS <1.00
PZ-109-SS <1.00
PZ-205-SS <1.00
PZ-107-SS <1.00
MW-205 <5.00
PZ-106-SS <1.00
PZ-106-SD <1.00
MO-3-SS <1.00
MO-3-SDR <1.00
PZ-204A-SS <1.00
PZ-204-SS <1.00
MW-1204 <1.00
PZ-116-SS <1.00
PZ-105-SS <1.00
PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-100-SS <1.00
PZ-100-SD <1.00
PZ-101-SS <1.00
PZ-200-SS <1.00
PZ-102R-SS <1.00
PZ-102-SS <1.00
PZ-201A-SS <1.00
PZ-103-SS <1.00
PZ-202-SS <1.00
PZ-104-SS <1.00
PZ-104-SD <1.00
PZ-209-SS <1.00
PZ-209-SD <1.00
MO-1-SDR <1.00
PZ-203-SS <1.00
PZ-210-SS <1.00
PZ-210-SD <1.00
PZ-212-SS <1.00
PZ-212-SD <1.00
PZ-211-SS <1.00
PZ-211-SD <1.00

Warsaw/Keokuk Formations

MW-304-P3 1.40

N

Legend

cis-1,2-Dichloroethene

cis-1,2-Dichloroethene Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-3.6	3.6-7.2	7.2-36	>36

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

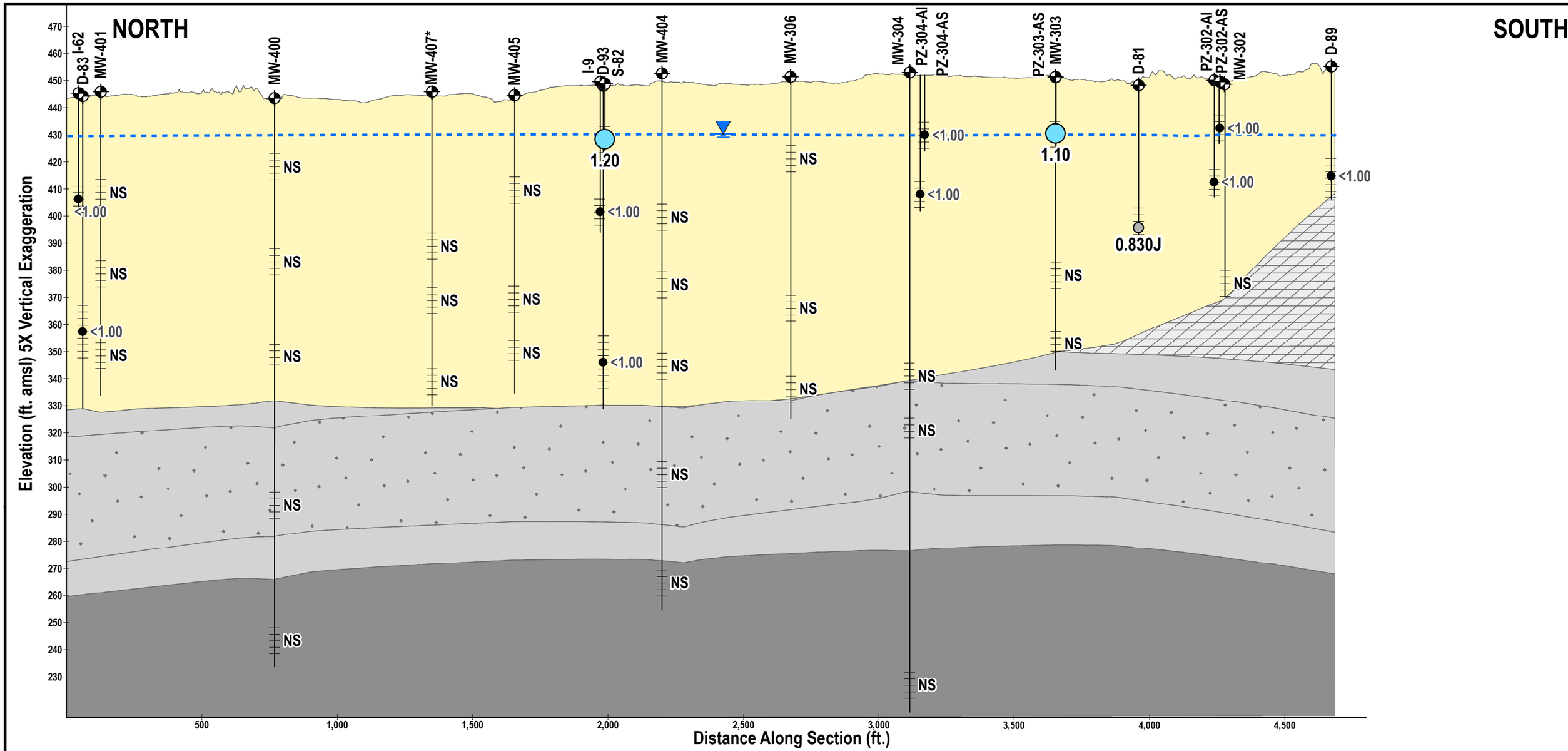
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.
8. Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution

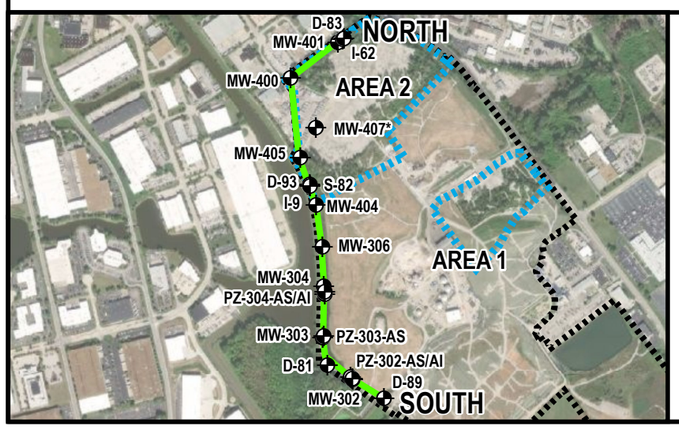
0 500 1,000 2,000
Feet

Figure 14c: Q3 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\gisdata\ervl\Data\Boston\Jobs\MMVO\Projects_V_2\West Lake\Landfill MOMVO0002.2.0\1-Reports\Updates\CHEMISTRY\Panview_Q3_2021_cDCE_20220222.mxd Kshyamsono 2022-02-28





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total cis-1,2-Dichloroethene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- cis-1,2-Dicholoroethene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

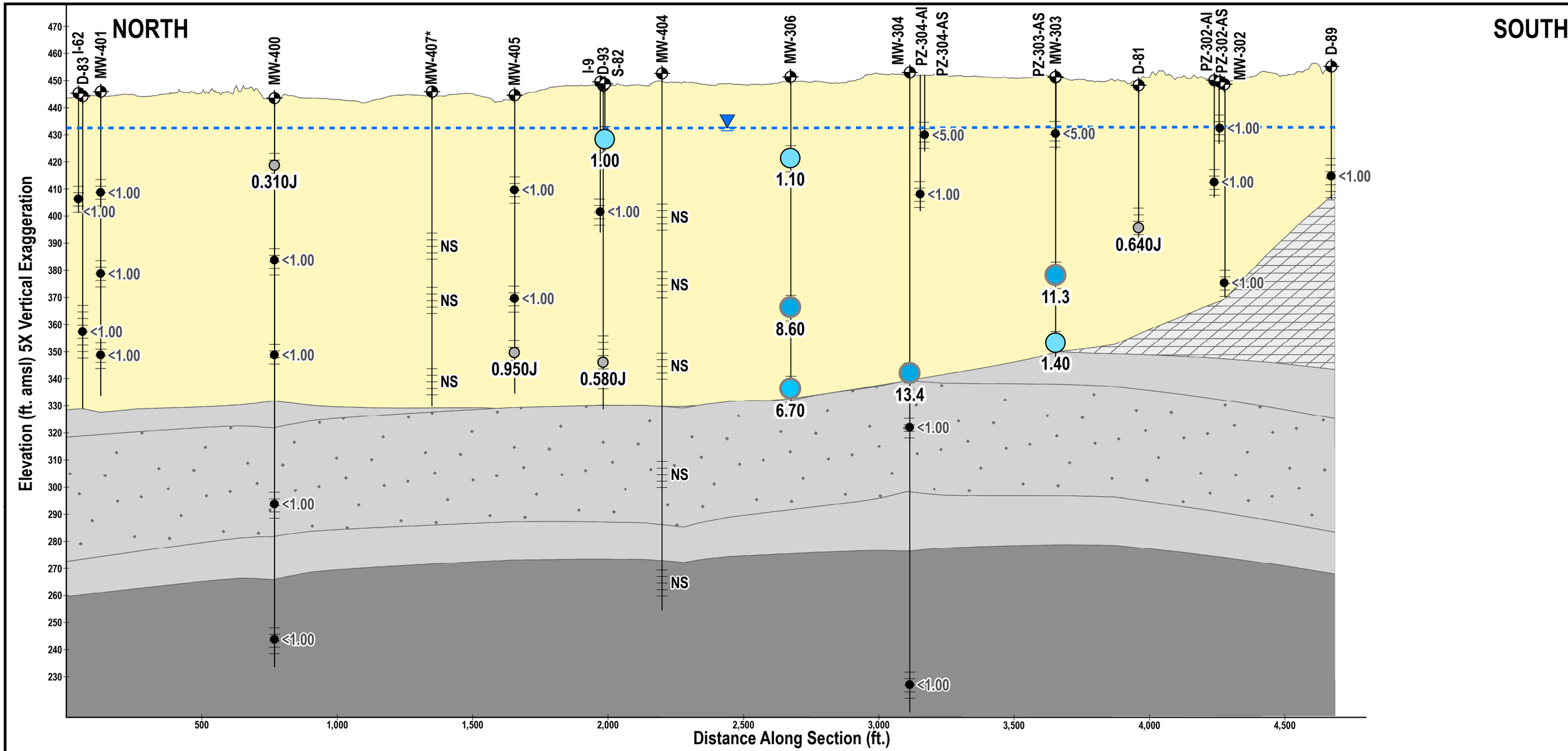
NOTES:

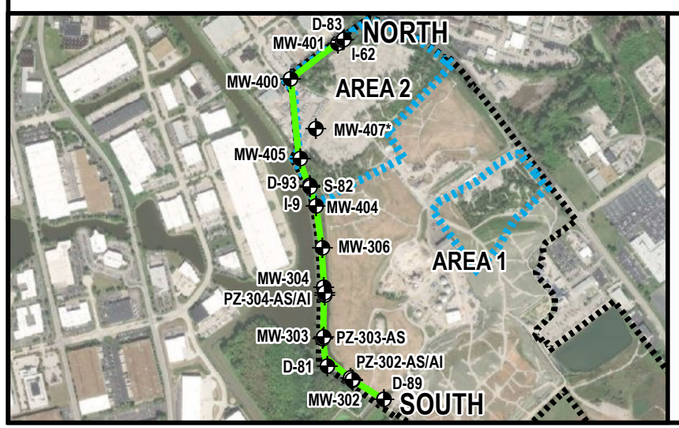
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 15a: Q1 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total cis-1,2-Dichloroethene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- cis-1,2-Dicholoroethene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

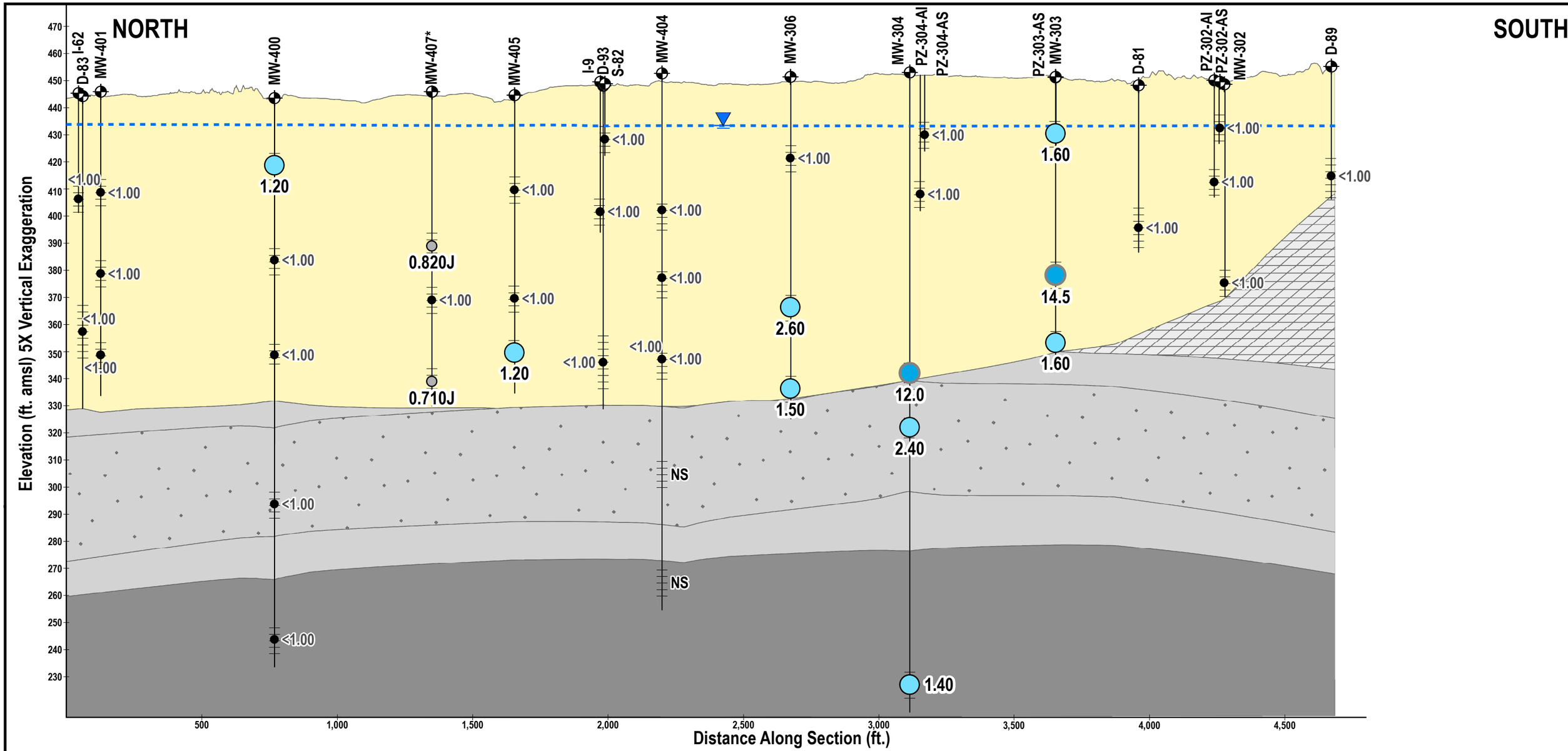
NOTES:

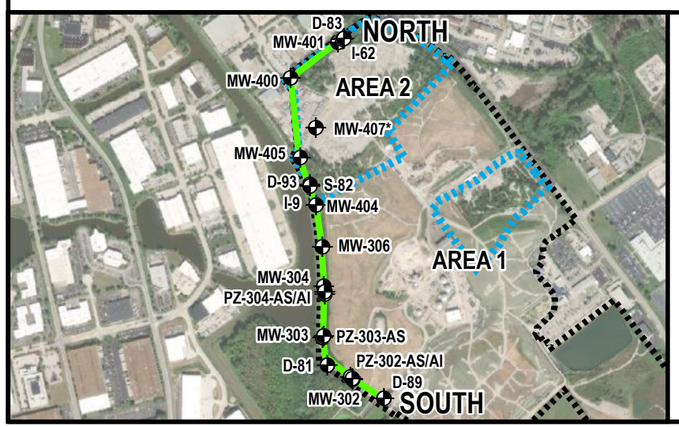
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 15b: Q2 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total cis-1,2-Dichloroethene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- cis-1,2-Dicholoroethene Not Detected

Alluvium
Shoal
St. Louis
Warsaw
Salem

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 70 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 15c: Q3 2021 Summary of cis-1,2-Dichloroethene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Alluvium

S-8 < 100
D-83 < 100
I-65 < 100
I-66 < 100
D-13 < 100
MW-409 < 100
MW-408 < 100
D-6 < 100
I-67 < 100
D-12 < 100
S-10 60.3J
PZ-207-AS < 100
S-84 < 100
I-68 < 100
Edge of Alluvium (410' Bedrock Elevation)
D-85 < 100
PZ-114-AS < 100
I-9 70.5J
PZ-113-AD < 100
PZ-113-AS < 100
D-93 < 100
S-82 < 100
D-87 51.1J
D-3 < 100
S-5 < 100
PZ-304-AS < 100
PZ-304-AI < 100
PZ-303-AS < 100
I-73 1,390J
PZ-302-AI < 100
D-81 < 100
PZ-205-AS 1,150J
PZ-302-AS < 100
D-89 < 100

St. Louis/Salem Formations

PZ-115-SS <100
PZ-208-SS <100
PZ-113-SS <100
PZ-100-SS <100
PZ-111-SD <100
PZ-100-SD <100
PZ-111-SS <100
PZ-101-SS <100
PZ-200-SS <100
PZ-206-SS <100
PZ-102R-SS <100
PZ-102-SS <100
PZ-109-SS <100
PZ-201A-SS <100
PZ-103-SS 279
PZ-202-SS 581J
PZ-212-SS <100
PZ-205-SS <100
PZ-212-SD <100
PZ-107-SS <100
PZ-104-SS <100
PZ-209-SS <100
PZ-104-SD <100
PZ-209-SD <100
PZ-106-SD <100
PZ-211-SS <100
PZ-106-SS <100
MW-1204 <100
PZ-203-SS <100
PZ-211-SD <100
PZ-204A-SS <100
PZ-116-SS <100
PZ-105-SS <100
PZ-210-SS <100
PZ-210-SD <100

Warsaw/Keokuk Formations

PZ-100-KS <100
PZ-111-KS <100
PZ-104-KS <100
PZ-106-KS <100

Legend

1,4-Dioxane Concentration (ug/L)

- 1,4-Dioxane Not Detected
- Concentration Estimated Below RL (100 ug/L)
- 100-200
- 200-1,000
- 1,000-2,000
- >2,000

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 16a: Q1 2021 Summary of 1,4-Dioxane Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

S-8: < 100
I-62: < 100
D-83: < 100
I-65: < 100
MW-400-P1: < 100
MW-400-P2: < 100
MW-400-P3: < 100
MW-401-P1: < 100
MW-401-P2: <100
MW-401-P3: < 100
I-66: < 100
D-13: < 100
MW-408: < 100
MW-409: < 100
D-6: < 100
I-67: < 100
Edge of Alluvium (410' Bedrock Elevation)
MW-405-P1: < 100
MW-405-P2: 493J
MW-405-P3: < 100
D-12: < 100
S-10: < 100
I-11 260J
PZ-207-AS: < 100
S-84: < 100
D-85: < 100
I-68: < 100
MW-117: < 100
PZ-114-AS: < 100
I-9 516J
PZ-113-AD: < 100
PZ-113-AS: < 100
S-82: < 100
D-93 245J
D-87: < 100
S-5: < 100
D-3: < 100
MW-306-P1: < 100
MW-306-P2: 45.9J
MW-306-P3: 66.3J
MW-118: < 100
MW-111-P1: < 100
MW-111-P2: < 100
MW-111-P3: < 100
MW-304-P1: < 100
PZ-304-AS: < 500
PZ-304-AI: < 100
PZ-303-AS: < 500
MW-303-P1: < 100
MW-303-P2: < 100
I-73 3,740J
PZ-205-AS 2,050J
D-81: < 100
PZ-302-AS: < 100
PZ-302-AI: < 100
MW-302 459J
D-89 177J
MW-505-P1: < 100
MW-505-P2: < 100
MW-505-P3: < 100

St. Louis/Salem Formations

MW-400-P4 <100
PZ-115-SS <100
PZ-208-SS <100
PZ-113-SS <100
PZ-100-SS <100
PZ-111-SS 133J
PZ-100-SD <100
PZ-111-SD <100
PZ-101-SS <100
PZ-200-SS <100
MW-304-P2 <100
PZ-109-SS <100
PZ-102R-SS <100
PZ-102-SS <100
PZ-206-SS <100
PZ-201A-SS <100
MW-205 <100
PZ-103-SS 990J
PZ-212-SS <100
PZ-202-SS 780J
PZ-205-SS <100
PZ-212-SD <100
PZ-104-SS <100
PZ-209-SS <100
PZ-104-SD <100
PZ-209-SD <100
PZ-107-SS 182J
PZ-106-SD <100
MO-1-SDR <100
PZ-211-SS <100
PZ-106-SS <100
MW-1204 86.1 J
PZ-203-SS <100
PZ-211-SD <100
PZ-204A-SS 606J
PZ-116-SS <100
PZ-105-SS <100
PZ-210-SS <100
PZ-210-SD <100

Warsaw/Keokuk Formations

MW-400-P5 <100
PZ-100-KS <100
PZ-111-KS <100
MW-304-P3 <100
PZ-104-KS <100
PZ-106-KS <100

Legend

1,4-Dioxane Concentration (ug/L)

- 1,4-Dioxane Not Detected
- Concentration Estimated Below RL (100 ug/L)
- 100-200
- 200-1,000
- 1,000-2,000
- >2,000

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 16b: Q2 2021 Summary of 1,4-Dioxane Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

MW-400-P1: 18.2J
MW-400-P2: 39.6J
MW-400-P3: 57.4J
MW-401-P1: <3.00
MW-401-P2: <3.00
MW-401-P3: 5.44
S-8: 1.50J
I-65 <3.00
I-62: <3.00
D-83: <3.00
I-66: 4.86
MW-409: <3.00
MW-408: 39.0
D-6: 39.2
D-13 <3.00
I-67 <3.00
MW-213-P1: <3.00
MW-213-P2: <3.00
MW-407R-P1: 64.6
MW-407R-P2: 297
MW-407R-P3: 111
S-10: 276
I-11: 46.0
D-12: 27.0J
PZ-207-AS: 59.8
S-84: < 3.00
D-85: <3.00
I-68: <3.00
MW-405-P1: 3.36
MW-405-P2: 488
MW-405-P3: 218
S-82: 188
I-9: 512
D-93: 118
PZ-113-AS: 10.4
PZ-113-AD: 39.9
MW-117 <3.00
PZ-114-AS: < 3.00
D-87: 29.6
S-5: 75.2
D-3: 30.5
MW-404-P1: 113
MW-404-P2: 108
MW-404-P3: 163
MW-118: 16.5
MW-112-P1: 31.4
MW-112-P2: 37.3
MW-112-P3: 69.3
MW-306-P1: 127
MW-306-P2: 72.7
MW-306-P3: 84.4
MW-111-P1: 14.7
MW-111-P2: 37.6
MW-111-P3: 164
MW-304-P1: 344
PZ-304-AS: 110
PZ-304-AI: 146
PZ-303-AS: 78.3
I-73: 2,270J-
MW-303-P2: 404
PZ-205-AS: 1,930J-
D-81 <3.00
MW-302: 506
PZ-302-AS: 4.51
PZ-302-AI: 2.59J
D-89: 247J
MW-505-P1: <3.00
MW-505-P2: <3.00
MW-505-P3: <3.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 25.6J
MW-113 6.64
PZ-113-SS <3.00
PZ-115-SS 21.2
PZ-208-SS <3.00
PZ-100-SS <3.00
PZ-100-SD <3.00
PZ-111-SS 119
PZ-111-SD <3.00
PZ-101-SS 47.2
PZ-200-SS <3.00
MW-304-P2 89.6
PZ-109-SS <3.00
PZ-102R-SS <3.00
PZ-102-SS <3.00
PZ-206-SS 25.3
PZ-201A-SS <3.00
PZ-103-SS 717
PZ-212-SD <3.00
PZ-212-SS <3.00
MW-205 10.7
PZ-205-SS 11.4
PZ-202-SS 925J
PZ-104-SS <3.00
PZ-209-SS <3.00
PZ-104-SD 46.7
PZ-209-SD <3.00
PZ-107-SS 151
PZ-106-SS 8.95
PZ-106-SD <3.00
MW-1204 144
PZ-203-SS 36.8
MO-1-SDR <3.00
PZ-211-SS <3.00
PZ-211-SD 41.5
MO-3-SS <3.00
MO-3-SDR 227
PZ-204-SS <3.00
PZ-116-SS <3.00
PZ-105-SS 30.7
PZ-210-SS 183
PZ-210-SD 3.96
PZ-204A-SS 245

Warsaw/Keokuk Formations

MW-400-P5 23.5J
PZ-100-KS <3.00
PZ-111-KS <3.00
MW-304-P3 56.1
PZ-104-KS <3.00
PZ-106-KS <3.00

N

Legend

1,4-Dioxane Concentration (ug/L)

1,4-Dioxane Not Detected	Concentration Estimated Below RL (3 ug/L)	<100	100-200	200-1,000	1,000-2,000	>2,000

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 16c: Q3 2021 Summary of 1,4-Dioxane Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\erkbsfdc01\Data\Boston\Learn\MMY\Clients_V_Z\West Lake Landfill_MXM\2022_01_Report\plots\HEIRS KY\Planview_03_2021_14Jan.mxd - Kitty Abano - 2022/02/21

NORTH

SOUTH

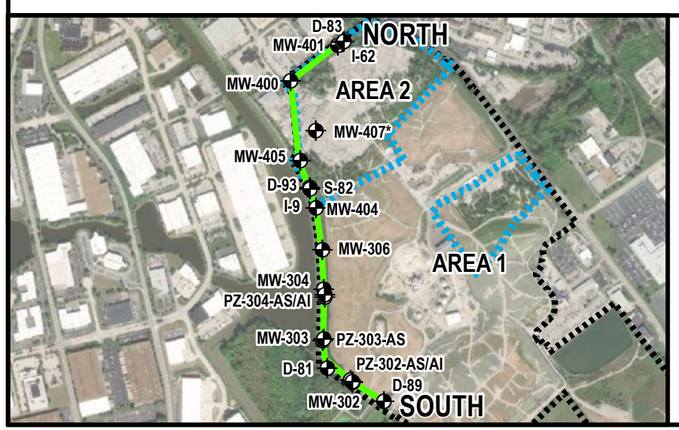
D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 | PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

Elevation (ft. amsl) 5X Vertical Exaggeration

470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,4-Dioxane Concentration (ug/L)

- >2,000
- 1,000-2,000
- 200-1,000
- 100-200
- Concentration Estimated Below RL (100 ug/L)
- 1,4-Dioxane Not Detected

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L

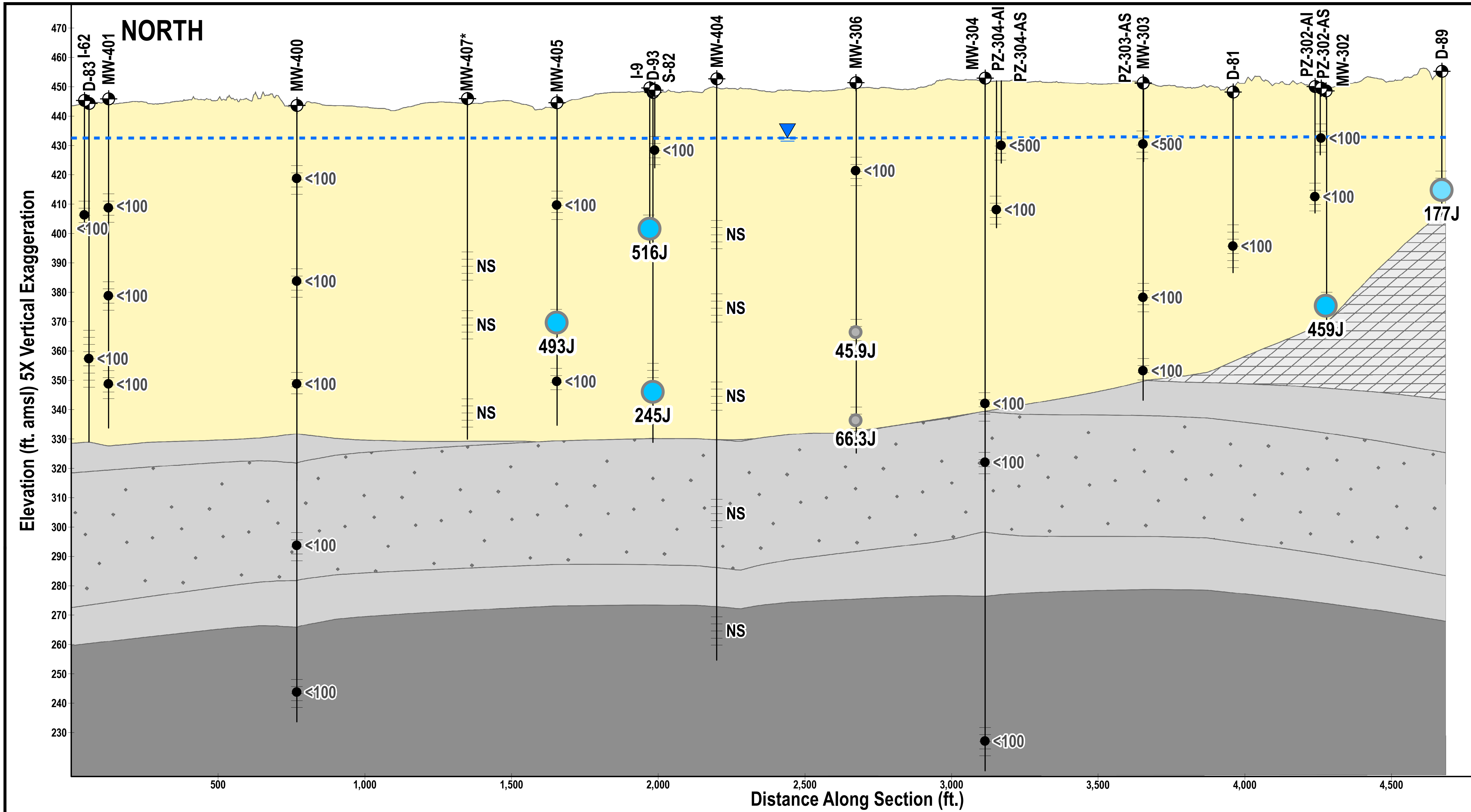
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

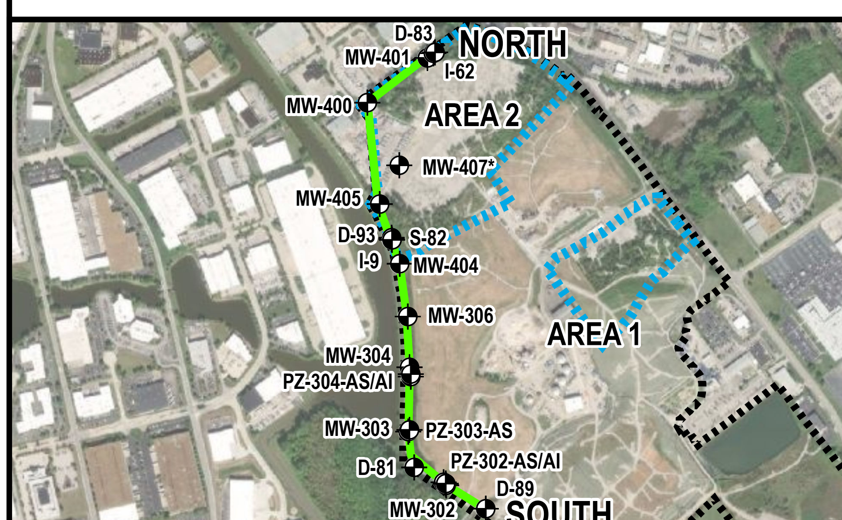
Figure 17a: Q1 2021 Summary of 1,4-Dioxane Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

G:\Boston\Team\MWV\Clients_V_Z\WestLake\WestLakeLandfill_MOWXD\2022_01_Report\Updates\CHEMISTRY\XSec\CrossSection_CSC2_14Dioxane_20210Q1_20220203.mxd - Joseph.Hakam - 2/23/2022





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,4-Dioxane Concentration (ug/L)

- >2,000
- 1,000-2,000
- 200-1,000
- 100-200
- Concentration Estimated Below RL (100 ug/L)
- 1,4-Dioxane Not Detected

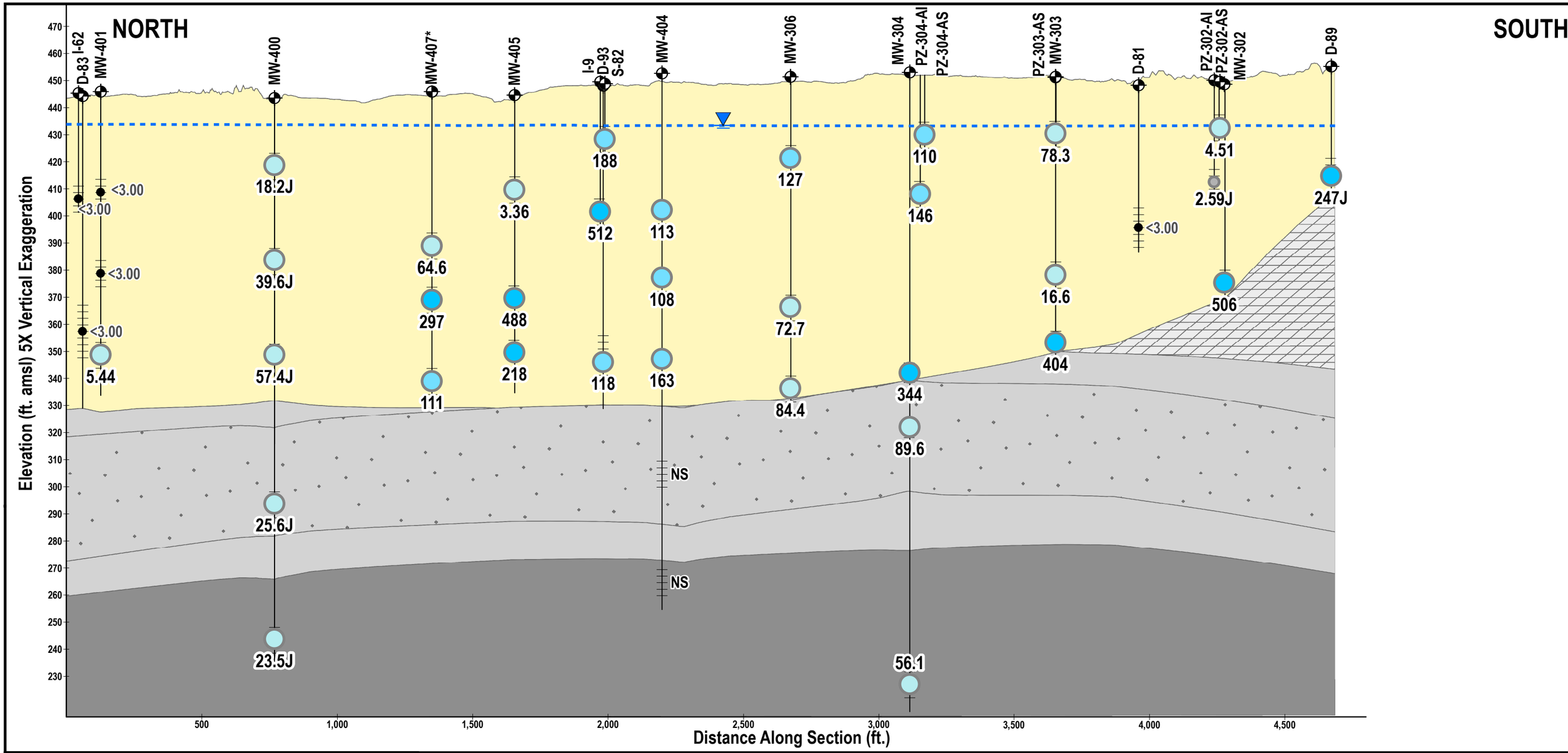
- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

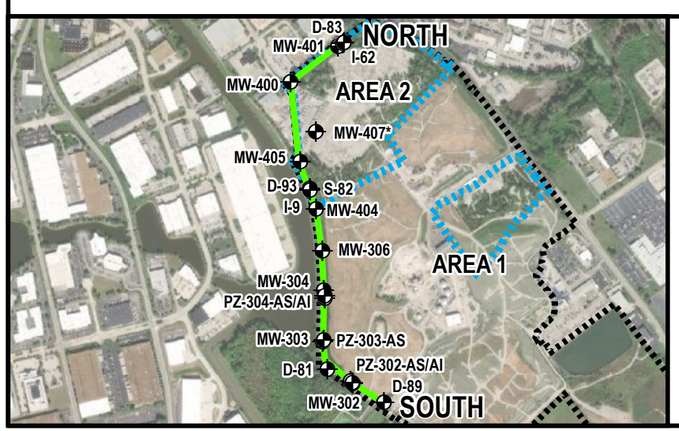
NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 17b: Q2 2021 Summary of 1,4-Dioxane Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Q:\Boston\Team\DMM\Clients_V_Z\WestLake\WestLakeLandfill_MO\MXD\2022_01_ReportUpdates\CHEMISTRY\XSec\CrossSection_CS2_14Dioxane_2021Q2_20220223.mxd - Joseph.Hakam - 2/23/2022





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,4-Dioxane Concentration (ug/L)

- >2,000
- 1,000-2,000
- 200-1,000
- 100-200
- 3-100
- Concentration Estimated Below RL (3 ug/L)
- 1,4-Dioxane Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

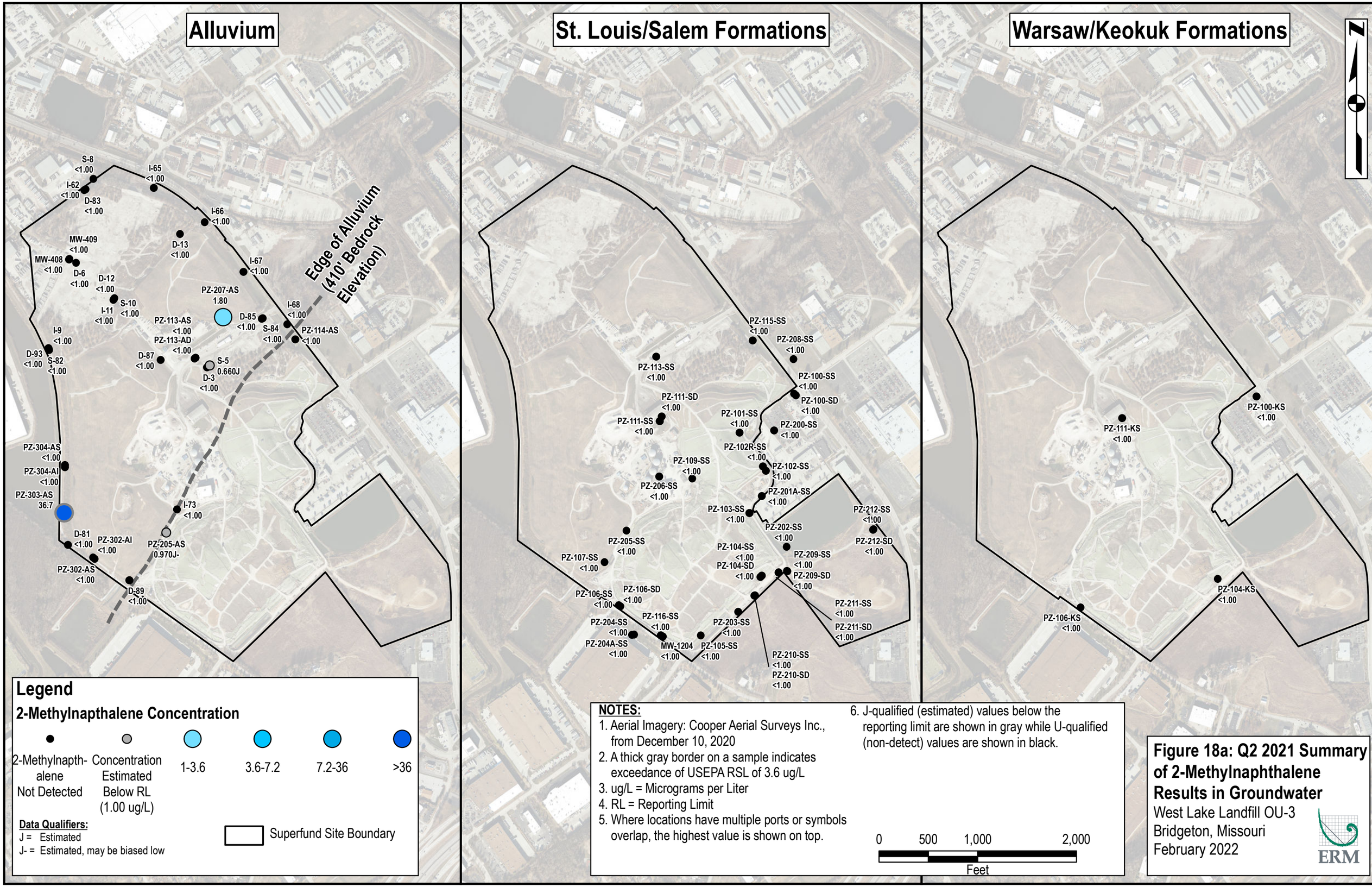
NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.46 ug/L

- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 17c: Q3 2021 Summary of 1,4-Dioxane Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

Figure 18a: Q2 2021 Summary of 2-Methylnaphthalene Results in Groundwater

West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Alluvium

MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
MW-400-P1 <1.00
MW-400-P2 <1.00
MW-400-P3 <1.00
S-8 <1.00
I-65 <1.00
I-62 <1.00
D-83 <1.00
I-66 <1.00
MW-408 <1.00
MW-409 <1.00
D-13 <1.00
MW-405-P1 <1.00
MW-405-P2 <1.00
MW-405-P3 <1.00
D-6 <1.00
D-12 <1.00
I-67 <1.00
S-10 <1.00
PZ-207-AS 1.00
I-11 <1.00
D-85 <1.00
I-68 <1.00
PZ-113-AS <1.00
S-84 <1.00
PZ-113-AD <1.00
MW-117 <1.00
PZ-114-AS <1.00
I-9 <1.00
D-93 <1.00
S-82 <1.00
D-87 <1.00
S-5 0.890J
MW-306-P1 <1.00
MW-118 <1.00
D-3 <1.00
MW-306-P2 <1.00
MW-306-P3 <1.00
MW-111-P1 <1.00
MW-304-P1 <1.00
PZ-304-AS <1.00
MW-111-P2 <1.00
PZ-304-AI 0.290J
MW-111-P3 <1.00
MW-303-P1 <1.00
I-73 0.680J-
MW-303-P2 <1.00
PZ-303-AS 67.9
PZ-302-AS <1.00
PZ-302-AI <1.00
PZ-205-AS 0.650J-
D-81 <1.00
MW-302 <1.00
D-89 <1.00
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-113-SS <1.00
PZ-100-SS <1.00
PZ-111-SD <1.00
PZ-100-SD <1.00
PZ-101-SS <1.00
PZ-111-SS <1.00
PZ-200-SS <1.00
MW-304-P2 <1.00
PZ-102R-SS <1.00
PZ-206-SS <1.00
PZ-102-SS <1.00
PZ-109-SS <1.00
PZ-201A-SS <1.00
PZ-212-SS <1.00
PZ-205-SS <1.00
PZ-103-SS <1.00
PZ-212-SD <1.00
PZ-202-SS <1.00
MW-205 <1.00
PZ-107-SS <1.00
PZ-104-SS <1.00
PZ-209-SS <1.00
PZ-104-SD <1.00
PZ-106-SS <1.00
PZ-106-SD <1.00
MO-3-SS <1.00
MO-1-SDR <1.00
MW-1204 <1.00
PZ-211-SS <1.00
MO-3-SDR <1.00
PZ-203-SS <1.00
PZ-211-SD <1.00
PZ-204A-SS <1.00
PZ-116-SS <1.00
PZ-105-SS <1.00
PZ-204-SS <1.00
PZ-210-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

MW-400-P5 <1.00
PZ-100-KS <1.00
PZ-111-KS <1.00
MW-304-P3 <1.00
PZ-104-KS <1.00
PZ-106-KS <1.00

Legend

2-Methylnapthalene Concentration

2-Methylnapthalene Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-3.6	3.6-7.2	7.2-36	>36

Data Qualifiers:
J = Estimated
J- = Estimated, may be biased low

Superfund Site Boundary

NOTES:

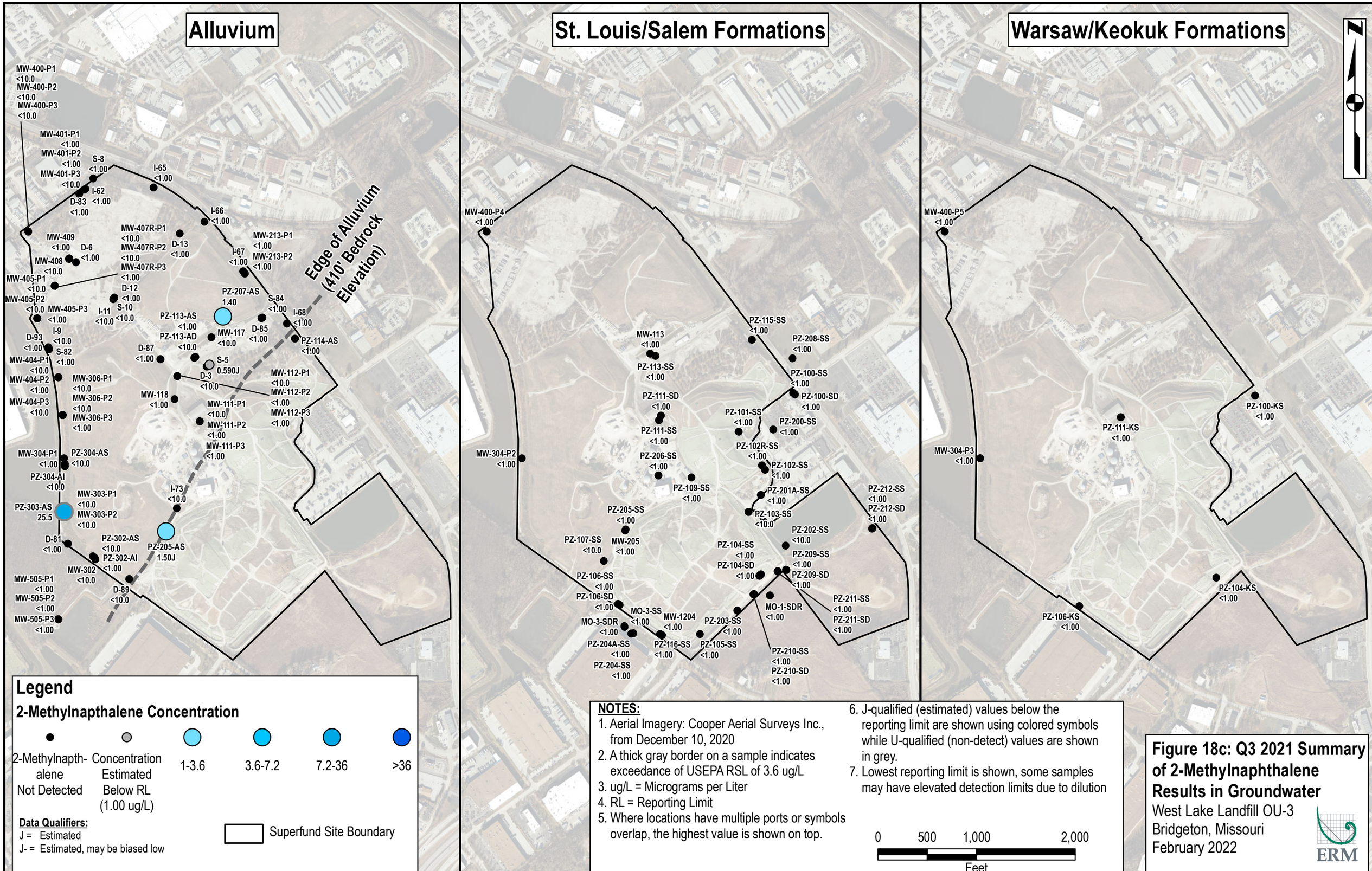
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.

0 500 1,000 2,000
Feet

Figure 18b: Q2 2021 Summary of 2-Methylnaphthalene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\cpsdcfile01\Data\Boston\Learn\MXD\Clients_V_Z\West Lake\Landfill\MXD\2022_Q1_Report\Updates\GHSHS\HYdrainview_Q2_2021_2Methylnapthalene_20220428.mxd - Katy Albano - 2022/04/28



NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.
7. Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution

Figure 18c: Q3 2021 Summary of 2-Methylnaphthalene Results in Groundwater

West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

NORTH

SOUTH

D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 | PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

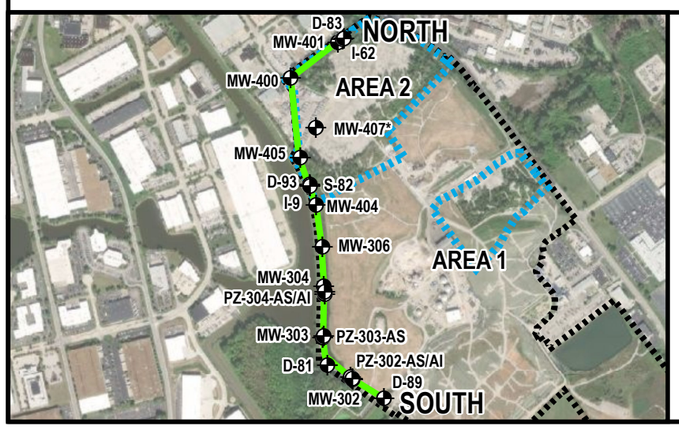
Elevation (ft. amsl) 5X Vertical Exaggeration

470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

<1.00 | NS | <1.00 | <1.00 | 36.7 | <1.00 | <1.00 | <1.00

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total 2-Methylnaphthalene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- 2-Methylnaphthalene Not Detected

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 19a: Q1 2021 Summary of 2-Methylnaphthalene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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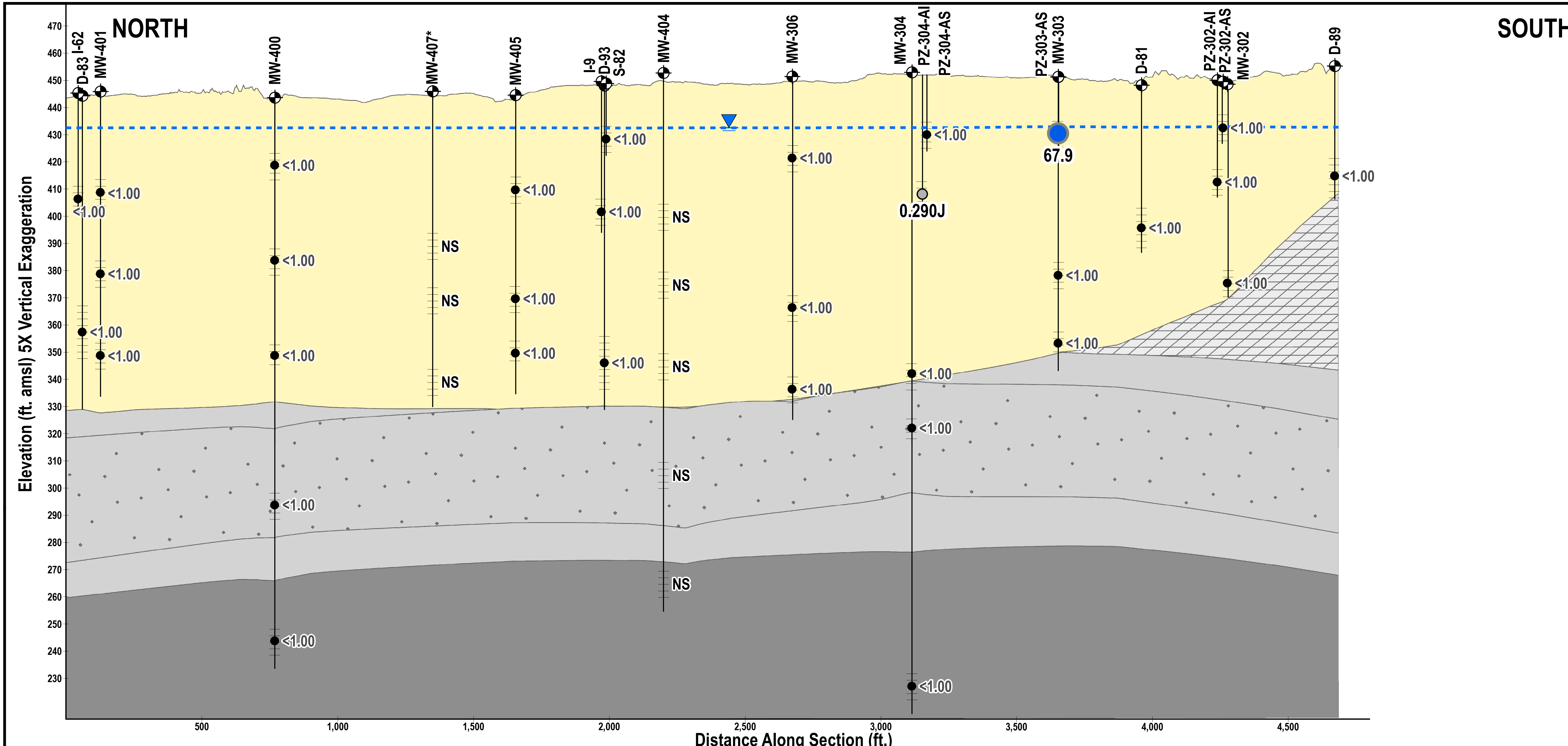

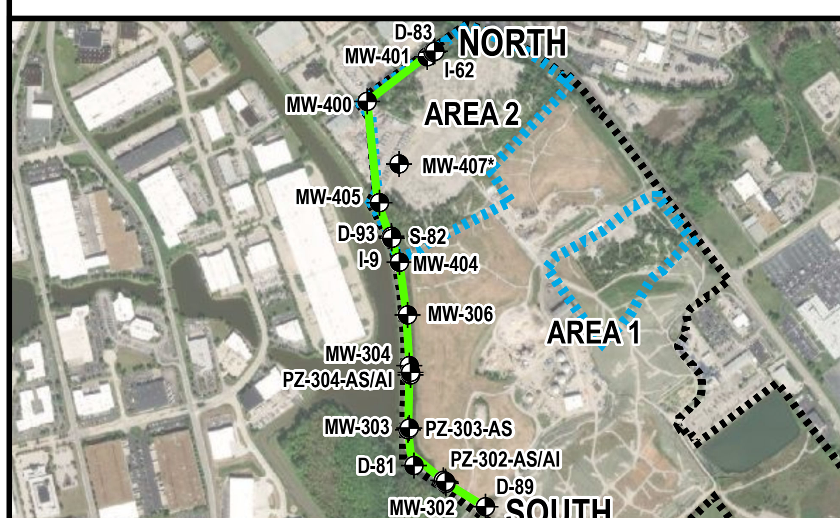

Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 2-Methylnaphthalene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- 2-Methylnaphthalene Not Detected

Alluvium **Shoal**
St. Louis **Warsaw**
Salem

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 19b: Q2 2021 Summary of 2-Methylnaphthalene Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

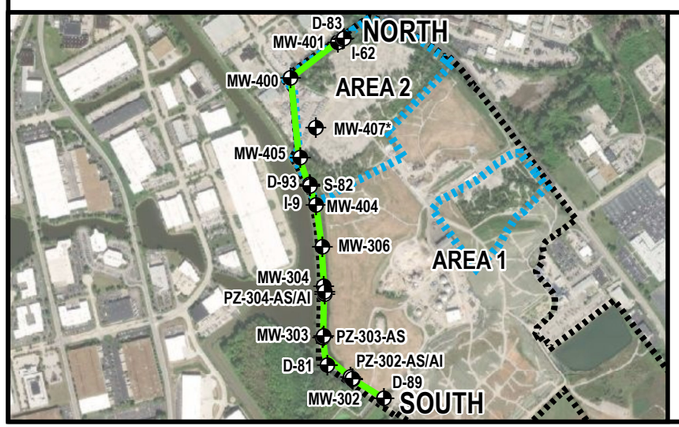
470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

<1.00 <10.0 25.5 NS

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total 2-Methylnaphthalene Concentration (ug/L)

- >36
- 7.2-36
- 3.6-7.2
- 1-3.6
- Concentration Estimated Below RL (1.00 ug/L)
- 2-Methylnaphthalene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- A thick gray border on a sample indicates exceedance of USEPA RSL of 3.6 ug/L
- Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- HGU = Potential Hydrogeologic Unit
- J-qualified (estimated) values below the reporting limit are shown in grey while U-qualified (non-detect) values are shown in black.

Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 19c: Q3 2021 Summary of 2-Methylnaphthalene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

S-8 1.88
D-83 4.27
I-62 2.42
I-65 1.68
I-66 <1.45
D-13 1.97J-
MW-408 <1.60
MW-409 <2.12
D-6 4.55
S-10 3.74
D-12 <1.28
I-11 2.33J-
PZ-207-AS <1.70
PZ-113-AS <1.55
S-84 1.33J-
I-68 <1.33
D-85 1.74J-
PZ-114-AS <1.64
PZ-113-AD 7.38
S-82 <1.55
D-93 7.78
I-9 5.33
D-87 5.7
S-5 <1.36
D-3 4.48
I-67 <1.37
Edge of Alluvium (410' Bedrock Elevation)
PZ-304-AS 3.08
PZ-304-AI 1.61
PZ-303-AS <2.00
I-73 10.8J-
PZ-302-AS <1.82
PZ-205-AS 7.88J+
D-81 1.97J
PZ-302-AI <2.40
D-89 4.58

St. Louis/Salem Formations

PZ-115-SS 12.3J-
PZ-208-SS <1.20
PZ-113-SS <1.63
PZ-100-SS 3.47
PZ-111-SS 22.5J
PZ-100-SD 3.32
PZ-101-SS 16.6J-
PZ-200-SS 1.69
PZ-111-SD 1.77
PZ-102R-SS 2.7J-
PZ-102-SS 3.72J-
PZ-206-SS 2.26
PZ-109-SS 2.15
PZ-201A-SS <1.37
PZ-205-SS 2.12J+
PZ-103-SS 10.6J-
PZ-212-SS <1.29
PZ-202-SS 6.48
PZ-212-SD 1.08J
PZ-107-SS 14.5
PZ-104-SS 1.84
PZ-209-SS 1.85J-
PZ-104-SD 3.5
PZ-209-SD 1.73J+
PZ-106-SD 1.88J
PZ-211-SS 1.49
PZ-106-SS 10.9
PZ-116-SS <1.49
PZ-203-SS <1.48
PZ-211-SD <1.22
PZ-204A-SS <2.11
PZ-105-SS 3.66
PZ-210-SS <1.57
PZ-204-SS <1.74
MW-1204 57.4J
PZ-210-SD 2.3

Keokuk/Warsaw Formations

PZ-100-KS <1.43
PZ-111-KS <1.46
PZ-104-KS <1.74
PZ-106-KS 1.14

N

Legend

Total Radium 226/228 Activity (pCi/L)

<1 | 1-5 | 5-10 | 10-50 | >50

Radium 226

Radium 228

Radium Activity Below MDC (U-Qualified)

Superfund Site Boundary

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high
J- = Estimated, may be biased low

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
3. pCi/L = Picocuries per liter
4. MDC = Minimum Detectable Concentration
5. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure **20a**: Q1 2021 Summary of Radium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

Q:\Projects\Remedial\WLF\Projects_V_2\WestLake\WestLakeLandfill_MXD\2022_Q1_Report\plates\CH-ENS1-KV\Planview_Q1_2021_Features_20220124.mxd - joseph.Hearn - 3/1/2022

Alluvium

MW-400-P1 4.63
MW-400-P2 8.9
MW-400-P3 7.92
MW-401-P1 1.2J-
MW-401-P2 1.89J-
MW-401-P3 3.13J-
S-8 <1.27
I-62 <1.36
D-83 2.8J
I-65 1.61
I-66 <1.63
D-13 3.1J+
MW-408 3.42
MW-409 <1.69
D-6 5.39J
I-67 <1.55
D-12 1.54J+
I-11 2.51J+
S-10 <1.56
MW-405-P1 <2.21
MW-405-P2 9.14
MW-405-P3 9.49
PZ-207-AS 2.16
D-85 2.13
I-68 <1.87
PZ-113-AS <1.23
PZ-113-AD 8.56
MW-117 2.32
S-84 <1.46
PZ-114-AS 1.58
D-87 6.55
D-3 6.57
S-5 <1.77
D-93 5.81
I-9 5.05
S-82 1.75
MW-306-P1 1.76
MW-118 3.92
MW-306-P2 <0.927
MW-306-P3 5.86
MW-118 2.7
MW-111-P1 2.16J+
MW-111-P2 2.49J+
MW-111-P3 2.68J+
PZ-304-AS 2.18J+
MW-304-P1 10.4J+
PZ-304-AI 2.84
PZ-303-AS <1.76
MW-303-P1 <2.00
MW-303-P2 5.47
I-73 9.61J+
PZ-302-AS 2.1
D-81 <1.77
PZ-302-AI <1.62
PZ-205-AS 11.8J+
MW-302 5.82
D-89 4.37
MW-505-P1 <2.12
MW-505-P2 <1.40
MW-505-P3 <1.56

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 6.48
PZ-115-SS 14.8
PZ-208-SS 1.67J
PZ-113-SS 1.67J-
PZ-111-SD 1.71J+
PZ-100-SS 2.52J-
PZ-100-SD 4.33J-
PZ-111-SS 15.5
PZ-200-SS <1.35
PZ-102R-SS 3.52J+
MW-304-P2 6.34J+
PZ-206-SS 2.65
PZ-101-SS 16.8
PZ-102-SS 3.9J+
PZ-109-SS 1.81J+
PZ-201A-SS <1.44
PZ-205-SS 1.84J+
PZ-103-SS 9.81J+
PZ-212-SS 1.44
PZ-202-SS 3.48
PZ-212-SD <1.91
MW-205 1.84J+
PZ-104-SS 2.26J+
PZ-209-SS 1.31J-
PZ-107-SS 15.2
PZ-104-SD <1.89
PZ-209-SD <1.98
PZ-106-SD 2.98J+
PZ-116-SS 1.95J-
MO-1-SDR <1.28
PZ-211-SS 1.27J+
PZ-106-SS 10.9J+
PZ-203-SS 2.48
PZ-211-SD 1.91
MO-3-SS <2.04
PZ-204A-SS 1.86
PZ-105-SS 2.99
MW-1204 44
MO-3-SDR <2.31
PZ-204-SS <1.55
PZ-210-SS 2.02
PZ-210-SD <1.93

Keokuk/Warsaw Formations

MW-400-P5 5.94
PZ-111-KS <1.98
PZ-100-KS <1.54
MW-304-P3 3.45J+
PZ-104-KS <1.49
PZ-106-KS <1.75

N

Legend

Total Radium 226/228 Activity (pCi/L)

<1 1-5 5-10 10-50 >50

Radium 226
Radium 228

Radium Activity Below MDC (U-Qualified)
Superfund Site Boundary

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high
J- = Estimated, may be biased low

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
3. pCi/L = Picocuries per liter
4. MDC = Minimum Detectable Concentration
5. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure **20b**: Q2 2021 Summary of Radium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

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Alluvium

MW-400-P1 2.64J+
MW-400-P2 6.48J+
MW-400-P3 6.48J+
MW-401-P1 <1.18
MW-401-P2 2.43J+
MW-401-P3 5.62J+
S-9 1.87
I-62 <1.78
D-83 2.66J+
I-65 <1.53
I-66 <1.74
D-13 3.96J+
MW-408 3.31J+
MW-409 <1.49
D-6 6.23J
MW-407R-P1 <1.85
MW-407R-P2 7.36J
MW-407R-P3 3.46J
I-67 <1.52
MW-213-P1 <1.31
MW-213-P2 2.14J-
Edge of Alluvium (410' Bedrock Elevation)
I-11 2.6J
S-10 <1.95
PZ-207-AS 2.03
S-84 1.33J-
I-68 <1.39
MW-405-P1 1.89
MW-405-P2 8.96
MW-405-P3 9.63
D-12 <1.65
PZ-113-AS <1.82
PZ-113-AD 5.92J-
MW-117 1.89J-
D-85 2.42J-
PZ-114-AS 2.04J-
S-82 3.65J
D-93 7.47J
MW-404-P1 4.65J-
MW-404-P2 3.81J-
MW-404-P3 7J-
I-9 5.88J
D-87 5.37J-
D-3 6.57J-
S-5 <1.76
MW-112-P1 3.86J-
MW-112-P2 3.95J-
MW-112-P3 4.79J-
MW-118 3.85J-
MW-111-P1 1.82J-
MW-111-P2 3.36J-
MW-111-P3 3.32J-
MW-306-P1 2.87J
MW-306-P2 6.08J
MW-306-P3 10.9J
PZ-304-AS 2.9
PZ-304-AI 4.69J-
MW-304-P1 8.85
I-73 7.4J
MW-303-P1 1.81J+
MW-303-P2 5.4J+
PZ-303-AS 1.61
PZ-302-AS 2.51
PZ-302-AI 2.47
PZ-205-AS 7.44J-
D-81 <1.74
MW-302 4.17
D-89 5.09
MW-505-P1 <1.57
MW-505-P2 2.04J+
MW-505-P3 <0.993

St. Louis/Salem Formations

MW-400-P4 2.47
PZ-115-SS 12.7J-
MW-113 5.12
PZ-113-SS 2.24J-
PZ-208-SS <1.74
PZ-100-SS 4.74
PZ-100-SD 3.53
PZ-111-SD <1.50
PZ-101-SS 16.4J-
PZ-111-SS 12.9
PZ-200-SS 2.41J+
MW-304-P2 5.46
PZ-109-SS 2.47
PZ-102R-SS 3.36
PZ-102-SS 2.39
PZ-206-SS 1.59
PZ-201A-SS <1.81
PZ-103-SS 9.06
PZ-212-SS <2.20
PZ-212-SD <1.80
MW-205 <1.02
PZ-205-SS 2.29
PZ-202-SS 4.1
PZ-104-SS 1.89
PZ-104-SD 3.86
PZ-209-SS <1.47
PZ-209-SD <1.66
PZ-107-SS 18.3
PZ-106-SD <1.75
PZ-106-SS 12.5
PZ-211-SS <1.87
PZ-211-SD <1.72
MO-1-SDR <2.01
PZ-116-SS <1.82
PZ-203-SS 1.86J
MO-3-SS 1.71
MO-3-SDR 3.45J
PZ-105-SS 3.27J-
PZ-204A-SS <1.83
MW-1204 40.4
PZ-210-SS <1.94
PZ-204-SS <1.80
PZ-210-SD <1.35

Keokuk/Warsaw Formations

MW-400-P5 <1.87
PZ-111-KS 1.54
PZ-100-KS <0.985
MW-304-P3 2.68
PZ-104-KS <1.27
PZ-106-KS <1.33

N

Legend

Total Radium 226/228 Activity (pCi/L)

<1 1-5 5-10 10-50 >50

Radium 226

Radium 228

Radium Activity Below MDC (U-Qualified)

Superfund Site Boundary

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high
J- = Estimated, may be biased low

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
3. pCi/L = Picocuries per liter
4. MDC = Minimum Detectable Concentration
5. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure **20c**: Q3 2021 Summary of Radium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

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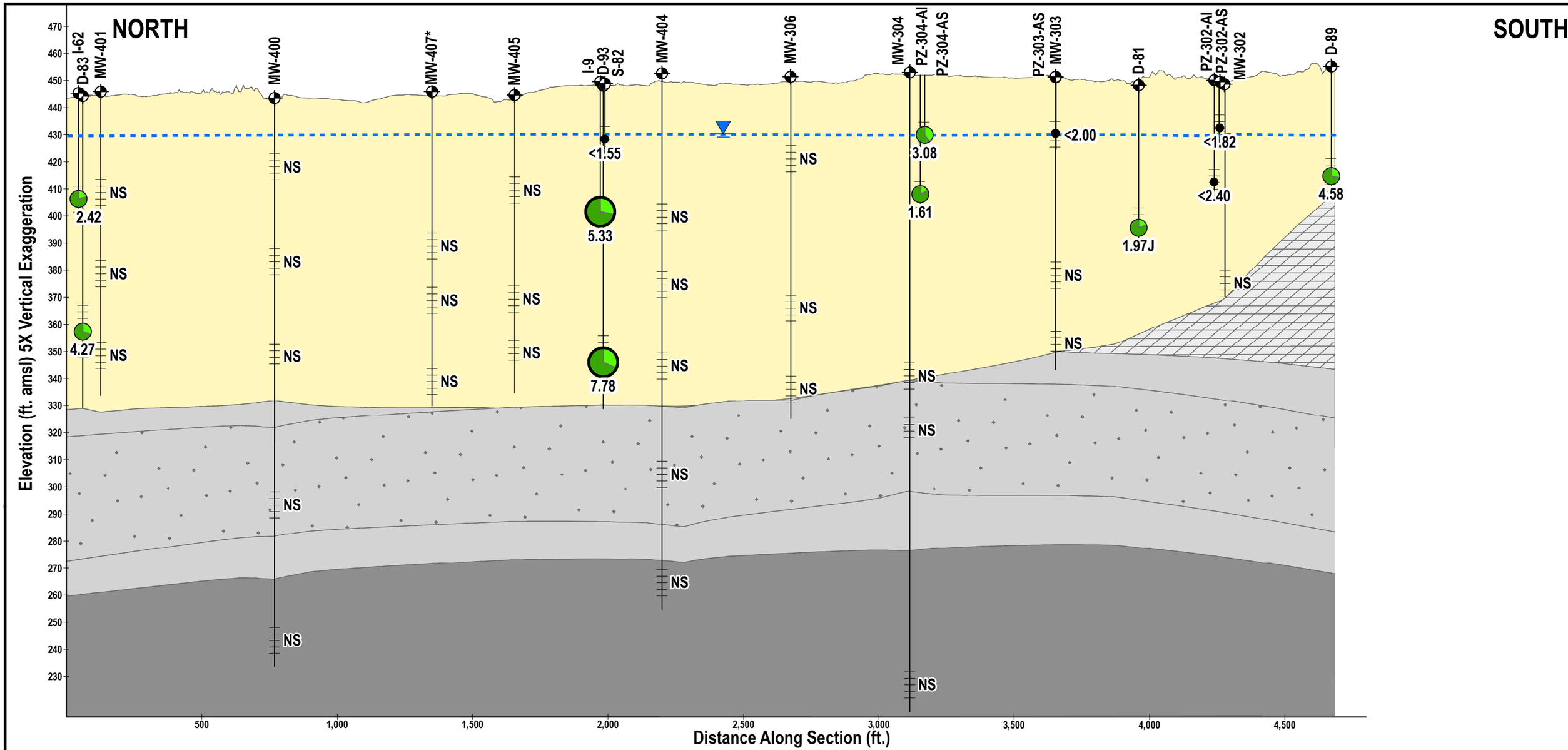
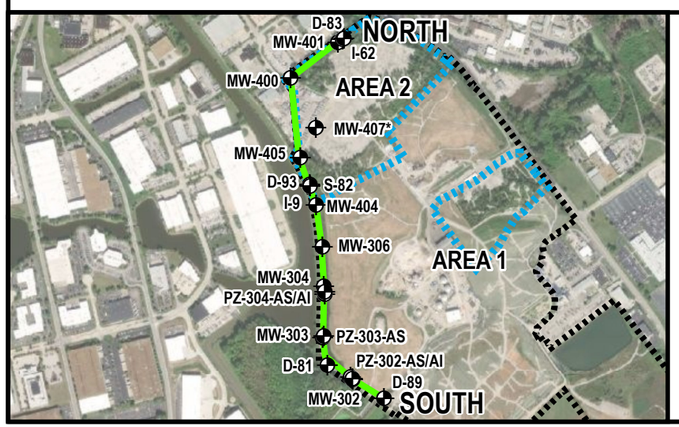




Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Radium 226/228 Activity (pCi/L)

<1 | 1-5 | 5-10

- Radium 226
- Radium 228
- Radium Activity Below MDC (U-Qualified)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown
- pCi/L = Picocuries per Liter
- MDC = Minimum Detectable Concentration
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 21a: Q1 2021 Summary of Radium Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

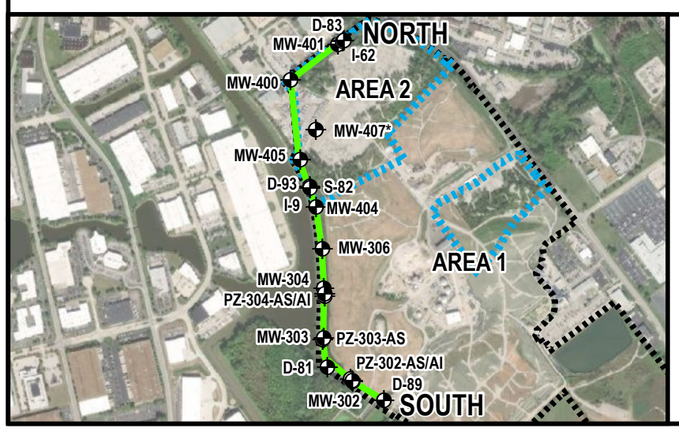
470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

1.20J- <1.36 1.89J- 2.80J 3.13J- 4.63 8.90 7.92 6.48 5.94 NS NS NS NS <2.21 9.14 9.49 1.75 5.05 5.81 NS NS NS NS 1.76 <0.927 5.86 2.18J+ 2.84 10.4J+ 6.34J+ 3.45J+ <1.61 <2.00 5.47 <1.77 2.10 <1.62 5.82 4.37

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:

J = Estimated
J+ = Estimated, may be biased high
J- = Estimated, may be biased low

Total Radium 226/228 Activity (pCi/L)

<1 1-5 5-10

- Radium 226
- Radium 228
- Radium Activity Below MDC (U-Qualified)

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown
- pCi/L = Picocuries per Liter
- MDC = Minimum Detectable Concentration
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 21b: Q2 2021 Summary of Radium Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

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NORTH

SOUTH

D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 | PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

<1.78 | <1.18 | 2.64J+ | <1.85 | 1.89 | 3.65J | 2.87J | 2.90 | 1.61 | 2.51 | 5.09

2.43J+ | 6.48J+ | 7.36J | 8.96 | 5.88J | 4.65J- | 4.69J- | <1.74 | 2.47

3.81J- | 1.81J+ | 4.17

2.66J+ | 6.08J | 8.85

5.62J+ | 6.48J+ | 9.63 | 7.47J | 7.00J- | 5.40J+

3.46J | 10.9J

NS

2.47 | 5.46

NS

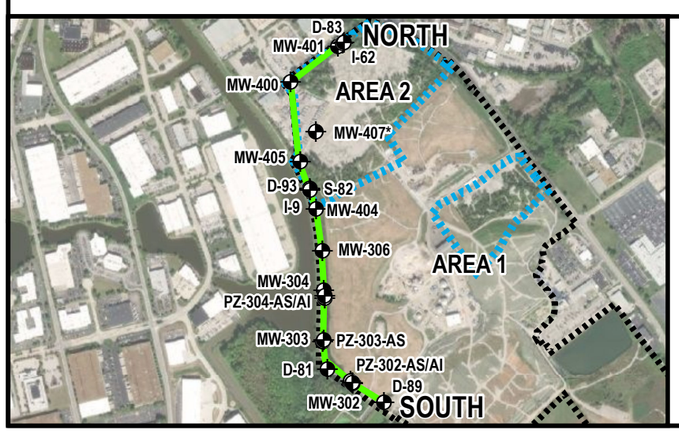
<1.87 | 2.68

Elevation (ft. amsl) 5X Vertical Exaggeration

470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Activity Qualifiers:

J = Estimated
J+ = Estimated, may be biased high
J- = Estimated, may be biased low

Total Radium 226/228 Activity (pCi/L)

<1 | 1-5 | 5-10

- Radium 226
- Radium 228
- Radium Activity Below MDC (U-Qualified)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a pie chart indicates exceedance of USEPA MCL of 5 pCi/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown
- pCi/L = Picocuries per Liter
- MDC = Minimum Detectable Concentration
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 21c: Q3 2021 Summary of Radium Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
March 2022

ERM

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Alluvium

MW-400-P1 <20.0
MW-400-P2 <20.0
MW-400-P3 11.2J
MW-401-P1 <20.0
MW-401-P2 <20.0
MW-401-P3 65.4
S-8 <20.0
I-62 <20.0
D-83 <20.0
I-65 <20.0
I-66 <20.0
D-13 <20.0
MW-409 <20.0
D-6 <20.0
MW-408 9.30J
D-12 12.1J
I-11 12.3J
S-10 20.5
I-67 <20.0
PZ-207-AS 41.6
D-85 <20.0
S-84 <20.0
I-68 <20.0
PZ-114-AS <20.0
Edge of Alluvium (410' Bedrock Elevation)
MW-405-P1 8.60J
MW-405-P2 33.3
MW-405-P3 20.5
PZ-113-AS 5.40J
PZ-113-AD 39.5
MW-117 <20.0
S-5 21.9
D-3 43.3
I-9 32.4
D-93 27.8
S-82 26.8
D-87 28.0
MW-118 15.2J
MW-306-P1 38.0
MW-306-P2 33.7
MW-306-P3 84.3
MW-111-P1 9.10J
MW-111-P2 16.5J
MW-111-P3 1,330
PZ-304-AS 81.7J
MW-304-P1 47.2
PZ-304-AI 36.0J+
PZ-303-AS 50.8J
I-73 2,490
MW-303-P1 14.7J
MW-303-P2 109
MW-302 1,300
PZ-205-AS 24,700
D-81 <20.0
PZ-302-AS 5.70J
PZ-302-AI 2.50J
D-89 535
MW-505-P1 1.00J
MW-505-P2 <20.0
MW-505-P3 1,240

St. Louis/Salem Formations

MW-400-P4 16.5J
PZ-115-SS 11.9J
PZ-208-SS <20.0
PZ-113-SS <20.0
PZ-100-SS <20.0
PZ-100-SD <20.0
PZ-111-SS 32.4
PZ-111-SD <20.0
PZ-200-SS <20.0
PZ-101-SS 38:6
MW-304-P2 <20.0
PZ-109-SS <20.0
PZ-102R-SS <20.0
PZ-102-SS <20.0
PZ-206-SS <20.0
PZ-201A-SS <20.0
MW-205 21.2J
PZ-103-SS 90.7J
PZ-212-SS <20.0
PZ-202-SS 680
PZ-205-SS <20.0
PZ-212-SD <20.0
PZ-107-SS 52.4
PZ-104-SS <20.0
PZ-209-SS <20.0
PZ-104-SD 300
PZ-209-SD <20.0
PZ-106-SS 5.70J
PZ-106-SD <20.0
PZ-211-SS <20.0
PZ-203-SS <20.0
MO-1-SDR <20.0
PZ-116-SS <20.0
PZ-204-SS <20.0
PZ-211-SD 33.5
PZ-105-SS <20.0
PZ-204A-SS 15.1J
MO-3-SS <20.0
MW-1204 187
PZ-210-SS <20.0
MO-3-SDR 5.10J
PZ-210-SD <20.0

Warsaw/Keokuk Formations

MW-400-P5 72.8
PZ-100-KS <20.0
PZ-111-KS <20.0
MW-304-P3 372
PZ-104-KS <20.0
PZ-106-KS <20.0

N

Legend

Tetrahydrofuran Concentration

Tetrahydrofuran Not Detected	Concentration Estimated Below RL (20.0 ug/L)	20-100	100-340	340-680	>680

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high

Superfund Site Boundary

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 340 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 22a: Q2 2021 Summary of Tetrahydrofuran Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

MW-400-P1 <20.0
MW-400-P2 7.60J
MW-400-P3 8.90J
MW-401-P1 <20.0
MW-401-P2 <20.0
MW-401-P3 <20.0
S-8 <20.0
I-62 <20.0
D-83 <20.0
I-65 <20.0
I-66 <20.0
MW-407R-P1 <20.0
MW-407R-P2 13.0J
MW-407R-P3 10.2J
D-13 <20.0
MW-408 6.30J
MW-409 <20.0
D-6 5.80J
I-67 <20.0
MW-213-P1 <20.0
MW-213-P2 <20.0
Edge of Alluvium (410' Bedrock Elevation)
D-12 7.90J
S-10 12.2J
I-11 10.0J
PZ-207-AS 34.6
D-85 <20.0
I-68 <20.0
MW-405-P1 <20.0
MW-405-P2 21.9
MW-405-P3 13.7J
PZ-113-AS <20.0
PZ-113-AD 31.0
MW-117 <20.0
S-84 <20.0
PZ-114-AS <20.0
I-9 29.7
S-82 29.4
D-93 27.1
MW-404-P1 23.9
MW-404-P2 22.5
MW-404-P3 26.0
D-87 23.1
D-3 27.7
S-5 <100
MW-112-P1 10.1J
MW-112-P2 18.4J
MW-112-P3 90.6
MW-306-P1 30.8
MW-306-P2 24.9
MW-306-P3 88.5
MW-118 9.40J
MW-111-P1 108
MW-111-P2 77.2
MW-111-P3 104
MW-304-P1 42.8
PZ-304-AS 59.4
PZ-304-AI 39.4
I-73 2,070
MW-303-P1 7.00J
MW-303-P2 53.8
PZ-303-AS 40.1
MW-302 655
D-81 <20.0
PZ-205-AS 22,900
PZ-302-AS <20.0
PZ-302-AI <20.0
D-89 496
MW-505-P1 <20.0
MW-505-P2 <20.0
MW-505-P3 523

St. Louis/Salem Formations

MW-400-P4 8.10J
MW-113 <20.0
PZ-113-SS <20.0
PZ-115-SS 9.40J
PZ-208-SS <20.0
PZ-100-SS <20.0
PZ-100-SD <20.0
PZ-111-SS 21.3
PZ-111-SD <20.0
PZ-101-SS 40.7
PZ-200-SS <20.0
MW-304-P2 21.1
PZ-109-SS <20.0
PZ-206-SS <20.0
PZ-102R-SS <20.0
PZ-102-SS <20.0
PZ-201A-SS <20.0
PZ-205-SS <20.0
PZ-103-SS 23.6
PZ-212-SS <20.0
PZ-202-SS 587
PZ-212-SD <20.0
MW-205 <100
PZ-107-SS 49.1
PZ-104-SS <20.0
PZ-104-SD 160
PZ-209-SS <20.0
PZ-209-SD <20.0
PZ-106-SS <20.0
PZ-106-SD <20.0
MO-3-SS <20.0
MO-3-SDR 18.3J
MW-1204 155
PZ-203-SS <20.0
MO-1-SDR <20.0
PZ-211-SS <20.0
PZ-211-SD 8.10J
PZ-204-SS <20.0
PZ-204A-SS <20.0
PZ-116-SS <20.0
PZ-105-SS <20.0
PZ-210-SS <20.0
PZ-210-SD <20.0

Warsaw/Keokuk Formations

MW-400-P5 137
PZ-111-KS <20.0
PZ-100-KS <20.0
MW-304-P3 1,030
PZ-104-KS <20.0
PZ-106-KS <20.0

N

Legend

Tetrahydrofuran Concentration

Tetrahydrofuran Not Detected	Concentration Estimated Below RL (20.0 ug/L)	20-100	100-340	340-680	>680

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high

Superfund Site Boundary

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 340 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 22b: Q3 2021 Summary of Tetrahydrofuran Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

C:\Boston\Gis\MXD\Charles V.A\West Lake\Westlake_report\Westlake_MXD\XXX2022_01_Report\Updates\THF\THFplanview_Q3 2021_THF_20220225.mxd - Joseph Hakim - 2/28/2022

NORTH

SOUTH

D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 | PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

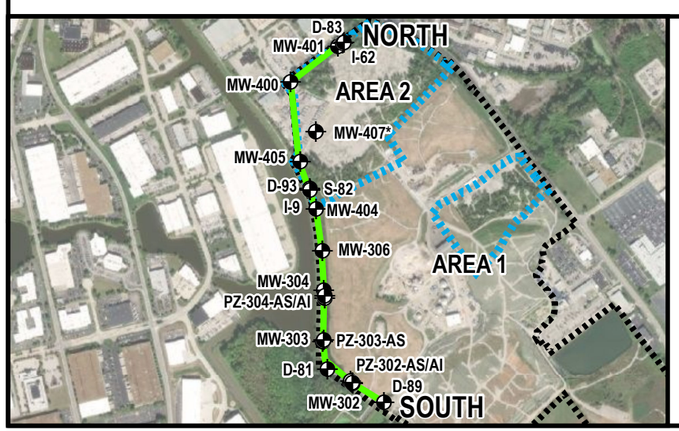
Elevation (ft. amsl) 5X Vertical Exaggeration

470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

<20.0 <20.0 <20.0 <20.0 65.4 | <20.0 <20.0 11.2J 16.5J 72.8 | NS NS NS | 8.60J 33.3 20.5 | 26.8 32.4 27.8 | NS NS NS NS NS | 38.0 33.7 84.3 | 81.7J 36.0J+ 45.8 <20.0 372 | 50.8J 14.7J 109 | <20.0 | 5.70J 2.50J 1,300 | 535

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated
J+ = Estimated, may be biased high

Total Tetrahydrofuran Concentration (ug/L)

- >680
- 340-680
- 100-340
- 20-100
- Concentration Estimated Below RL (20.0 ug/L)
- Tetrahydrofuran Not Detected

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA RSL of 340 ug/L

- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 23a: Q2 2021 Summary of Tetrahydrofuran Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

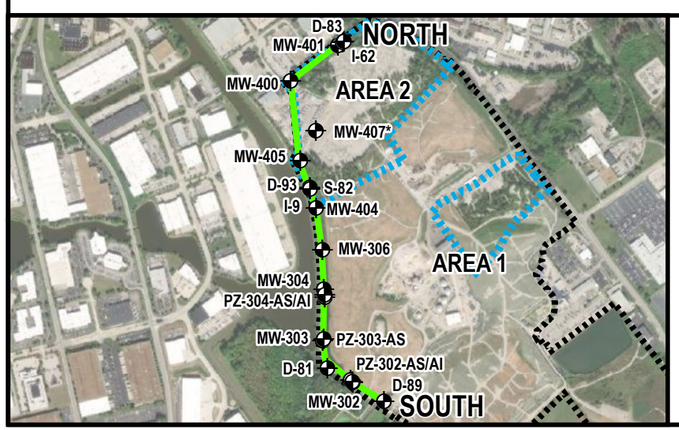
470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

D-83 I-62 | MW-401 | MW-400 | MW-407* | MW-405 | I-9 D-93 S-82 | MW-404 | MW-306 | MW-304 | PZ-304-AI PZ-304-AS | PZ-303-AS MW-303 | D-81 | PZ-302-AI PZ-302-AS MW-302 | D-89

<20.0
<20.0
<20.0
<20.0
<20.0
7.60J
8.90J
8.10J
137
<20.0
13.0J
10.2J
<20.0
21.9
13.7J
29.4
29.7
27.1
23.9
22.5
26.0
NS
NS
30.8
24.9
86.2
59.4
39.4
42.8
21.1
1,030
40.1
7.00J
53.8
<20.0
<20.0
<20.0
655
496

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Tetrahydrofuran Concentration (ug/L)

- >680
- 340-680
- 100-340
- 20-100
- Concentration Estimated Below RL (20.0 ug/L)
- Tetrahydrofuran Not Detected

- Alluvium
- St. Louis
- Salem
- Shoal
- Warsaw

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- A thick gray border on a sample indicates exceedance of USEPA RSL of 340 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 23b: Q3 2021 Summary of Tetrahydrofuran Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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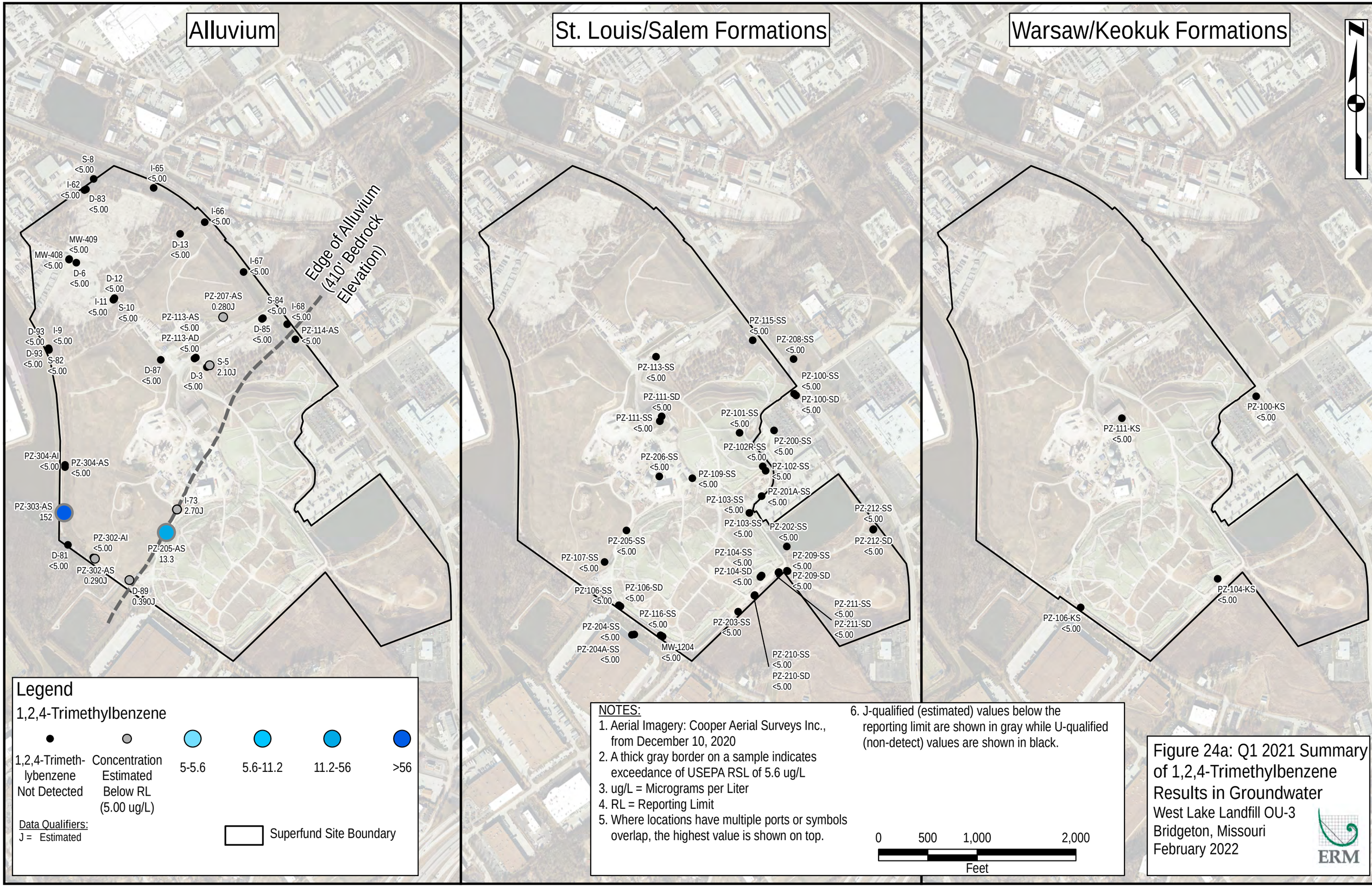

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

Figure 24a: Q1 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Alluvium

MW-400-P1 <5.00
MW-400-P2 <5.00
MW-400-P3 <5.00
MW-401-P1 <5.00
MW-401-P2 <5.00
MW-401-P3 <5.00
S-8 <5.00
I-62 <5.00
D-83 <5.00
I-65 <5.00
I-66 <5.00
D-13 <5.00
MW-409 <5.00
MW-408 <5.00
D-6 <5.00
D-12 <5.00
I-67 <5.00
MW-405-P1 <5.00
MW-405-P2 <5.00
MW-405-P3 <5.00
S-10 <5.00
I-11 <5.00
PZ-207-AS <5.00
S-84 <5.00
I-68 <5.00
PZ-113-AS <5.00
PZ-113-AD <5.00
MW-117 <5.00
D-85 <5.00
PZ-114-AS <5.00
I-9 <5.00
S-82 <5.00
D-93 <5.00
D-87 <5.00
S-5 1.70J
D-3 <5.00
MW-118 <5.00
MW-306-P1 <5.00
MW-306-P2 <5.00
MW-306-P3 <5.00
MW-111-P1 <5.00
MW-111-P2 <5.00
MW-111-P3 <5.00
MW-304-P1 <5.00
PZ-304-AS <25.0
PZ-304-AI <5.00
I-73 2.30J
MW-303-P1 <5.00
MW-303-P2 <5.00
PZ-303-AS 135
PZ-205-AS 10.9J
PZ-302-AS <5.00
PZ-302-AI <5.00
D-81 <5.00
MW-302 0.420J
D-89 0.390J
MW-505-P1 <5.00
MW-505-P2 <5.00
MW-505-P3 <5.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <5.00
PZ-115-SS <5.00
PZ-208-SS <5.00
PZ-113-SS <5.00
PZ-100-SS <5.00
PZ-111-SD <5.00
PZ-100-SD <5.00
PZ-111-SS <5.00
PZ-101-SS <5.00
PZ-200-SS <5.00
MW-304-P2 <5.00
PZ-102R-SS <5.00
PZ-206-SS <5.00
PZ-102-SS <5.00
PZ-109-SS <5.00
PZ-201A-SS <5.00
PZ-103-SS <25.0
PZ-205-SS <5.00
PZ-212-SS <5.00
PZ-202-SS <5.00
PZ-212-SD <5.00
PZ-107-SS <5.00
MW-205 <25.0
PZ-104-SS <5.00
PZ-209-SS <5.00
PZ-104-SD <5.00
PZ-209-SD <5.00
PZ-106-SS <5.00
PZ-106-SD <5.00
MO-1-SDR <5.00
PZ-211-SS <5.00
PZ-116-SS <5.00
PZ-203-SS <5.00
PZ-211-SD <5.00
PZ-204-SS <5.00
PZ-204A-SS <5.00
MO-3-SS <5.00
MW-1204 <5.00
PZ-105-SS <5.00
PZ-210-SS <5.00
MO-3-SDR <5.00
PZ-210-SD <5.00

Warsaw/Keokuk Formations

MW-400-P5 <5.00
PZ-100-KS <5.00
PZ-111-KS <5.00
MW-304-P3 <5.00
PZ-104-KS <5.00
PZ-106-KS <5.00

N

Legend

1,2,4-Trimethylbenzene

1,2,4-Trimethylbenzene Not Detected	Concentration Estimated Below RL (5.00 ug/L)	5-5.6	5.6-11.2	11.2-56	>56

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. Lowest reporting limit is shown, some samples may have elevatedd etection limits due to dilution.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 24b: Q2 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Q:\Boston\gis\mxd\WWW\Events_V_Z\WestLakes\WestLakeLandfill_MXD\Q2022_OU_Report\posters\CHLNSTYW\Fenwick_Q2_2021_124trimethylbenzene_20220225.mxd - Joseph.Hazen - 2/25/2022 8:43:31 AM

Alluvium

MW-400-P1 <5.00
MW-400-P2 <5.00
MW-400-P3 <5.00
MW-401-P1 <5.00
MW-401-P2 <5.00
MW-401-P3 <5.00
S-8 <5.00
I-62 <5.00
D-83 <5.00
I-65 <5.00
I-66 <5.00
MW-407R-P1 <5.00
MW-407R-P2 <5.00
MW-407R-P3 <5.00
D-13 <5.00
MW-409 <5.00
D-6 <5.00
MW-408 <5.00
I-67 <5.00
MW-213-P1 <5.00
MW-213-P2 <5.00
Edge of Alluvium (410' Bedrock Elevation)
MW-405-P1 <5.00
MW-405-P2 <5.00
MW-405-P3 <5.00
D-12 <5.00
S-10 <5.00
I-11 <5.00
PZ-207-AS <5.00
D-85 <5.00
S-84 <5.00
I-68 <5.00
PZ-113-AS <5.00
PZ-113-AD <5.00
MW-117 <5.00
PZ-114-AS <5.00
S-82 <5.00
I-9 <5.00
D-93 <5.00
MW-404-P1 <5.00
MW-404-P2 <5.00
MW-404-P3 <5.00
D-87 <5.00
S-5 2.80J
D-3 <5.00
MW-112-P1 <5.00
MW-112-P2 <5.00
MW-112-P3 <5.00
MW-118 <5.00
MW-111-P1 <5.00
MW-111-P2 <5.00
MW-111-P3 <5.00
MW-306-P1 <5.00
MW-306-P2 <5.00
MW-306-P3 <5.00
MW-304-P1 <5.00
PZ-304-AS <5.00
PZ-304-AI <5.00
I-73 2.30J
MW-303-P1 <5.00
PZ-303-AS 137
MW-303-P2 <5.00
PZ-302-AS <5.00
PZ-302-AI <5.00
PZ-205-AS 12.8
D-81 <5.00
MW-302 <5.00
D-89 0.420J
MW-505-P1 <5.00
MW-505-P2 <5.00
MW-505-P3 <5.00

St. Louis/Salem Formations

MW-400-P4 <5.00
MW-304-P2 <5.00
MW-113 <5.00
PZ-113-SS <5.00
PZ-115-SS <5.00
PZ-208-SS <5.00
PZ-100-SS <5.00
PZ-100-SD <5.00
PZ-111-SD <5.00
PZ-111-SS <5.00
PZ-101-SS <5.00
PZ-200-SS <5.00
PZ-102R-SS <5.00
PZ-109-SS <5.00
PZ-102-SS <5.00
PZ-206-SS <5.00
PZ-201A-SS <5.00
PZ-205-SS <5.00
PZ-103-SS <5.00
PZ-212-SS <5.00
PZ-212-SD <5.00
MW-205 3.30J
PZ-202-SS <5.00
PZ-107-SS <5.00
PZ-104-SS <5.00
PZ-104-SD <5.00
PZ-209-SS <5.00
PZ-209-SD <5.00
PZ-106-SS <5.00
PZ-106-SD <5.00
MO-1-SDR <5.00
PZ-211-SS <5.00
PZ-211-SD <5.00
PZ-204-SS <5.00
PZ-116-SS <5.00
PZ-203-SS <5.00
PZ-204A-SS <5.00
MO-3-SS <5.00
MW-1204 <5.00
PZ-105-SS <5.00
PZ-210-SS <5.00
MO-3-SDR <5.00
PZ-210-SD <5.00

Warsaw/Keokuk Formations

MW-400-P5 <5.00
PZ-100-KS <5.00
PZ-111-KS <5.00
MW-304-P3 <5.00
PZ-104-KS <5.00
PZ-106-KS <5.00

N

Legend

1,2,4-Trimethylbenzene

1,2,4-Trimethylbenzene Not Detected	Concentration Estimated Below RL (5.00 ug/L)	5-5.6	5.6-11.2	11.2-56	>56

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L
3. ug/L = Micrograms per Liter
4. RL = Reporting Limit
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 24c: Q3 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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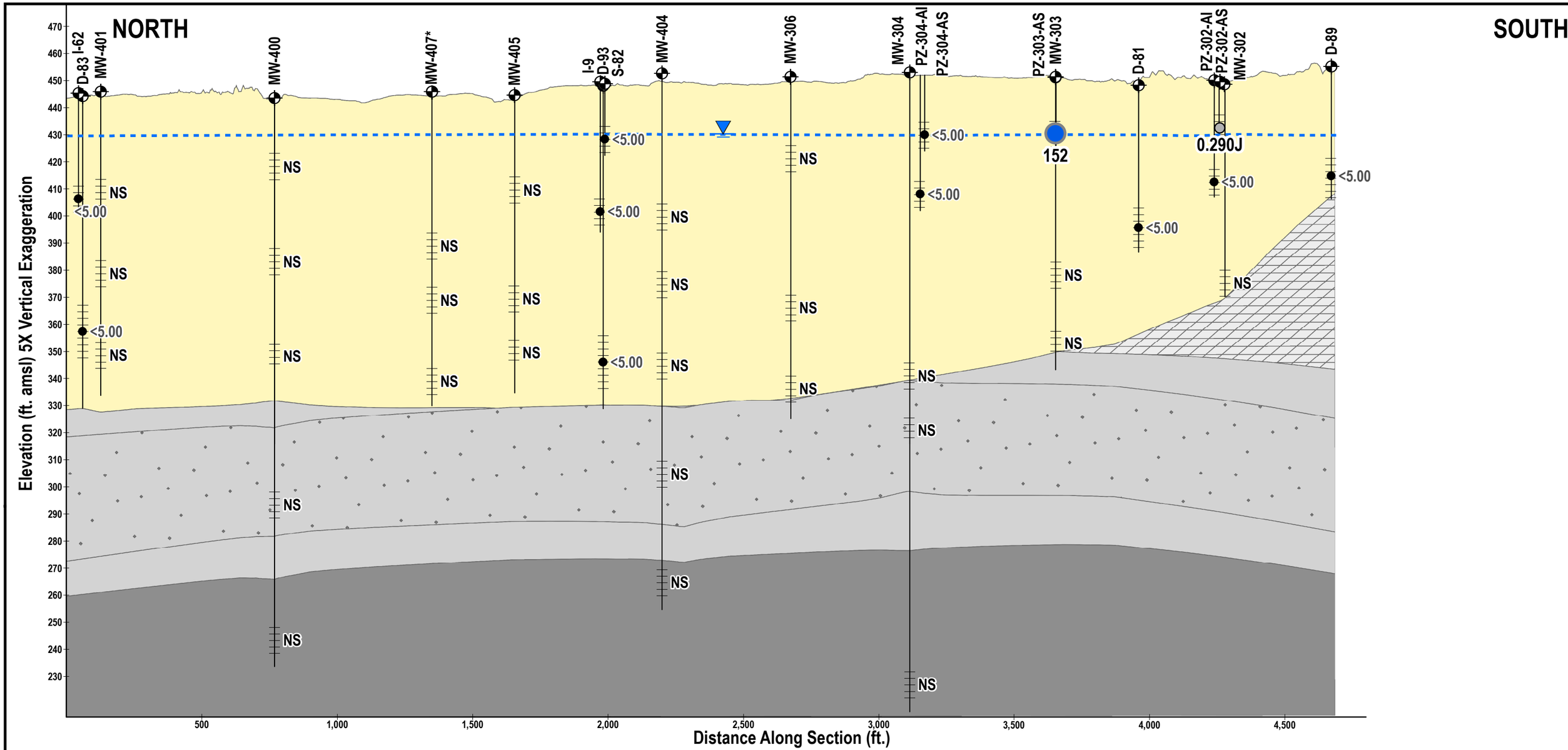
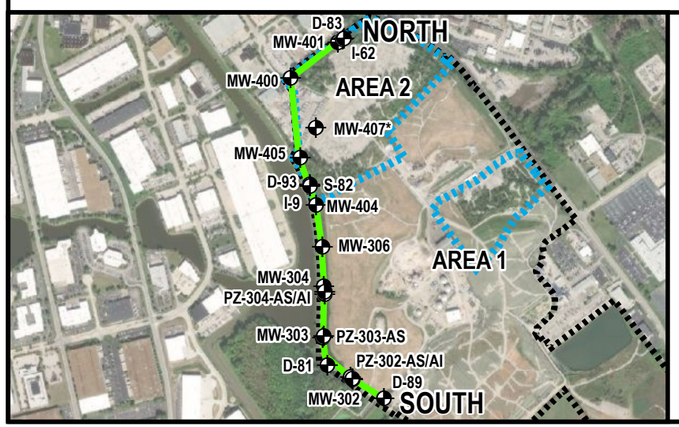




Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,2,4-Trimethylbenzene Concentration (ug/L)

- >56
- 11.2-56
- 5.6-11.2
- 5-5.6
- Concentration Estimated Below RL (5.00 ug/L)
- 1,2,4-Trimethylbenzene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

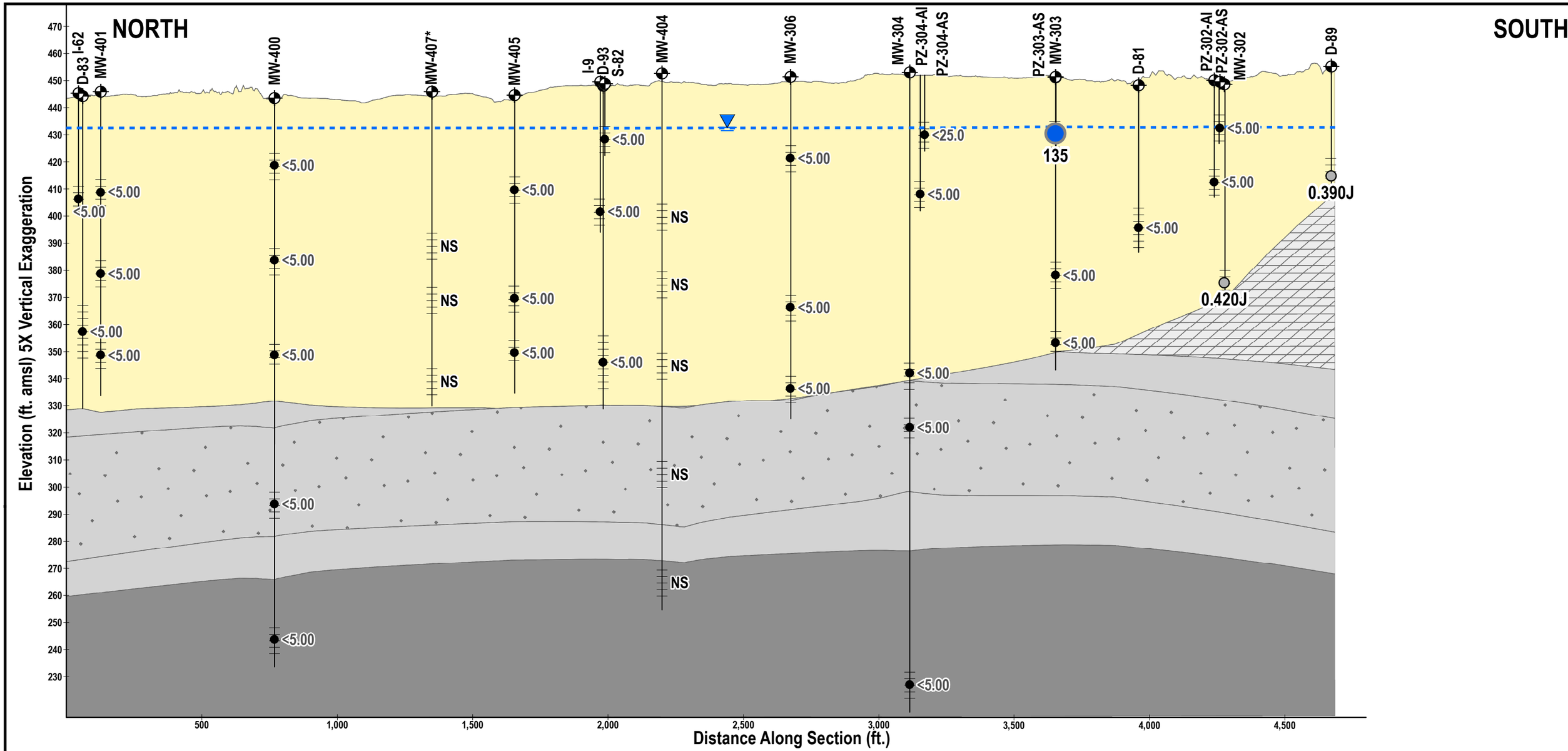
NOTES:
* - Well does not lie along transect. Its location is projected onto the transect. A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L

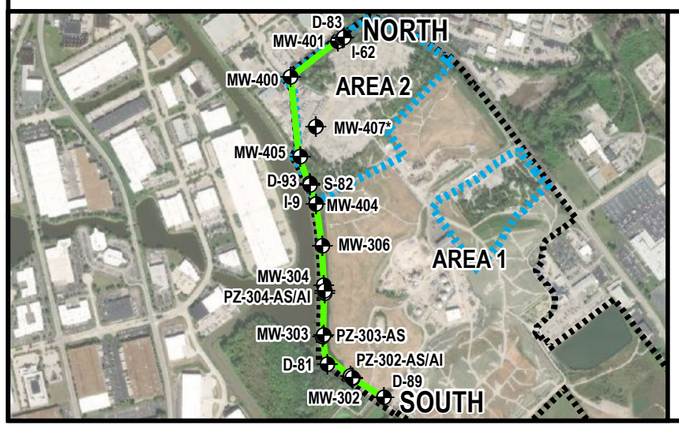
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 25a: Q1 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,2,4-Trimethylbenzene Concentration (ug/L)

- >56
- 11.2-56
- 5.6-11.2
- 5-5.6
- Concentration Estimated Below RL (5.00 ug/L)
- 1,2,4-Trimethylbenzene Not Detected

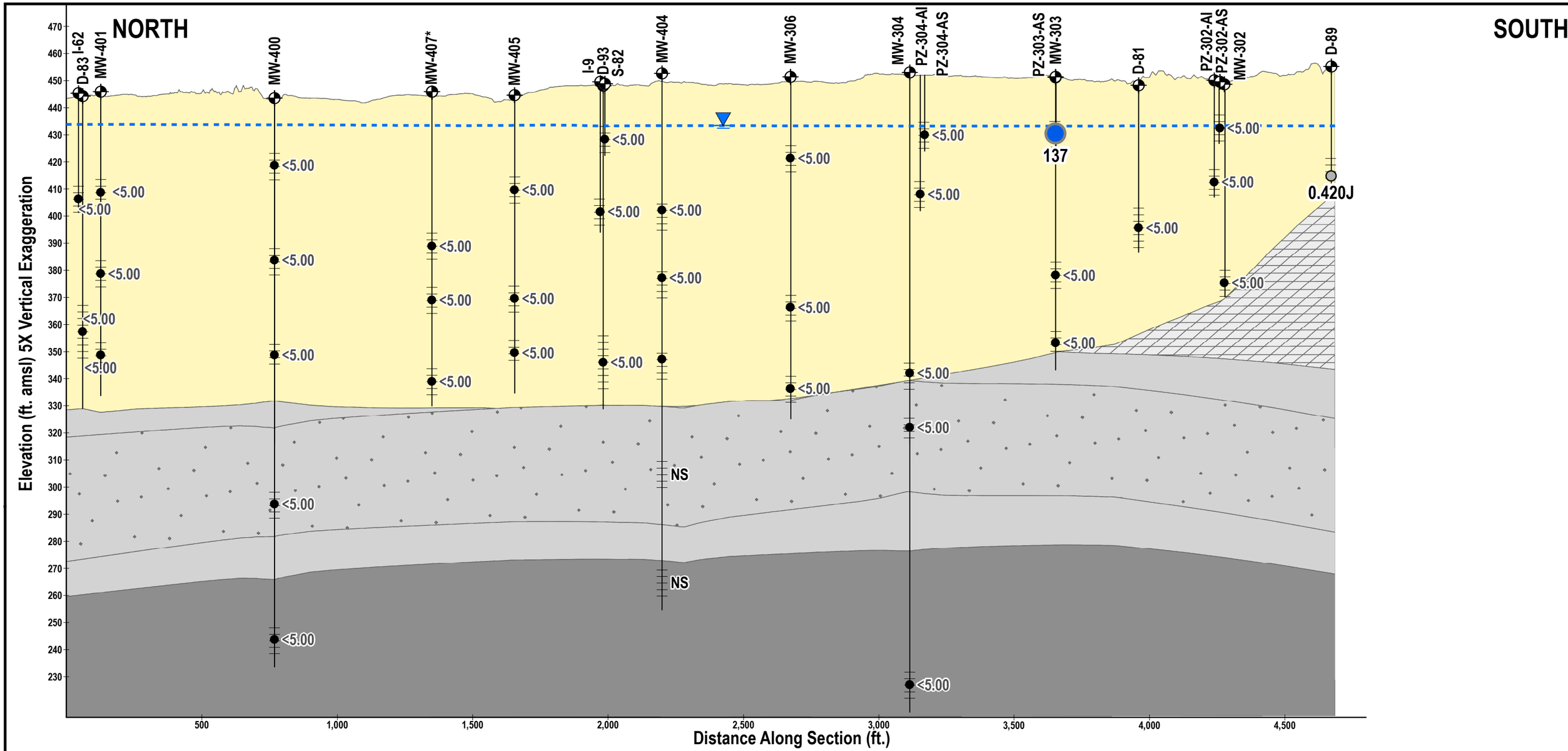
- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

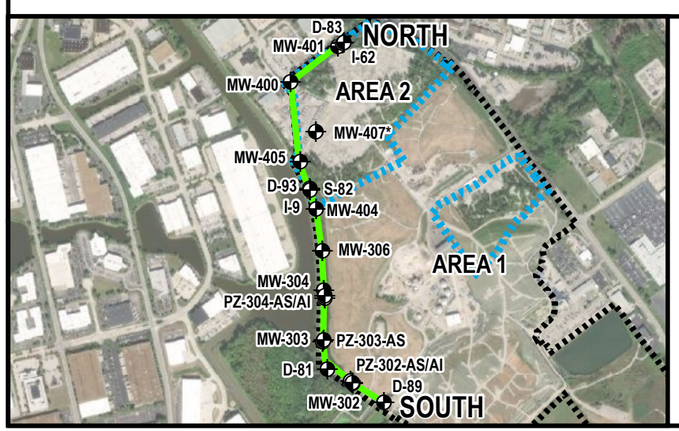
NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L
- Lowest reporting limit is shown, some samples may have elevated detection-limits due to dilution.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 25b: Q2 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total 1,2,4-Trimethylbenzene Concentration (ug/L)

- >56
- 11.2-56
- 5.6-11.2
- 5-5.6
- Concentration Estimated Below RL (5.00 ug/L)
- 1,2,4-Trimethylbenzene Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect. A thick gray border on a sample indicates exceedance of USEPA RSL of 5.6 ug/L

- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 25c: Q3 2021 Summary of 1,2,4-Trimethylbenzene Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Alluvium

S-8 2.40
I-62 0.280J
D-83 0.0210J
I-65 1.90
I-66 4.50
D-13 0.0680J
MW-408 0.270J
MW-409 1.00
D-6 0.220J
I-67 1.90
D-12 0.280J
S-10 0.130J
PZ-207-AS 0.0130J
S-84 0.0160J
PZ-113-AS 1.80
PZ-113-AD 0.120J
D-85 0.220J
I-68 2.70
PZ-114-AS <1.00
S-82 2.10
D-93 0.310J
I-9 0.150J
S-5 0.130J
D-87 0.210J
D-3 0.140J
PZ-304-AS 0.0130J
PZ-304-AI 0.270J
PZ-303-AS 0.0180J
I-73 <1.00
D-81 3.70
PZ-205-AS 0.0710J
PZ-302-AS 0.550J
PZ-302-AI 11.6
D-89 0.140J

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

PZ-115-SS 4.20
PZ-208-SS 2.70
PZ-113-SS 1.10
PZ-100-SS 3.40
PZ-100-SD 0.960J
PZ-111-SD 0.490J
PZ-101-SS 0.140J
PZ-111-SS 0.450J
PZ-200-SS 0.710J
PZ-109-SS 0.450J
PZ-102R-SS 1.90
PZ-102-SS 0.140J
PZ-206-SS 0.210J
PZ-201A-SS 3.80
PZ-103-SS 0.120J
PZ-212-SS 0.820J
PZ-202-SS 0.0990J
PZ-205-SS 0.800J
PZ-212-SD 4.40
PZ-107-SS 0.430J
PZ-104-SS 1.40
PZ-209-SS 0.610J
PZ-104-SD 0.120J
PZ-209-SD 5.10
PZ-106-SS 0.350J
PZ-106-SD 0.0760J
PZ-211-SS 1.00
PZ-116-SS 2.80
PZ-203-SS 0.660J
PZ-211-SD 2.90
PZ-204-SS 2.40
PZ-204A-SS 4.20
MW-1204 <1.00
PZ-105-SS 1.40
PZ-210-SS 0.0680J
PZ-210-SD 0.890J

Warsaw/Keokuk Formations

PZ-100-KS 0.0820J
PZ-111-KS 6.00
PZ-104-KS 0.290J
PZ-106-KS 1.40

N

Legend

Uranium Concentration (ug/L)

- Uranium Not Detected
- Concentration Estimated Below RL (1.00 ug/L)
- 1-4
- 4-40
- >40

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 30 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 26a: Q1 2021 Summary of Uranium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\ussclsvgermfs01\Projects\West Lake\West Lake Landfill_MXD\2022_01_Report\posters\PCE_NSH\Fig26a_Q1_2021_Uranium_20220201.mxd - Joseph Hogan - 2/25/2022

Alluvium

MW-401-P1 0.240J
MW-401-P2 0.0210J
MW-401-P3 0.0220J
MW-400-P1 0.680J
MW-400-P2 0.0220J
MW-400-P3 0.0360J
S-8 2.20
D-83 0.0250J
I-62 0.320J
I-65 2.10
I-66 4.70
D-13 0.0650J
I-67 1.90
MW-409 1.30
MW-405-P1 3.50
D-6 0.210J
MW-405-P2 0.0610J
MW-408 0.0930J
D-12 0.240J
MW-405-P3 0.380J
S-10 0.210J
I-11 1.10
PZ-207-AS 0.0170J
S-84 0.0190J
PZ-113-AS 1.80
D-85 0.200J
I-68 3.00
PZ-113-AD 0.110J
PZ-114-AS 0.0160J
I-9 0.150J
S-82 3.00
D-93 0.280J
D-87 0.200J
MW-117 0.0970J
S-5 <1.00
D-3 0.120J
MW-306-P1 0.390J
MW-306-P2 0.230J
MW-306-P3 0.120J
MW-118 1.60
MW-111-P1 2.60
MW-111-P2 0.880J
MW-111-P3 1.10
PZ-304-AS <1.00
MW-304-P1 0.140J
PZ-304-AI 0.360J
I-73 <1.00
PZ-303-AS 0.0300J
MW-303-P1 0.0700J
MW-303-P2 0.0570J
PZ-302-AS 6.90
PZ-302-AI 10.5
PZ-205-AS 0.0360J
D-81 3.20
D-89 0.110J
MW-302 0.0700J
MW-505-P1 0.730J
MW-505-P2 1.70
MW-505-P3 2.70

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 0.300J
PZ-115-SS 4.40
PZ-208-SS 2.70
PZ-113-SS 1.10
PZ-100-SS 3.20
PZ-100-SD 0.810J
PZ-111-SD 0.590J
PZ-101-SS 0.0960J
PZ-111-SS 0.360J
PZ-200-SS 0.610J
PZ-102-SS 0.120J
MW-304-P2 0.140J
PZ-109-SS 0.350J
PZ-206-SS 0.0720J
PZ-102R-SS 2.20
PZ-201A-SS 3.80
PZ-212-SS 0.620J
PZ-212-SD 4.80
PZ-103-SS 0.0860J
PZ-205-SS 1.50
MW-205 3.90
PZ-202-SS 0.0960J
PZ-104-SS 1.60
PZ-107-SS 0.420J
PZ-104-SD 0.0770J
PZ-209-SS 0.730J
PZ-209-SD 3.80
PZ-106-SS 0.320J
PZ-203-SS 0.630J
PZ-106-SD 0.120J
MO-3-SDR 1.90
MW-1204 <1.00
MO-1-SDR 5.90
PZ-211-SS 1.00
MO-3-SS 3.90
PZ-211-SD 2.20
PZ-204A-SS 3.30
PZ-116-SS 2.70
PZ-105-SS 1.50J
PZ-210-SS 0.0630J
PZ-204-SS 2.30
PZ-210-SD 0.960J

Warsaw/Keokuk Formations

MW-400-P5 0.310J
PZ-100-KS 0.0780J
PZ-111-KS 6.30
MW-304-P3 0.370J
PZ-104-KS 0.280J
PZ-106-KS 1.30

N

Legend

Uranium Concentration (ug/L)

- Uranium Not Detected
- Concentration Estimated Below RL (1.00 ug/L)
- 1-4
- 4-40
- >40

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

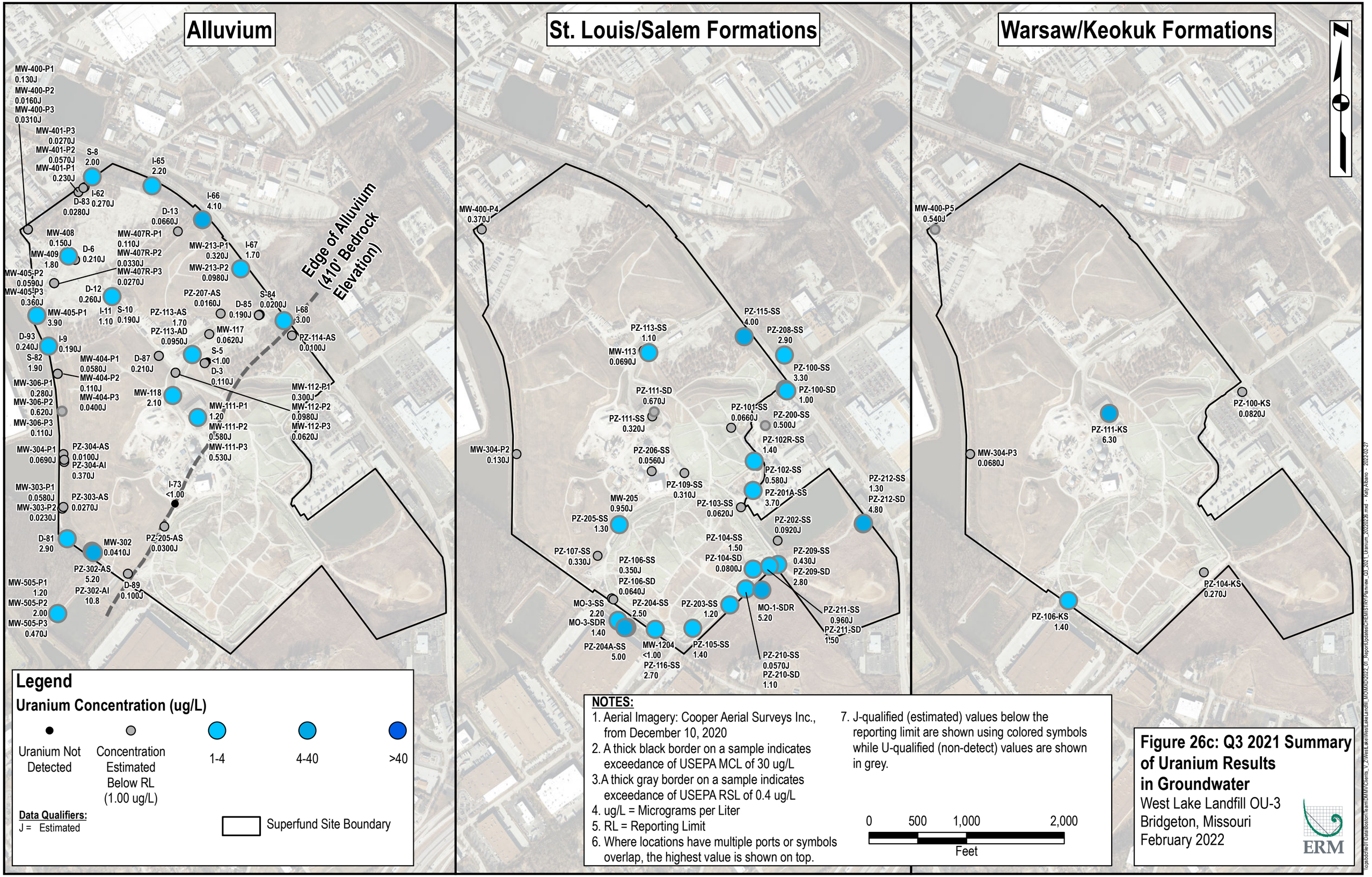
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 30 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.

0 500 1,000 2,000
Feet

Figure 26b: Q2 2021 Summary of Uranium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\orgbcefile01\data\Boston\Team\MW\Clients_V_Z\WestLake\WestLakeLandfill_LMO\MXD\2022\Q1_Report\Update\CHEMISTRY\Panview_Q2_2021_Uranium_20220225.mxd - Katy.Abreo - 2022/02/25



Legend

Uranium Concentration (ug/L)

Uranium Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-4	4-40	>40

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 30 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.

0 500 1,000 2,000
Feet

Figure 26c: Q3 2021 Summary of Uranium Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

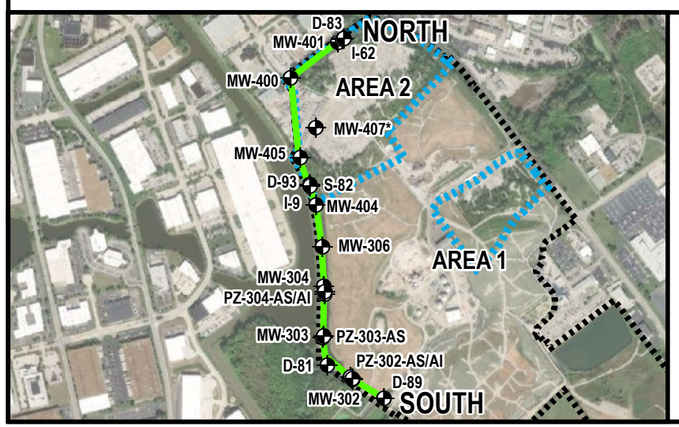
470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230

D-83 I-62
MW-401
MW-400
MW-407*
MW-405
I-9 D-93 S-82
MW-404
MW-306
MW-304
PZ-304-AI
PZ-304-AS
PZ-303-AS MW-303
D-81
PZ-302-AI PZ-302-AS MW-302
D-89

NS
0.280J
0.0210J
2.10
0.150J
0.310J
0.0130J
0.270J
0.0180J
0.550J
11.6
3.70
0.140J

500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Uranium Concentration (ug/L)

- >40
- 4-40
- 1-4
- Concentration Estimated Below RL (1.00 ug/L)
- Uranium Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA MCL of 30 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 27a: Q1 2021 Summary of Uranium Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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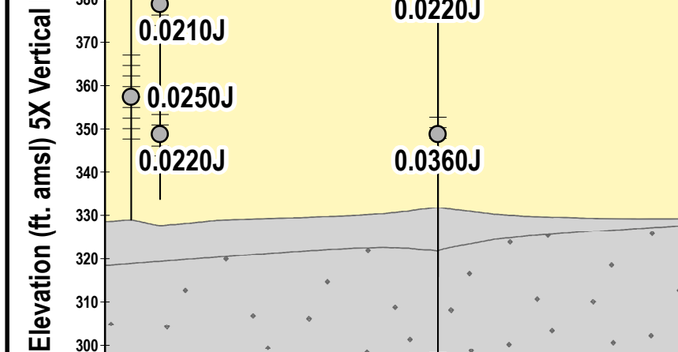
NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Uranium Concentration (ug/L)

- >40
- 4-40
- 1-4
- Concentration Estimated Below RL (1.00 ug/L)
- Uranium Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA MCL of 30 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 27b: Q2 2021 Summary of Uranium Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

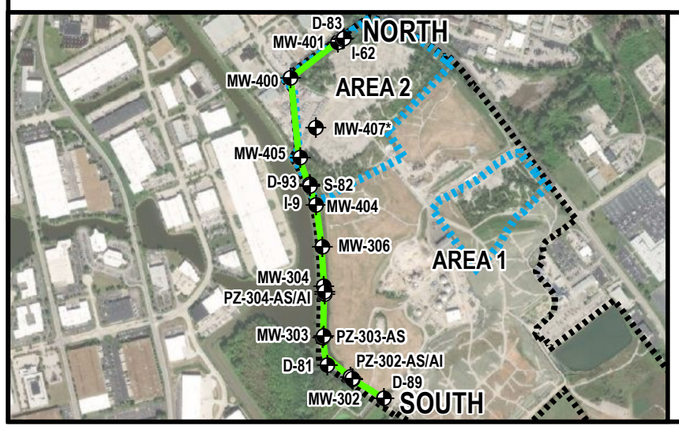
470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

0.230J
0.270J
0.0570J
0.0280J
0.0270J
0.130J
0.0160J
0.0310J
0.370J
0.540J
0.110J
0.0330J
0.0270J
3.90
0.0590J
0.360J
1.90
0.190J
0.240J
0.0580J
0.110J
0.0400J
NS
NS
0.280J
0.620J
0.110J
0.0680J
0.0100J
0.370J
0.0690J
0.130J
0.0270J
0.0580J
0.0230J
2.90
5.20
10.8
0.0410J
0.100J

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Uranium Concentration (ug/L)

- >40
- 4-40
- 1-4
- Concentration Estimated Below RL (1.00 ug/L)
- Uranium Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.
- A thick gray border on a sample indicates exceedance of USEPA MCL of 30 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.4 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 27c: Q3 2021 Summary of Uranium Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

G:\Boston\em\MWV\Clients_V_Z\WestLake\WestLakeLandfill_MOWXD\2022_01_Report\Updates\CHEMISTRY\XS\ecrossSection_CSZ_Uranium_2021Q3_20220223.mxd - Joseph.Hakam - 2/24/2022

Alluvium

S-8 <1.00
I-65 <1.00
I-62 <1.00
D-83 <1.00
I-66 <1.00
D-13 <1.00
MW-409 <1.00
MW-408 <1.00
D-6 <1.00
D-12 <1.00
I-67 <1.00
Edge of Alluvium (410' Bedrock Elevation)
S-10 <1.00
I-11 <1.00
PZ-207-AS <1.00
S-84 <1.00
I-68 <1.00
PZ-113-AS <1.00
PZ-113-AD <1.00
D-85 <1.00
PZ-114-AS <1.00
I-9 <1.00
D-93 0.880J
S-82 <1.00
D-87 <1.00
S-5 <1.00
D-3 <1.00
PZ-304-AS <1.00
PZ-304-AI <1.00
PZ-303-AS 0.790J
I-73 <1.00
I-73 <1.00
D-81 <1.00
PZ-302-AI <1.00
PZ-205-AS <1.00
PZ-302-AS <1.00
D-89 <1.00

St. Louis/Salem Formations

PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-113-SS <1.00
PZ-100-SS <1.00
PZ-111-SD <1.00
PZ-100-SD <1.00
PZ-111-SS <1.00
PZ-101-SS <1.00
PZ-102R-SS <1.00
PZ-200-SS <1.00
PZ-109-SS <1.00
PZ-102-SS <1.00
PZ-206-SS <1.00
PZ-103-SS <1.00
PZ-201A-SS <1.00
PZ-212-SS <1.00
PZ-202-SS <1.00
PZ-212-SD <1.00
PZ-205-SS <1.00
PZ-107-SS <1.00
PZ-104-SS <1.00
PZ-209-SS <1.00
PZ-104-SD <1.00
PZ-209-SD <1.00
PZ-106-SS <1.00
PZ-106-SD <1.00
PZ-211-SS <1.00
PZ-116-SS <1.00
PZ-203-SS <1.00
PZ-211-SD <1.00
PZ-204-SS <1.00
PZ-204A-SS <1.00
MW-1204 <1.00
PZ-105-SS <1.00
PZ-210-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

PZ-100-KS <1.00
PZ-111-KS <1.00
PZ-104-KS <1.00
PZ-106-KS <1.00

Legend

Vinyl Chloride Concentration (ug/L)

- Vinyl Chloride Not Detected
- Concentration Estimated Below RL (1.00 ug/L)
- 1-2
- 2-4
- 4-20
- >20

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.

0 500 1,000 2,000
Feet

Figure 28a: Q1 2021 Summary of Vinyl Chloride Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\gbstsfp01\Data\Boston\Learn\MW\Clients_V_Z\West Lake Landfill_MOMO\0022_01_Report\Updates\FIGURES\Planview_Q1_2021_VC_20220301.mxd - Kelly.Albano - 2022/02/25

Alluvium

MW-400-P1 <1.00
MW-400-P2 <1.00
MW-400-P3 <1.00
MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
S-8 <1.00
I-65 <1.00
I-62 <1.00
D-83 <1.00
I-66 <1.00
MW-408 <1.00
MW-409 <1.00
D-6 <1.00
D-13 <1.00
MW-405-P1 <1.00
MW-405-P2 <1.00
MW-405-P3 1.10
I-67 <1.00
D-12 <1.00
I-11 <1.00
S-10 0.490J
PZ-207-AS <1.00
S-84 <1.00
I-68 <1.00
PZ-113-AS <1.00
PZ-113-AD <1.00
MW-117 <1.00
D-85 <1.00
PZ-114-AS <1.00
S-82 <1.00
D-93 1.60
I-9 <1.00
D-87 <1.00
S-5 <1.00
D-3 <1.00
MW-306-P1 <1.00
MW-306-P2 2.80
MW-306-P3 <1.00
MW-118 <1.00
MW-111-P1 <1.00
MW-111-P2 <1.00
MW-111-P3 <1.00
MW-304-P1 7.30
PZ-304-AS <5.00
PZ-304-AI <1.00
MW-303-P1 2.30
MW-303-P2 <1.00
PZ-303-AS <5.00
I-73 <5.00
PZ-302-AS <1.00
PZ-205-AS <5.00
D-81 <1.00
PZ-302-AI <1.00
MW-302 <1.00
D-89 <1.00
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-113-SS <1.00
PZ-100-SS <1.00
PZ-100-SD <1.00
PZ-111-SD <1.00
PZ-101-SS <1.00
PZ-111-SS <1.00
MW-304-P2 <1.00
PZ-200-SS <1.00
PZ-102R-SS <1.00
PZ-206-SS <1.00
PZ-102-SS <1.00
PZ-109-SS <1.00
PZ-103-SS <5.00
PZ-201A-SS <1.00
PZ-212-SD <1.00
MW-205 <5.00
PZ-205-SS <1.00
PZ-202-SS <1.00
PZ-212-SS <1.00
PZ-104-SS <1.00
PZ-104-SD <1.00
PZ-209-SS <1.00
PZ-107-SS <1.00
PZ-106-SS <1.00
PZ-209-SD <1.00
PZ-106-SD <1.00
MO-3-SS <1.00
MO-1-SDR <1.00
MW-1204 <1.00
PZ-203-SS <1.00
PZ-211-SS <1.00
MO-3-SDR <1.00
PZ-204A-SS <1.00
PZ-116-SS <1.00
PZ-105-SS <1.00
PZ-211-SD <1.00
PZ-210-SS <1.00
PZ-204-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

MW-400-P5 <1.00
PZ-100-KS <1.00
PZ-111-KS <1.00
MW-304-P3 0.830J
PZ-104-KS <1.00
PZ-106-KS <1.00

N

Legend

Vinyl Chloride Concentration (ug/L)

- Vinyl Chloride Not Detected
- Concentration Estimated Below RL (1.00 ug/L)
- 1-2
- 2-4
- 4-20
- >20

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.
8. Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution

0 500 1,000 2,000
Feet

Figure 28b: Q2 2021 Summary of Vinyl Chloride Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\ppsdcfile01\Data\Boston\Learn\MMV\Clients_V_Z\West Lake Landfill_MXD\MXD\2022_Q2_Report\Updates\GIS\MXD\Narrative_Q2_2021_VC_20220225.mxd - Katy.Adams - 2022/02/25

Alluvium

MW-401-P1 <1.00
MW-401-P2 <1.00
MW-401-P3 <1.00
MW-400-P1 <1.00
MW-400-P2 <1.00
MW-400-P3 <1.00
S-8 <1.00
I-65 <1.00
I-62 <1.00
D-83 <1.00
I-66 <1.00
MW-409 <1.00
MW-408 <1.00
D-6 <1.00
MW-407R-P1 <1.00
MW-407R-P2 <1.00
MW-407R-P3 <1.00
D-13 <1.00
I-67 <1.00
MW-213-P1 <1.00
MW-213-P2 <1.00
MW-405-P1 <1.00
MW-405-P2 <1.00
I-11 <1.00
D-12 <1.00
S-10 0.910J
S-84 <1.00
I-68 <1.00
MW-405-P3 1.10
PZ-207-AS <1.00
PZ-113-AS <1.00
PZ-113-AD <1.00
MW-117 <1.00
D-85 <1.00
PZ-114-AS <1.00
S-82 <1.00
I-9 <1.00
D-93 1.10
D-87 <1.00
S-5 <5.00
D-3 <1.00
MW-404-P1 <1.00
MW-404-P2 4.50
MW-404-P3 3.30
MW-118 <1.00
MW-112-P1 <1.00
MW-112-P2 <1.00
MW-112-P3 <1.00
MW-306-P1 0.450J
MW-306-P2 8.40
MW-306-P3 6.80
MW-111-P1 <1.00
MW-111-P2 <1.00
MW-111-P3 <1.00
MW-304-P1 9.70
PZ-304-AS <1.00
PZ-304-AI <1.00
I-73 <1.00
MW-303-P1 2.80
PZ-303-AS 1.10
MW-303-P2 <1.00
PZ-302-AS <1.00
PZ-205-AS <1.00
D-81 <1.00
PZ-302-AI <1.00
MW-302 <1.00
D-89 <1.00
MW-505-P1 <1.00
MW-505-P2 <1.00
MW-505-P3 <1.00

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <1.00
MW-113 <1.00
PZ-115-SS <1.00
PZ-208-SS <1.00
PZ-113-SS <1.00
PZ-100-SS <1.00
PZ-100-SD <1.00
PZ-111-SD <1.00
PZ-101-SS <1.00
PZ-200-SS <1.00
PZ-111-SS <1.00
PZ-102R-SS <1.00
MW-304-P2 2.00
PZ-206-SS <1.00
PZ-102-SS <1.00
PZ-109-SS <1.00
PZ-201A-SS <1.00
PZ-103-SS <1.00
PZ-212-SS <1.00
MW-205 <5.00
PZ-205-SS <1.00
PZ-212-SD <1.00
PZ-107-SS <1.00
PZ-202-SS <1.00
PZ-104-SS <1.00
PZ-209-SS <1.00
PZ-104-SD <1.00
PZ-106-SS <1.00
PZ-209-SD <1.00
PZ-106-SD <1.00
PZ-203-SS <1.00
MO-1-SDR <1.00
MO-3-SS <1.00
PZ-211-SS <1.00
MO-3-SDR <1.00
MW-1204 <1.00
PZ-211-SD <1.00
PZ-204A-SS <1.00
PZ-116-SS <1.00
PZ-105-SS <1.00
PZ-104-SD <1.00
PZ-210-SS <1.00
PZ-204-SS <1.00
PZ-210-SD <1.00

Warsaw/Keokuk Formations

MW-400-P5 <1.00
PZ-100-KS <1.00
PZ-111-KS <1.00
MW-304-P3 0.920J
PZ-104-KS <1.00
PZ-106-KS <1.00

Legend

Vinyl Chloride Concentration (ug/L)

Vinyl Chloride Not Detected	Concentration Estimated Below RL (1.00 ug/L)	1-2	2-4	4-20	>20

Data Qualifiers:
J = Estimated

Superfund Site Boundary

NOTES:

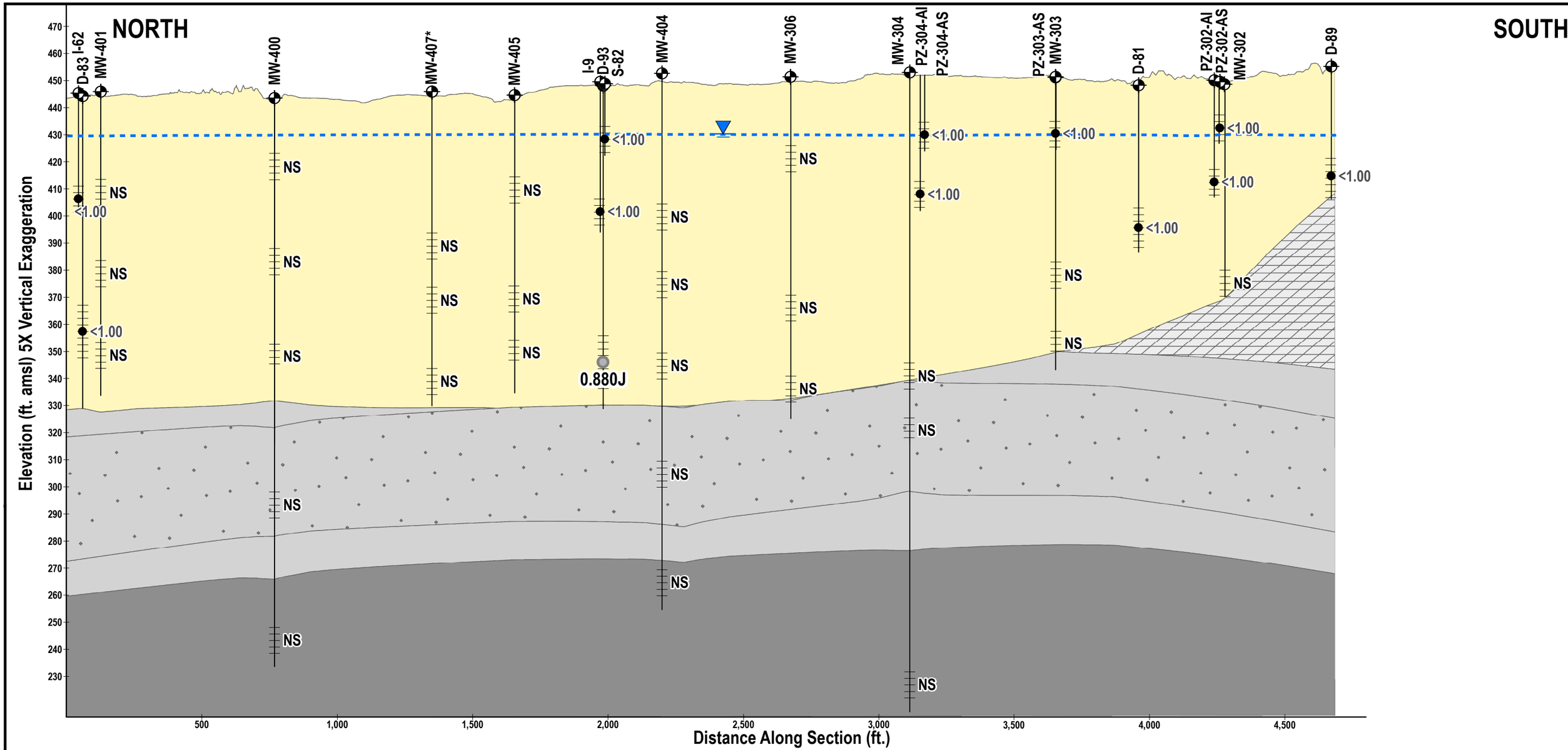
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
3. A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
4. ug/L = Micrograms per Liter
5. RL = Reporting Limit
6. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
7. J-qualified (estimated) values below the reporting limit are shown using colored symbols while U-qualified (non-detect) values are shown in grey.

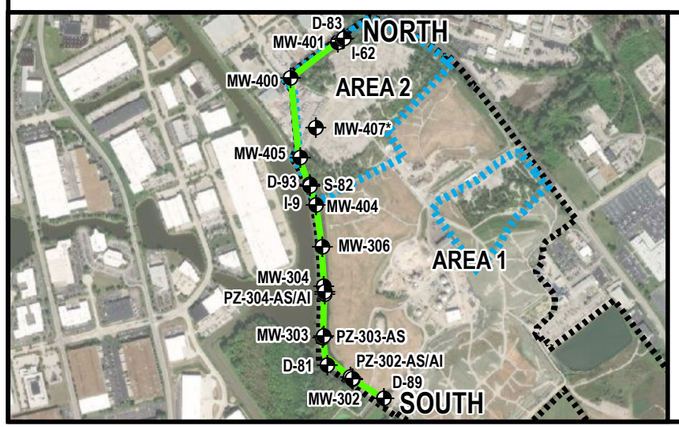
0 500 1,000 2,000
Feet

Figure 28c: Q3 2021 Summary of Vinyl Chloride Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

\\cpbsfdfe01\data$\boston\Team\MXM\Clients_V-Z\West Lake\WestLake Landfill_MXM\2022\2022_01_Report\Updates\ch\EHS\Rkt\Plan\ow_03_2021_1_VOC_20220225.mxd - ksty,Abano - 2022-02-25





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Vinyl Chloride Concentration (ug/L)

- >20
- 4-20
- 2-4
- 1-2
- Concentration Estimated Below RL (1.00 ug/L)
- Vinyl Chloride Not Detected

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

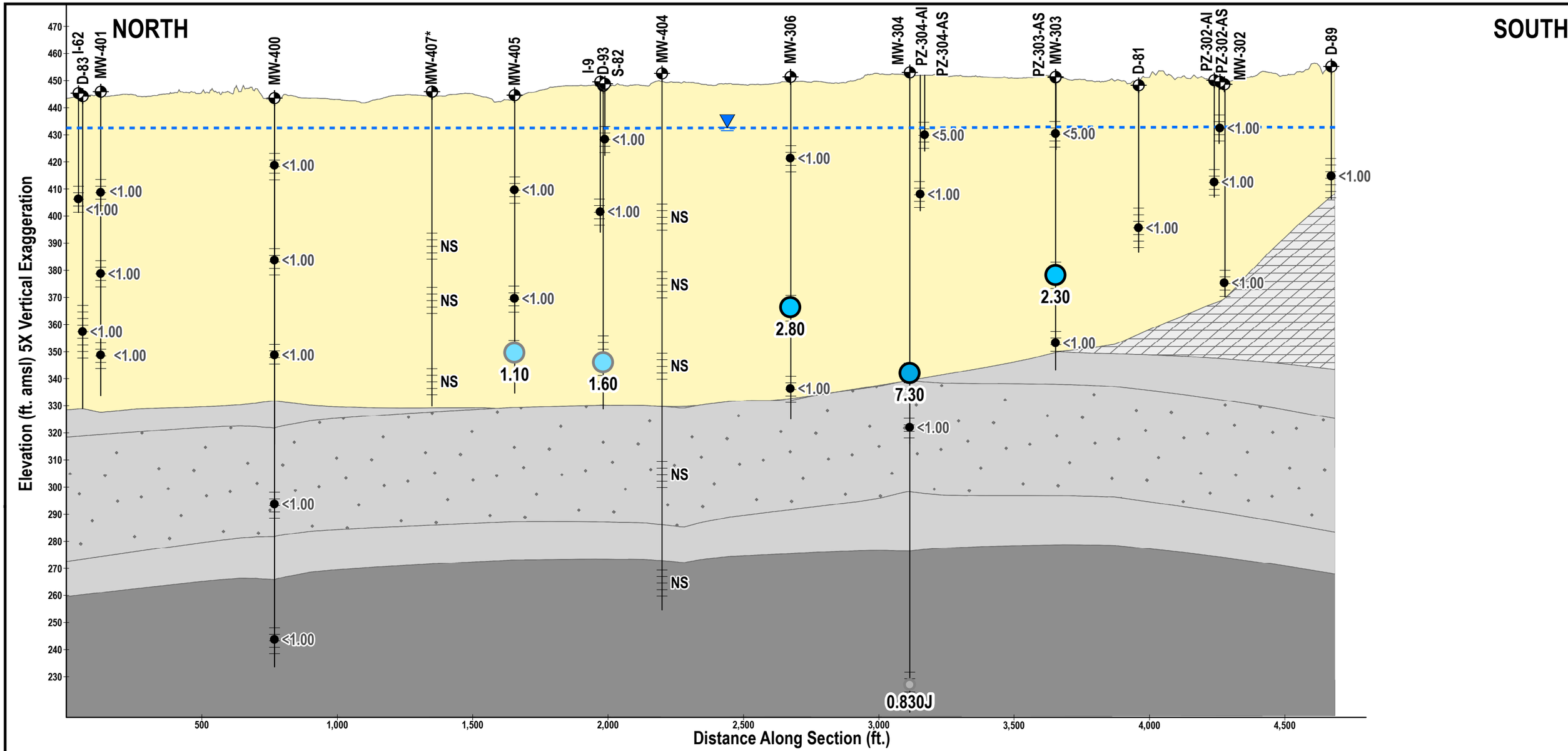
NOTES:

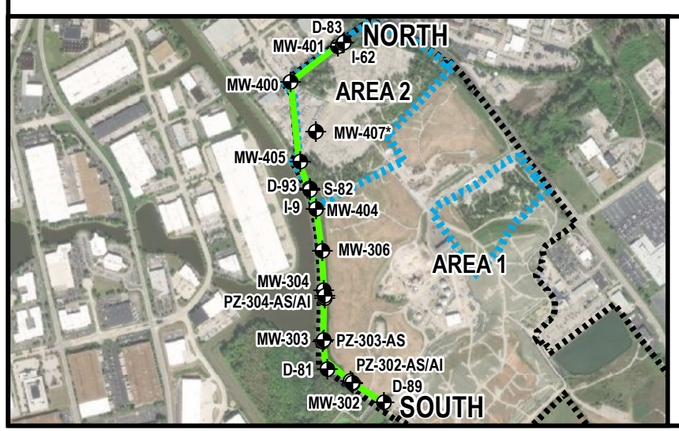
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 29a: Q1 2021 Summary of Vinyl Chloride Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Vinyl Chloride Concentration (ug/L)

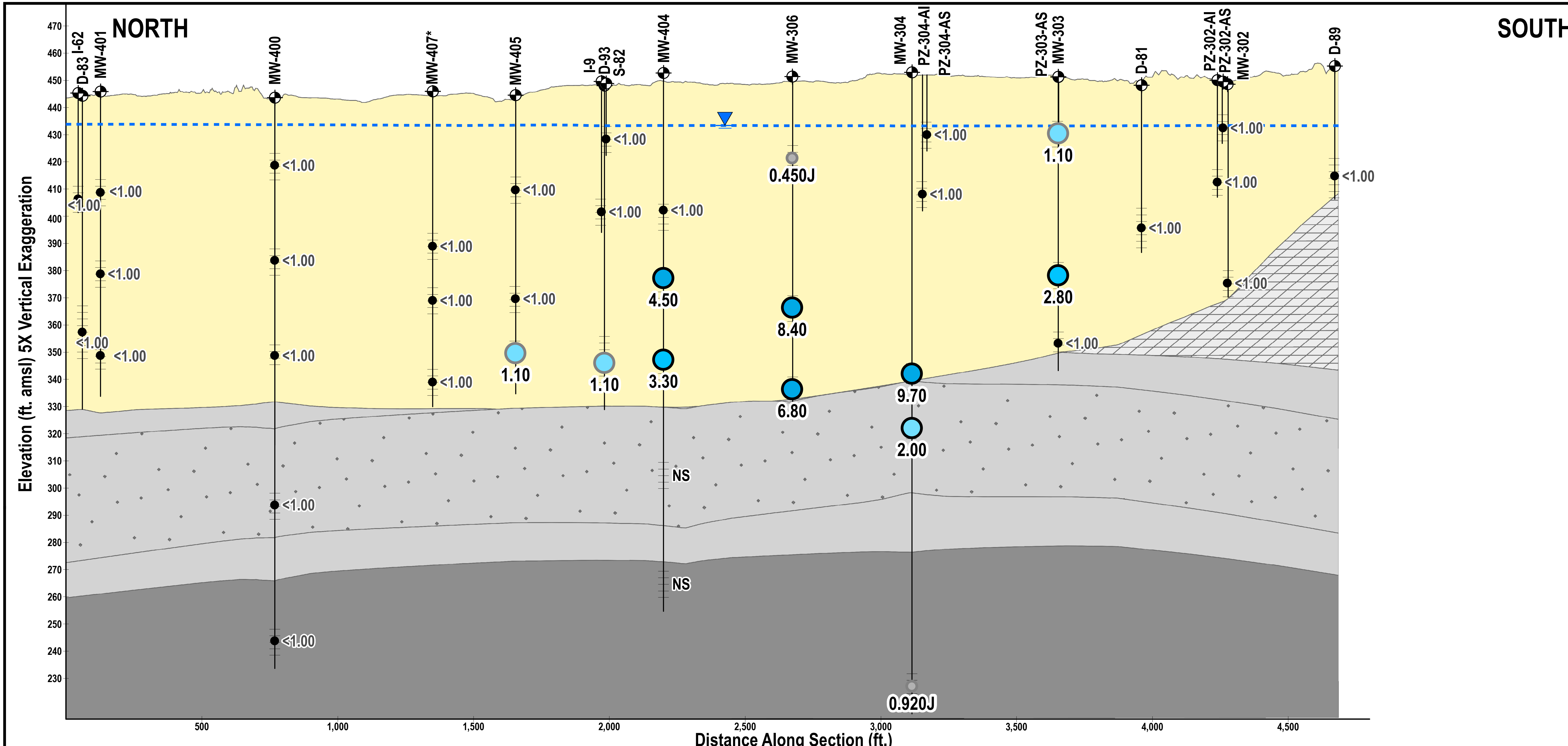
- >20
- 4-20
- 2-4
- 1-2
- Concentration Estimated Below RL (1.00 ug/L)
- Vinyl Chloride Not Detected

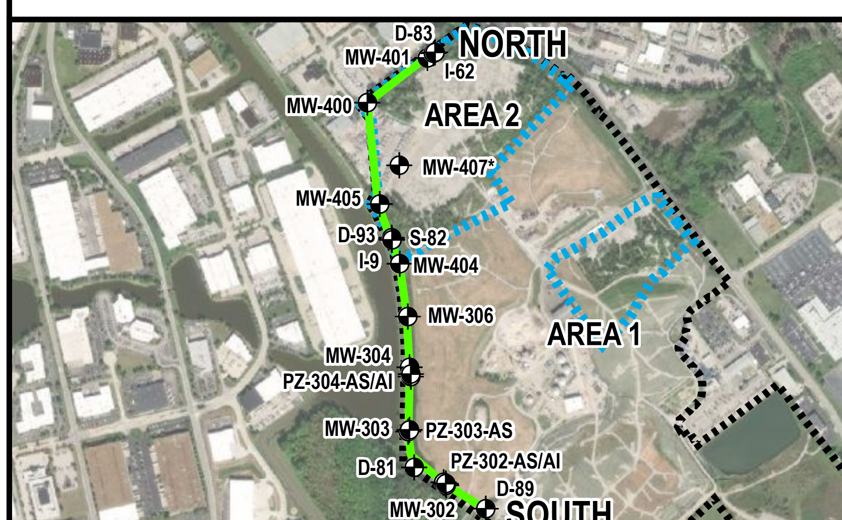
Alluvium
Shoal
St. Louis
Warsaw
Salem

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
- Lowest reporting limit is shown, some samples may have elevated detection limits due to dilution.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 29b: Q2 2021 Summary of Vinyl Chloride Results in Groundwater - Cross-Section
Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Data Qualifiers:
J = Estimated

Total Vinyl Chloride Concentration (ug/L)

- >20
- 4-20
- 2-4
- 1-2
- Concentration Estimated Below RL (1.00 ug/L)
- Vinyl Chloride Not Detected

- **Alluvium**
- **St. Louis**
- **Salem**
- **Shoal**
- **Warsaw**

NOTES:
* - Well does not lie along transect. Its location is projected onto the transect.
- A thick black border on a sample indicates exceedance of USEPA MCL of 2 ug/L
- A thick gray border on a sample indicates exceedance of USEPA RSL of 0.019 ug/L
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- ug/L = Micrograms per Liter
- RL = Reporting Limit
- J-qualified (estimated) values below the reporting limit are shown in gray while U-qualified (non-detect) values are shown in black.
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 29c: Q3 2021 Summary of Vinyl Chloride Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

S-8 <0.0440
I-65 <0.0530
I-62 <0.128
D-83 <0.111
I-66 <0.135
D-13 <0.0410
MW-409 <0.121
MW-408 <0.107
I-67 0.225
D-6 <0.0450
S-10 <0.110
I-11 <0.116
PZ-207-AS <0.0460
S-84 <0.0490
D-12 0.0480
PZ-113-AS <0.125
I-68 <0.119
I-9 <0.134
PZ-113-AD <0.136
D-85 0.138
PZ-114-AS <0.120
D-93 <0.139
D-87 <0.0420
S-5 <0.158
S-82 <0.0430
D-3 <0.103
PZ-304-AI <0.141
PZ-304-AS <0.106
PZ-303-AS <0.215
I-73 <0.105
PZ-302-AS <0.113
PZ-205-AS <0.0660
D-81 <0.150
PZ-302-AI <0.145
D-89 <0.114

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

PZ-115-SS <0.131
PZ-208-SS <0.0750
PZ-113-SS <0.122
PZ-100-SS <0.0530
PZ-111-SD <0.0440
PZ-100-SD <0.0410
PZ-111-SS <0.128
PZ-101-SS <0.0470
PZ-200-SS <0.115
PZ-109-SS 0.0510
PZ-102R-SS <0.139
PZ-102-SS <0.0480
PZ-206-SS <0.128
PZ-201A-SS <0.117
PZ-103-SS <0.158
PZ-212-SS <0.0570
PZ-202-SS <0.108
PZ-212-SD <0.117
PZ-205-SS <0.121
PZ-104-SS <0.0460
PZ-107-SS <0.166
PZ-209-SS <0.150
PZ-104-SD <0.0960
PZ-209-SD 0.185
PZ-106-SS <0.108
PZ-106-SD <0.102
PZ-211-SS <0.115
PZ-204-SS <0.0920
MW-1204 <0.0850
PZ-203-SS <0.126
PZ-211-SD <0.0420
PZ-204A-SS <0.106
PZ-116-SS <0.102
PZ-105-SS <0.109
PZ-210-SS <0.0930
PZ-210-SD <0.109

Warsaw/Keokuk Formations

PZ-100-KS <0.116
PZ-111-KS <0.125
PZ-104-KS <0.0880
PZ-106-KS <0.126

N

Legend

Thorium-230 Activity (pCi/L)

Thorium-230 Not Detected (Below MDC)	<0.1	0.1-0.3	0.3-0.6	>0.6

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure 30a: Q1 2021 Summary of Thorium-230 Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

MW-400-P1 <0.0730
MW-400-P2 <0.123
MW-400-P3 <0.173
MW-401-P1 <0.176
MW-401-P2 <0.176
MW-401-P3 <0.182
S-8 <0.129
I-62 <0.167
D-83 <0.126
I-65 <0.123
I-66 <0.155
D-13 <0.168
MW-409 <0.132
MW-408 <0.159
D-6 <0.166
I-67 0.490
D-12 <0.0700
S-10 <0.0660
MW-405-P1 <0.176
MW-405-P2 <0.161
MW-405-P3 <0.145
I-9 <0.163
D-93 <0.171
S-82 <0.127
I-11 <0.144
PZ-207-AS <0.149
S-84 <0.147
I-68 <0.156
PZ-113-AS <0.117
MW-117 <0.147
D-85 <0.143
PZ-114-AS <0.120
PZ-113-AD <0.129
D-87 <0.123
S-5 <0.154
D-3 <0.127
MW-306-P1 <0.178
MW-306-P2 <0.230
MW-306-P3 <0.0620
MW-118 <0.239
MW-111-P1 <0.177
MW-111-P2 <0.165
MW-111-P3 <0.132
MW-304-P1 <0.155
PZ-304-AI <0.133
PZ-304-AS <0.140
I-73 0.545
MW-303-P1 <0.151
MW-303-P2 <0.131
PZ-303-AS <0.155
PZ-302-AS <0.216
PZ-302-AI <0.193
PZ-205-AS <0.151
D-81 <0.100
MW-302 <0.123
D-89 <0.132
MW-505-P1 <0.227
MW-505-P2 <0.182
MW-505-P3 <0.127

Edge of Alluvium (410' Bedrock Elevation)

St. Louis/Salem Formations

MW-400-P4 <0.0670
PZ-115-SS <0.115
PZ-208-SS <0.160
PZ-113-SS <0.122
PZ-100-SS <0.144
PZ-100-SD <0.128
PZ-111-SD <0.177
PZ-111-SS <0.203
PZ-101-SS <0.218
PZ-200-SS <0.147
MW-304-P2 <0.126
PZ-109-SS <0.150
PZ-102R-SS <0.146
PZ-102-SS <0.165
PZ-206-SS <0.130
PZ-201A-SS <0.120
MW-205 0.354
PZ-103-SS <0.127
PZ-212-SS <0.150
PZ-205-SS <0.184
PZ-202-SS <0.137
PZ-212-SD <0.183
PZ-104-SS <0.153
PZ-107-SS <0.155
PZ-209-SS <0.141
PZ-104-SD <0.127
PZ-209-SD <0.134
PZ-106-SS <0.158
PZ-106-SD <0.0650
MO-1-SDR <0.112
PZ-211-SS <0.161
PZ-204-SS <0.113
MW-1204 <0.0690
PZ-203-SS <0.165
PZ-211-SD <0.0720
PZ-204A-SS <0.150
MO-3-SDR 0.0710
MO-3-SS <0.127
PZ-116-SS <0.181
PZ-105-SS <0.165
PZ-210-SS <0.0650
PZ-210-SD 0.102

Warsaw/Keokuk Formations

MW-400-P5 <0.168
PZ-100-KS <0.158
PZ-111-KS <0.151
MW-304-P3 <0.136
PZ-104-KS <0.155
PZ-106-KS <0.118

N

Legend

Thorium-230 Activity (pCi/L)

Thorium-230 Not Detected (Below MDC)	<0.1	0.1-0.3	0.3-0.6	>0.6

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure **30b**: Q2 2021 Summary of Thorium-230 Results in Groundwater
West Lake Landfill OU-3 Bridgeton, Missouri
February 2022

ERM

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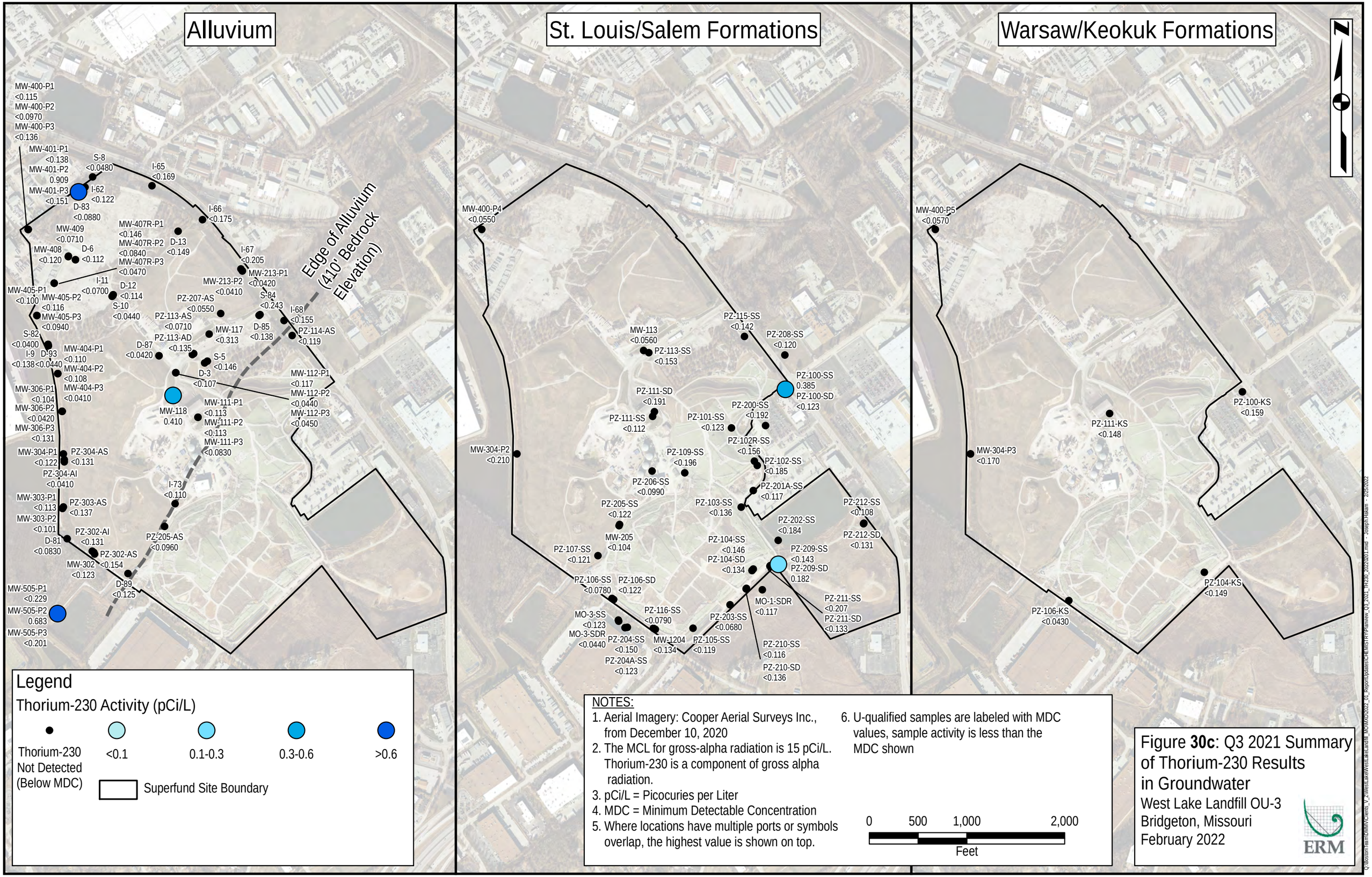


NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

Figure **30c**: Q3 2021 Summary of Thorium-230 Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230

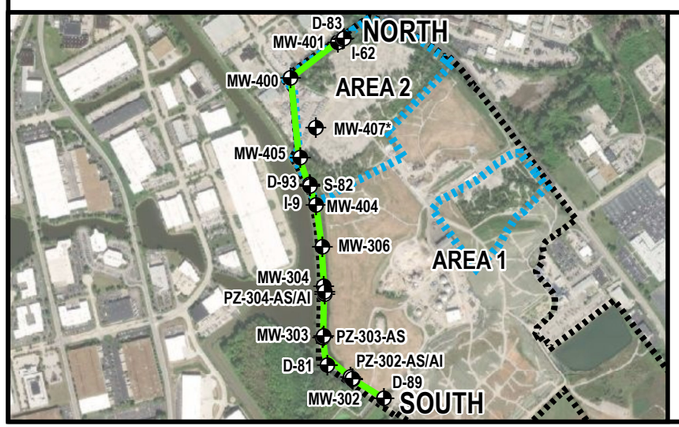
D-83 I-62
MW-401
MW-400
MW-407*
MW-405
I-9 D-93 S-82
MW-404
MW-306
MW-304
PZ-304-AI
PZ-304-AS
PZ-303-AS MW-303
D-81
PZ-302-AI PZ-302-AS MW-302
D-89

<0.128
<0.111
<0.0430
<0.134
<0.139
<0.106
<0.141
<0.215
<0.150
<0.113
<0.145
<0.114

NS

500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-230 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-230 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.

NS = Location Not Sampled
amsl = Above Mean Sea Level
pCi/L = Picocuries per Liter
MDC = Minimum Detectable Concentration
Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 31a: Q1 2021 Summary of Thorium-230 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

G:\Boston\Team\DMW\Clients_V_Z\WestLake\WestLakeLandfill_MO\WXD\2022_01_Report\Updates\CHEMISTRY\XS\ecrossSection_CSC2_Thr230_20210120203.mxd - Joseph.Haam - 2/8/2022

NORTH

SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

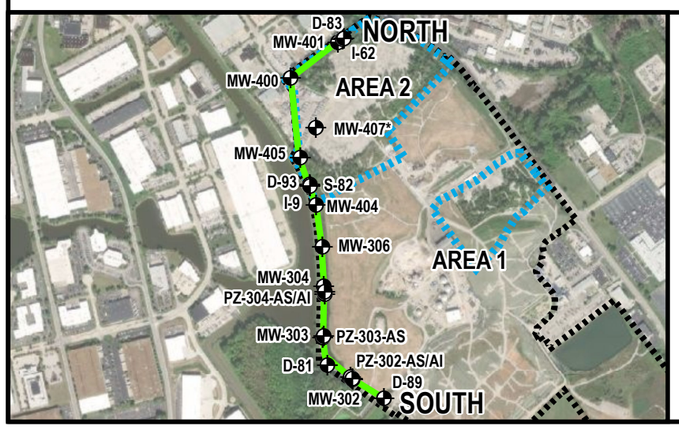
470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230

D-83 I-62
MW-401
MW-400
MW-407*
MW-405
I-9 D-93 S-82
MW-404
MW-306
MW-304
PZ-304-AI
PZ-304-AS
PZ-303-AS MW-303
D-81
PZ-302-AI PZ-302-AS MW-302
D-89

<0.176
<0.167
<0.176
<0.126
<0.182
<0.0730
<0.123
<0.173
<0.0670
NS
NS
NS
<0.176
<0.161
<0.145
<0.168
<0.127
<0.163
<0.171
NS
NS
NS
NS
<0.178
<0.230
<0.0620
<0.140
<0.133
<0.155
<0.126
<0.136
<0.155
<0.151
<0.131
<0.216
<0.193
<0.123
<0.100
<0.132

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-230 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-230 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.

NS = Location Not Sampled
amsl = Above Mean Sea Level
pCi/L = Picocuries per Liter
MDC = Minimum Detectable Concentration
Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 31b: Q2 2021 Summary of Thorium-230 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

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NORTH

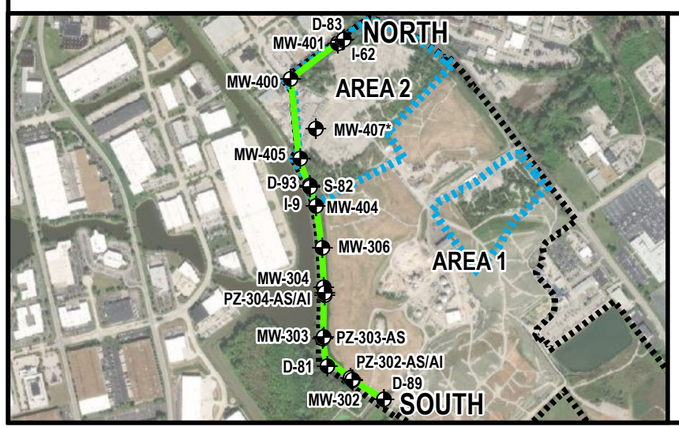
SOUTH

Elevation (ft. amsl) 5X Vertical Exaggeration

Distance Along Section (ft.)

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

<0.138 <0.122 0.909 <0.0880 <0.151 <0.115 <0.0970 <0.136 <0.0550 <0.146 <0.0840 <0.0470 <0.100 <0.116 <0.0940 <0.0570 <0.0400 <0.138 <0.0440 <0.110 <0.108 <0.0410 NS NS <0.104 <0.0420 <0.131 <0.131 <0.0410 <0.122 <0.210 <0.170 <0.137 <0.113 <0.101 <0.0830 <0.154 <0.131 <0.123 <0.125



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-230 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-230 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.

NS = Location Not Sampled
amsl = Above Mean Sea Level
pCi/L = Picocuries per Liter
MDC = Minimum Detectable Concentration
Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 31c: Q3 2021 Summary of Thorium-230 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

S-8 <0.0880
I-62 <0.0940
D-83 <0.0920
I-65 <0.0530
I-66 <0.0900
D-13 <0.0410
MW-409 <0.0880
MW-408 <0.0430
D-6 <0.0450
D-12 <0.0430
I-67 <0.0420
Edge of Alluvium (410' Bedrock Elevation)
S-10 <0.0450
I-11 <0.0520
PZ-207-AS <0.0460
S-84 <0.0490
I-68 <0.109
PZ-113-AS <0.0910
PZ-113-AD <0.0550
D-85 0.0480
PZ-114-AS <0.0800
I-9 <0.110
D-93 <0.115
S-82 <0.0430
D-87 <0.0420
S-5 <0.0520
D-3 <0.0420
PZ-304-AS <0.0520
PZ-304-AI <0.0510
I-73 <0.0550
PZ-303-AS <0.106
PZ-205-AS <0.0660
PZ-302-AS <0.0460
D-81 <0.0920
PZ-302-AI <0.0900
D-89 <0.100

St. Louis/Salem Formations

PZ-115-SS <0.0470
PZ-208-SS <0.0440
PZ-113-SS <0.0440
PZ-100-SS <0.0530
PZ-111-SD <0.0900
PZ-100-SD <0.0410
PZ-111-SS <0.0520
PZ-101-SS <0.0470
PZ-200-SS <0.115
PZ-102R-SS <0.101
PZ-206-SS <0.0460
PZ-102-SS <0.0480
PZ-109-SS <0.0940
PZ-201A-SS <0.0470
PZ-103-SS <0.105
PZ-212-SS <0.0570
PZ-202-SS <0.0440
PZ-212-SD <0.0520
PZ-205-SS <0.110
PZ-209-SS <0.0490
PZ-107-SS <0.137
PZ-104-SD <0.0470
PZ-209-SD 0.180
PZ-106-SS <0.0440
PZ-106-SD <0.0450
PZ-211-SS <0.119
PZ-211-SD <0.0420
PZ-204-SS <0.0450
MW-1204 <0.0850
PZ-203-SS <0.0920
PZ-204A-SS <0.0430
PZ-116-SS <0.0500
PZ-105-SS <0.0440
PZ-210-SS <0.0460
PZ-210-SD <0.0900

Warsaw/Keokuk Formations

PZ-100-KS <0.0470
PZ-111-KS <0.114
PZ-104-KS <0.0880
PZ-106-KS <0.0450

N

Legend

Thorium-232 Activity (pCi/L)

Thorium-232 Not Detected (Below MDC)	<0.1	0.1-0.3	0.3-0.6	>0.6

Superfund Site Boundary

NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-232 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure 32a: Q1 2021 Summary of Thorium-232 Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

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Alluvium

St. Louis/Salem Formations

Warsaw/Keokuk Formations

N

Edge of Alluvium (410' Bedrock Elevation)

MW-400-P1 <0.0730
MW-400-P2 <0.0670
MW-400-P3 <0.154
MW-401-P1 <0.132
MW-401-P2 <0.157
MW-401-P3 <0.129
S-8 <0.0700
I-62 <0.125
D-83 <0.126
I-65 <0.123
I-66 <0.130
MW-408 <0.141
MW-409 <0.0710
D-6 <0.125
D-13 <0.0680
I-67 <0.0790
S-10 <0.0660
D-12 <0.0700
MW-405-P1 <0.0960
MW-405-P2 <0.155
MW-405-P3 <0.122
I-11 <0.144
PZ-207-AS <0.0810
S-84 <0.124
I-68 <0.0850
PZ-113-AS <0.0640
PZ-113-AD <0.0700
MW-117 <0.0800
D-85 <0.0660
PZ-114-AS <0.0650
I-9 <0.122
D-93 <0.153
S-82 <0.0690
D-87 <0.0670
S-5 <0.116
D-3 <0.127
MW-306-P1 <0.159
MW-306-P2 <0.0800
MW-306-P3 <0.0620
MW-118 <0.168
MW-111-P1 <0.133
MW-111-P2 <0.0670
MW-111-P3 <0.0720
PZ-304-AS <0.0640
MW-304-P1 <0.0710
PZ-304-AI <0.0720
MW-303-P1 <0.0820
MW-303-P2 <0.0710
PZ-303-AS <0.207
I-73 <0.0720
PZ-302-AI <0.0670
PZ-205-AS <0.0820
D-81 <0.0650
PZ-302-AS <0.152
MW-302 <0.0670
D-89 <0.0720
MW-505-P1 <0.159
MW-505-P2 <0.149
MW-505-P3 <0.169

MW-400-P4 <0.0670
PZ-115-SS <0.0630
PZ-208-SS <0.160
PZ-113-SS <0.0660
PZ-100-SS <0.121
PZ-111-SD <0.144
PZ-101-SS <0.0760
PZ-100-SD <0.128
PZ-111-SS <0.0740
PZ-200-SS <0.155
MW-304-P2 <0.0680
PZ-109-SS <0.150
PZ-102R-SS <0.123
PZ-102-SS <0.0670
PZ-206-SS <0.0710
PZ-201A-SS <0.120
PZ-205-SS <0.138
PZ-103-SS <0.154
PZ-212-SS <0.150
MW-205 0.402
PZ-202-SS <0.0740
PZ-212-SD <0.130
PZ-104-SS <0.148
PZ-104-SD <0.0690
PZ-209-SS <0.0770
PZ-107-SS <0.0840
PZ-209-SD <0.134
PZ-106-SS <0.0640
PZ-106-SD <0.0650
MO-1-SDR <0.0610
PZ-211-SS <0.0730
MW-1204 <0.127
MO-3-SS <0.0690
PZ-203-SS <0.124
PZ-211-SD <0.0720
MO-3-SDR <0.0640
PZ-204-SS <0.0610
PZ-116-SS <0.128
PZ-105-SS <0.147
PZ-210-SS <0.119
PZ-204A-SS <0.0680
PZ-210-SD <0.127

MW-400-P5 <0.126
PZ-100-KS <0.0860
PZ-111-KS <0.0620
MW-304-P3 <0.0740
PZ-104-KS <0.138
PZ-106-KS <0.0670

Legend

Thorium-232 Activity (pCi/L)

Thorium-232 Not Detected (Below MDC)	<0.1	0.1-0.3	0.3-0.6	>0.6

Superfund Site Boundary

NOTES:

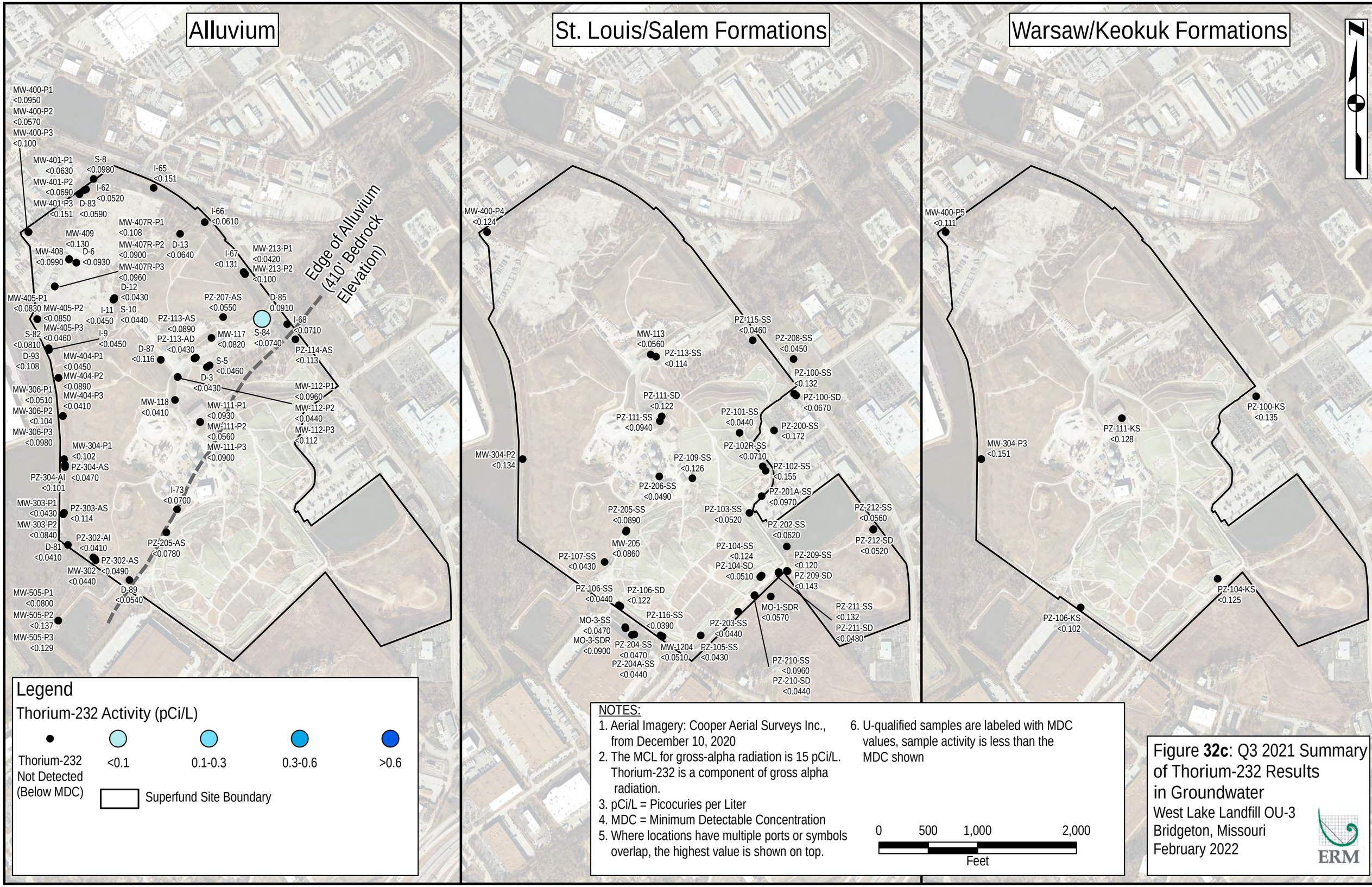
1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-232 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

0 500 1,000 2,000
Feet

Figure **32b**: Q2 2021 Summary of Thorium-232 Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM

Q:\Jobs\ermMWW\eries_V_2\WestLake\WestLakeLandfill_MWWW2022_Q2_Report\pptfiles\CHENISTRY\Pannen_Q2_2021_Th232_20220103.mxd - Joseph.Hasm - 2/25/2022

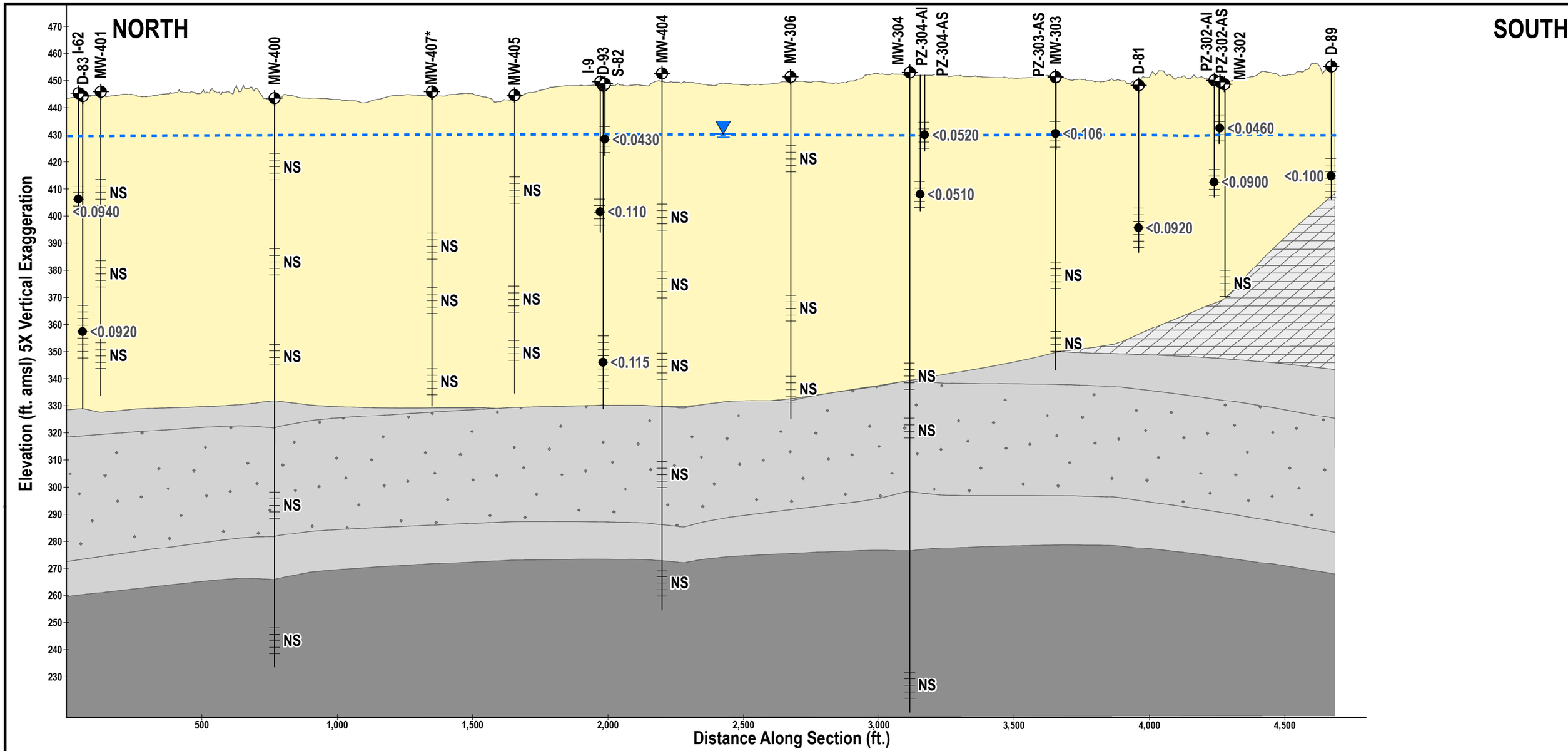


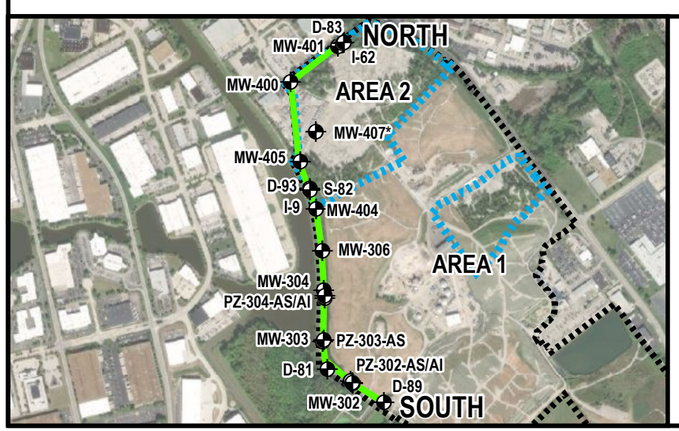
NOTES:

1. Aerial Imagery: Cooper Aerial Surveys Inc., from December 10, 2020
2. The MCL for gross-alpha radiation is 15 pCi/L. Thorium-232 is a component of gross alpha radiation.
3. pCi/L = Picocuries per Liter
4. MDC = Minimum Detectable Concentration
5. Where locations have multiple ports or symbols overlap, the highest value is shown on top.
6. U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown

Figure **32c**: Q3 2021 Summary of Thorium-232 Results in Groundwater
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-232 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-232 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

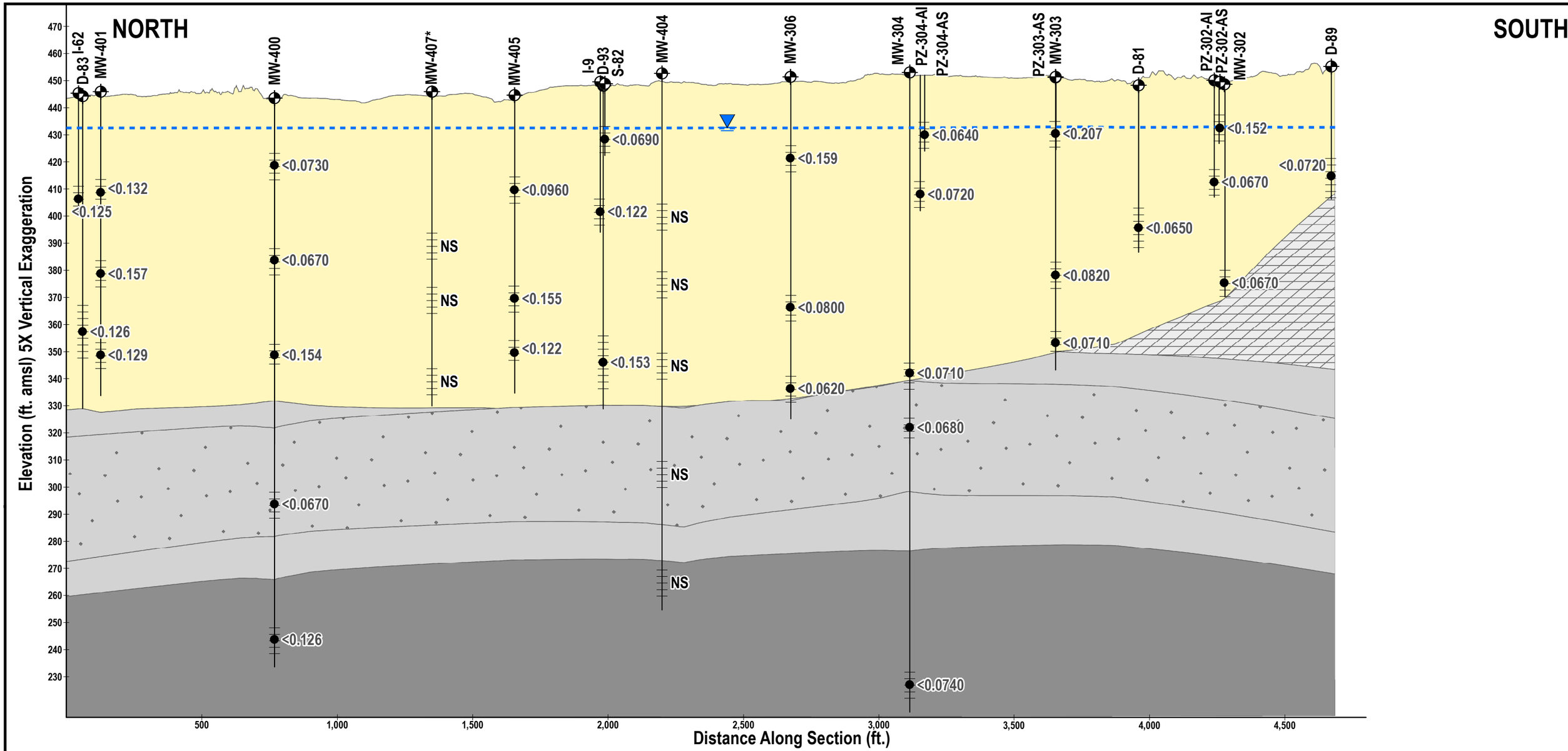
* - Well does not lie along transect. Its location is projected onto the transect.

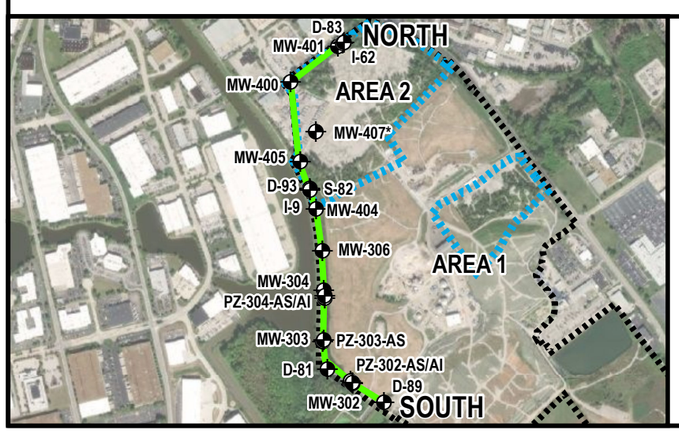
- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- pCi/L = Picocuries per Liter
- MDC = Minimum Detectable Concentration
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 33a: Q1 2021 Summary of Thorium-232 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

ERM





Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-232 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-232 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.
- NS = Location Not Sampled
- amsl = Above Mean Sea Level
- pCi/L = Picocuries per Liter
- MDC = Minimum Detectable Concentration
- Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 33b: Q2 2021 Summary of Thorium-232 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

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NORTH

SOUTH

D-83 I-62 MW-401 MW-400 MW-407* MW-405 I-9 D-93 S-82 MW-404 MW-306 MW-304 PZ-304-AI PZ-304-AS PZ-303-AS MW-303 D-81 PZ-302-AI PZ-302-AS MW-302 D-89

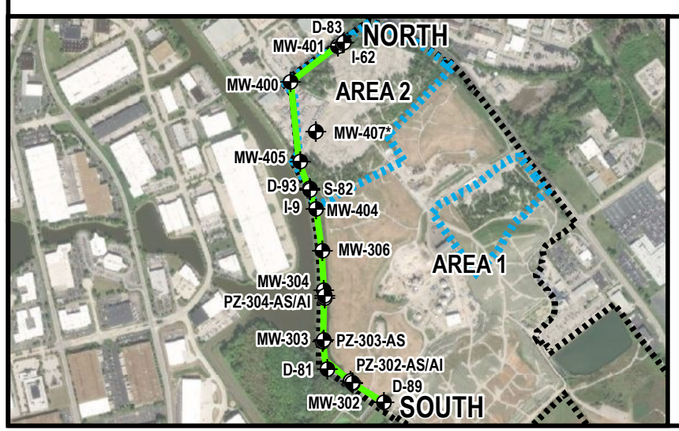
<0.0630 <0.0520 <0.0690 <0.133 <0.151 <0.0950 <0.0570 <0.100 <0.124 <0.108 <0.0900 <0.0960 <0.0830 <0.0850 <0.0460 <0.111 <0.0810 <0.0450 <0.108 <0.0890 <0.0410 NS NS <0.0510 <0.104 <0.0980 <0.0470 <0.101 <0.102 <0.134 <0.151 <0.114 <0.0430 <0.0840 <0.0410 <0.0490 <0.0410 <0.0440 <0.0540

Elevation (ft. amsl) 5X Vertical Exaggeration

470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230

500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Distance Along Section (ft.)



Legend

- Well
- Borehole
- Well Screen
- Water Table[1]

1 Water table determined based on gauging round performed immediately prior to sampling.

Total Thorium-232 Activity (pCi/L)

- >0.6
- 0.3-0.6
- 0.1-0.3
- <0.1
- Thorium-232 Not Detected (Below MDC)

- Alluvium
- Shoal
- St. Louis
- Warsaw
- Salem

NOTES:

* - Well does not lie along transect. Its location is projected onto the transect.

- The MCL for gross-alpha radiation is 15 pCi/L. Thorium-230 is a component of gross alpha radiation.
- U-qualified samples are labeled with MDC values, sample activity is less than the MDC shown.

NS = Location Not Sampled
amsl = Above Mean Sea Level
pCi/L = Picocuries per Liter
MDC = Minimum Detectable Concentration
Area 1 and 2 = Investigation areas 1 and 2 of operational unit 1 (OU-1)

Figure 33c: Q3 2021 Summary of Thorium-232 Results in Groundwater - Cross-Section

Site Boundary Transect
West Lake Landfill OU-3
Bridgeton, Missouri
February 2022

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Kenya
Malaysia
Mexico
Mozambique
Myanmar
The Netherlands
New Zealand
Norway
Panama
Peru
Poland
Portugal
Puerto Rico
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