TETRA TECH

June 12, 2025 **Via Email and FedEx**

Andrew Grenzer
Chief, Solid Waste Operations, Land & Materials Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

Subject: **Groundwater Discharge Permit Renewal Application**
Groundwater Discharge Permit No. 2020-GWD-2445
Pappy, Inc. — Oak Avenue Rubble Landfill; Joppa, Maryland

Dear Mr. Grenzer:

Tetra Tech, Inc. on behalf of Waste Management is pleased to submit the enclosed Groundwater Discharge Permit Application for Unlined Rubble Landfills form for the renewal of the above referenced permit. Also enclosed is a copy of the Worker's Compensation Insurance policy (WLR C72629668), appropriate drawings and a copy of the most recent groundwater and leachate monitoring report (*2025 First Semi-Annual Groundwater and Leachate Monitoring Report,* dated May 2025).

The Pappy, Inc., Oak Avenue Rubble Landfill was operated as a rubble Landfill in Harford County under Refuse Disposal Permit 2004-WRF-0104. The facility ceased accepting waste in 2007 and final capping was completed in 2008. By way of letter dated June 19, 2009, the Maryland Department of the Environment (MDE) formally approved the completion of the closure of the landfill and placed it in the "post-closure monitoring and maintenance period as required under Code of Maryland Regulation 26.04.07.22". Refuse Disposal Permit 2004-WRF-0104 expired on March 21, 2010 and has not been renewed.

The landfill is divided into two disposal areas: Phases I-III and Phase IV. Phases I-III encompass an area approximately 20.3 acres in size and consist of unlined cells that were constructed prior to the effective date identified in the liner regulations adopted in 1997. Phase IV encompasses an area approximately 15.9 acres in size and was constructed with a 60-mil high-density polyethylene (HDPE) base liner system with leachate collection as required by revised MDE regulations promulgated in 1997. Cap construction consists of two feet of final cover/vegetative soils underlain by a double-sided geocomposite drainage layer. The geocomposite is underlain by a 60-mil textured HDPE geomembrane underlain by two feet of protective cover soil.

The current renewal application has been prepared to address leachate discharge through the 20.3 acres of unlined cells in Phases I-III. It should be noted that since this area has been completely capped as described above, the closed landfill does not allow for continued surface water recharge. Accordingly, it is expected that the volume of leachate discharged to groundwater will continue to decline over the post-closure monitoring and maintenance period.

Based on the groundwater and leachate quality that we have seen over the past five years, we request consideration of reducing the required groundwater monitoring frequency from semiannual to annual.

I trust you find this submittal satisfactory. If you have any questions regarding this application or require additional information, please contact me at your convenience at 410-990-4607 or peter.rich@tetratech.com.

Sincerely,

Peter A. Rich, P.E.
Principal Engineer

Enclosure

cc: Dallas Mellott, Waste Management (via email)

Tetra Tech, Inc
980 Awald Road, Suite 302 | Annapolis, MD 21403
Tel (410) 990-4607 | tetratech.com

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration ● Solid Waste Program
1800 Washington Boulevard ● Suite 605 ● Baltimore Maryland 21230-1719
410-537-3315 ● 800-633-6101 x3315 ● www.mde.maryland.gov

Groundwater Discharge Permit Application For Unlined Rubble Landfills

Authority: Title 9, Environment Article, Annotated Code of Maryland, and Code of Maryland Regulations (COMAR) 26.08.04

Application for: ☐ **New Permit** ☒ **Renewal Permit**

Existing Permit No. 2020 -GWD-2445 **Issued Date:** 01 / 20 / 2021 **Expiration Date:** 01 / 19 / 2026

Applicant's Legal Name: Pappy, Inc. (dba Waste Management)

Applicant's Status: ☐ **Individual** ☒ **Corporation** ☐ **Government** ☐ **Other:** _____

Corporation or Government Federal Tax Identification No.: 52 - 1561430

Maryland State Department of Assessments and Taxation (SDAT) ID No.: D02475960
Please note that a business/entity must be registered to do business in Maryland before a permit can be issued. The business or entity's information provided in this application must match the information in the SDAT register.

(1) A copy of a Certificate of Compliance issued by the Maryland Workers' Compensation Commission; or
(2) Workers' Compensation Insurance Policy/Binder Number: _____

Applicant's Mailing Address: 100 Brandywine Blvd, Suite 300 **City:** Newtown **State:** PA **Zip Code:** 18940

Applicant's Telephone No.: (267) 751 -9486 **Facsimile No.:** ( ) _____ -_____

Emergency Contact Name & Title: Dallas Mellott **Telephone No.:** (267) 751 -9486

Facility/Site Name: Oak Avenue Rubble Landfill

Facility/Site Address: 1020 Oak Avenue **City:** Joppa **State:** MD **Zip Code:** 21085

County: Harford **Maryland Grid Coordinates:** N580000 / E830000 - NAD 83

County Zoning Map No.: 65 **Lot/Parcel No.:** 450 **Deed/Liber/Folio No.:** 1525 /423

State Legislative District: 34A **Local Council/Election District:** A

Bay Tributary Watershed Code: 02130801 **Latitude/Longitude (Deg/Min/Sec):** 42 - 40 - 58.8 / 069 - 53 - 42.3

Site Acreage: 42.8 **Landfill Acreage:** 36.2 total / 20.3 unlined

Nature of Business (describe briefly):

Closed rubble landfill. The acreage listed above is for the entire landfill footprint. The facility was certified closed by MDE via letter dated June 19, 2009 and is now in the post-closure monitoring and maintenance period as required under Code of Maryland Regulation 26.04.07.22 Figure 1 depicts the current landfill, all of which is capped. The 20.3 acre unlined, capped portion of the closed facility is considered subject to this permit application.

List Other Environmental Permits Held For the Site: (e.g., NPDES-surface water; PSD-air emissions; RCRA-hazardous waste, etc).

MDE Refuse Disposal Permit (2004-WRF-0104), expired March 21, 2010

MDE Groundwater Discharge Permit (2020-GWD-2445)

Wastewater (Leachate) Description:

Residual landfill leachate generated prior to landfill closure infiltrating through landfill to cell floor. The entire landfill is synthetically capped, significantly limiting percolation through the landfill cover into the waste contained within the landfill. Percolation through the landfill cell floor is considered to occur only through the 20.3 acre unlined portion of the landfill.

Flow Calculations:

Average leachate generation rate for post-closure facilities in the northeast is 40 gal/acre/day (Bonaparte, R., D.E. Daniel, R.M. Koerner, 2002) Assessments and Reccommendations for improving the Performance of Waste Containment Systems. (EPA/600/R-02/099). Flow calculation assumes percolation occurs only through the 20.3-acre unlined portion of the landfill. 40 gallons/acre/day x 20.3 acres = 812 gallons/day.

Groundwater Characteristics -------See attached 2025 First Semi-Annual Groundwater and Leachate Monitoring Report,

(Attach Latest Groundwater Sample Results) \

Map Of The Facility

This application must be accompanied by a copy of a U.S. Geological Survey topographical map or road map with a scale of 1" = 2000 feet, showing the exact location of the facility.

By signing this form, I the applicant or duly authorized representative, do solemnly affirm under the penalties of perjury that the contents of this application are true to the best of my knowledge, information, and belief. I hereby authorize the representatives of the Department to have access to the site of the facility for inspection and to records relating to this application at any reasonable time. I acknowledge that depending on the type of facility applied for, other permits or approvals may be required.



Signature of Applicant

6/11/2025

Date

Dallas Mellott

Applicant's Name (Print)

Landfill Operation Manager

Title

This Notice is provided pursuant to §10-624 of the State Government Article of the Maryland Code. The personal information requested on this form is intended to be used in processing your application. Failure to provide the information requested may result in your application not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment ("MDE") is a public agency and subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by Federal or State law.

Privacy Act Notice: This Notice is provided pursuant to the Federal Privacy Act of 1974, 5 U.S.C. §552.a. Disclosure of your Social Security Number or Federal Employer Identification Number on this application is mandatory pursuant to the provisions of §1-203 (2003), Environment Article, Annotated Code of Maryland, which requires the MDE to verify that an applicant for a permit has paid all undisputed taxes and unemployment insurance. Social Security or Federal Employer Identification Numbers will not be used for any purposes other than those described in this Notice.

CERTIFICATE OF LIABILITY INSURANCE

1/1/2026

DATE (MM/DD/YYYY) 12/10/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LOCKTON COMPANIES, LLC 3657 BRIARPARK DRIVE, SUITE 700 HOUSTON TX 77042 866-260-3538	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Indemnity Insurance Co of North America	43575
INSURER B : ACE American Insurance Company	22667
INSURER C : ACE Fire Underwriters Insurance Company	20702
INSURER D : ACE Property and Casualty Insurance Company	20699
INSURER E :	
INSURER F :	

INSURED
1300299
WASTE MANAGEMENT HOLDINGS, INC. & ALL AFFILIATED, RELATED & SUBSIDIARY COMPANIES INCLUDING:
WASTE MANAGEMENT, INC.
800 CAPITOL STREET, SUITE 3000
HOUSTON TX 77002

COVERAGES **CERTIFICATE NUMBER:** 19287819 **REVISION NUMBER:** XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X XCU INCLUDED X ISO FORM CG00010413 GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:	Y	Y	HDO G48900793	1/1/2025	1/1/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 5,000,000 $ 5,000,000 $ XXXXXXX $ 5,000,000 $ 6,000,000 $ 6,000,000 $
B	AUTOMOBILE LIABILITY X ANY AUTO X OWNED AUTOS ONLY X HIRED AUTOS ONLY X MCS-90 SCHEDULED AUTOS X NON-OWNED AUTOS ONLY	Y	Y	MMT H1082235A	1/1/2025	1/1/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ XXXXXXX $ XXXXXXX $ XXXXXXX $ XXXXXXX
D	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $	Y	Y	XEU 27929242 010	1/1/2025	1/1/2026	EACH OCCURRENCE AGGREGATE 	$ 15,000,000 $ 15,000,000 $ XXXXXXX
A B C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	WLR C72629668 (AOS) WLR C72629620 (AZ,CA & MA) SCF C7262970A (WI)	1/1/2025 1/1/2025 1/1/2025	1/1/2026 1/1/2026 1/1/2026	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 3,000,000 $ 3,000,000 $ 3,000,000
B	EXCESS AUTO LIABILITY	Y	Y	XSA H10822269	1/1/2025	1/1/2026	COMBINED SINGLE LIMIT $9,000,000 (EACH ACCIDENT)	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

BLANKET WAIVER OF SUBROGATION IS GRANTED IN FAVOR OF CERTIFICATE HOLDER ON ALL POLICIES WHERE AND TO THE EXTENT REQUIRED BY WRITTEN CONTRACT WHERE PERMISSIBLE BY LAW. CERTIFICATE HOLDER IS NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES (EXCEPT FOR WORKERS' COMP/EMPLOYER'S LIABILITY) WHERE AND TO THE EXTENT REQUIRED BY WRITTEN CONTRACT.

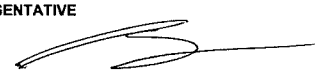
CERTIFICATE HOLDER

19287819
FOR INFORMATION PURPOSES ONLY

CANCELLATION

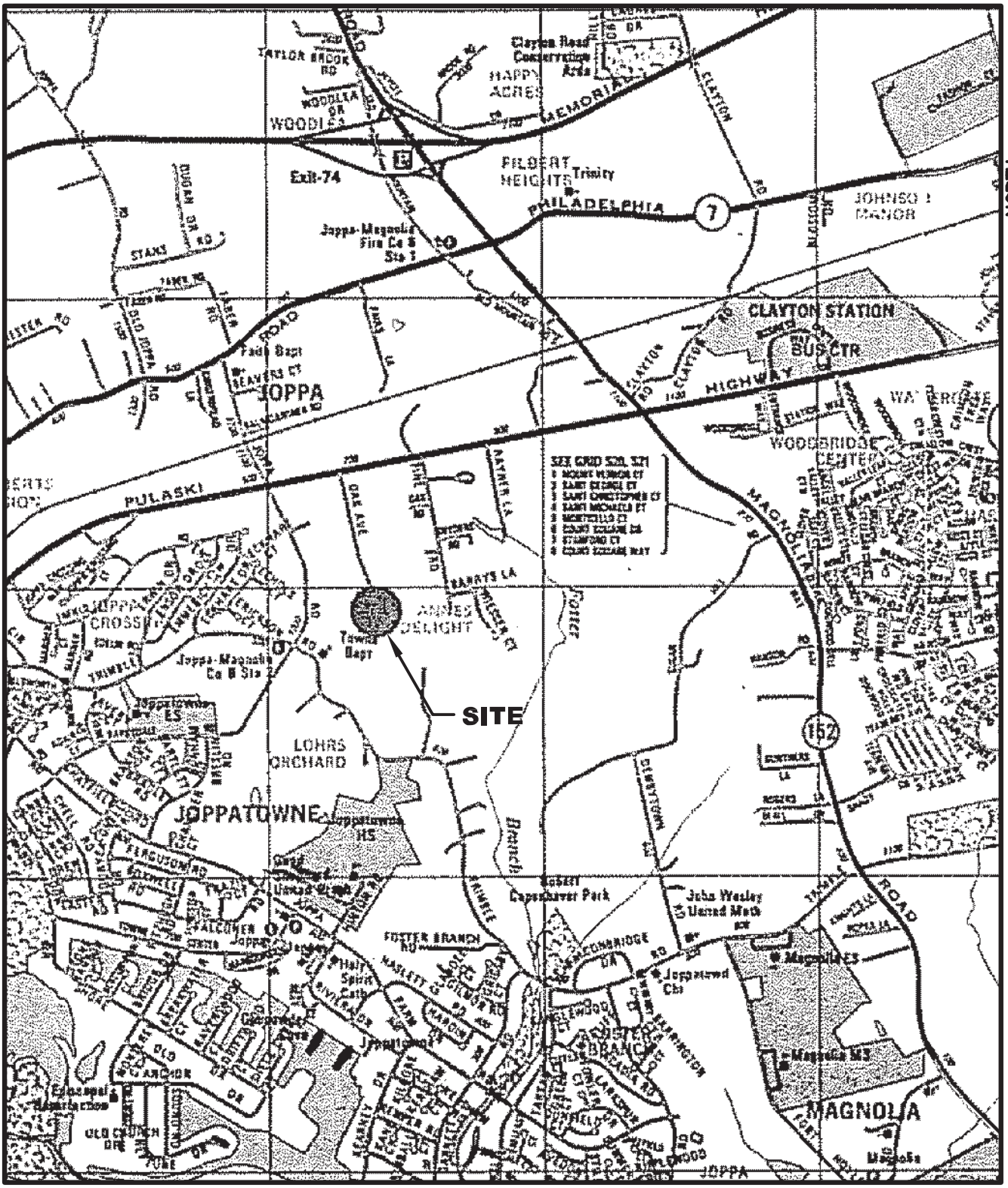
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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SITE LOCATION MAP



MAP SOURCE:
"HARFORD COUNTY AREA MAP", P.S. PUBLICATIONS, INC.

2000 1000 0 2000

APPROXIMATE SCALE: 1" = 2000'

GeoSyntec Consultants
COLUMBIA, MARYLAND

FIGURE NO.	2
PROJECT NO.	ME0472
DOCUMENT NO.	
FILE NO.	0472F001

TETRA TECH

May 21, 2025

Mr. Andrew Grenzer
Administrator-Solid Waste Program
Maryland Department of the Environment
1800 Washington Boulevard
Suite 605
Baltimore, Maryland 21230-1719

RE: 2025 First Semi-Annual Groundwater and Leachate Monitoring Report
Oak Avenue Rubble Landfill
Groundwater Discharge Permit No. 2020-GWD-2445
1020 Oak Avenue, Joppa, Maryland 21085

Mr. Grenzer:

Tetra Tech, on behalf of Pappy, Inc., is submitting the enclosed 2025 First Semi-Annual Groundwater and Leachate Monitoring Report for the Oak Avenue Landfill in Joppa, Maryland (the Facility). This report summarizes inspection and monitoring activities completed at the Facility from October 2024 to March 2025, including landfill gas monitoring and semi-annual groundwater sampling.

Should you have any questions or require additional information, please feel free to contact me at (410) 990-4607.

Sincerely,

Peter A. Rich, P.E.
Principal Engineer

Enclosure

TETRA TECH, INC.
980 Awald Road, Suite 302, Annapolis, MD 21403
Tel 410.990.4607 Fax 410.990.4749 www.tetratech.com

2025 First Semi-Annual Groundwater Monitoring and Leachate Report

OAK AVENUE RUBBLE LANDFILL

1020 Oak Avenue, Joppa, Maryland 21085
Groundwater Discharge Permit No. 2020-GWD-2445

MAY 2025

PREPARED FOR

Pappy, Inc.
100 Brandywine Blvd, Suite 300
Newtown, PA 18940

PREPARED BY

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980 Awald Road, Ste 302
Annapolis, MD 21403

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TETRA TECH

EXECUTIVE SUMMARY

Tetra Tech, Inc. has prepared this report on behalf of Pappy, Inc. (Pappy) for the Oak Avenue Rubble Landfill (Facility), to comply with the Facility Groundwater Discharge Permit (GDP) No. 2020-GWD-2445.

The Maryland Department of the Environment (MDE) regulates Solid Waste Facilities under the Code of Maryland Regulation (COMAR) 26.04.07. In accordance with COMAR 26.08.02.09C(1) unlined rubble landfills are required to maintain a Groundwater Discharge Permit to discharge wastewater (leachate) generated by rainwater percolating through the landfill cell floor into groundwater. The GDP regulations (Part I.B.2.a) mandate that owners/operators of the Oak Avenue Rubble Landfill monitor groundwater semi-annually in accordance with the Facility Groundwater and Surface Water Monitoring (GSWM) Plan and submit semi-annual reports to MDE within 90-days of the end of the first and third calendar quarters. This report has been prepared to comply with the semi-annual reporting requirements.

Analytical results from the first semi-annual 2025 sampling event were compared to United States Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCLs) drinking water and MDE groundwater standards using a value-to-standard comparison procedure. Analytical results for the first semi-annual 2025 sampling event were received on March 31, 2025. Based on a review of the analytical data, no sample detections were reported at concentrations above the EPA MCLs or MDE standards for the first semi-annual 2025 sampling event except for manganese which exceeded its corresponding 0.043 mg/L MDE groundwater standard in most wells. Manganese is ubiquitous in the region.

Based on an evaluation of the groundwater flow direction in the uppermost aquifer beneath the landfill for 2025, the locations of the Facility's groundwater monitoring wells are adequate, and no changes to the monitoring system are recommended at this time.

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
COMAR	Code of Maryland Regulations
EPA	[United States] Environmental Protection Agency
Facility	Oak Avenue Rubble Landfill
GDP	Groundwater Discharge Permit
GSWM	Groundwater and Surface Water Monitoring Plan
LEL	Lower explosive limit
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
Pappy	Pappy, Inc.
QA/QC	Quality Assurance / Quality Control
Tetra Tech	Tetra Tech, Inc.
VOC	Volatile organic compound

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) has prepared this report on behalf of Pappy, Inc. (Pappy) for the Oak Avenue Rubble Landfill (Facility) located at 1020 Oak Avenue, Joppa, Maryland 21085, to comply with Facility Groundwater Discharge Permit (GDP) No. 2020-GWD-2445. The report presents the results of the semi-annual groundwater sampling event conducted on March 11-12, 2025.

2.0 SITE INFORMATION

The Oak Avenue Rubble Landfill was permitted by the Maryland Department of the Environment (MDE) to accept land clearing wastes, demolition debris, construction debris, household appliances, and white goods as a rubble landfill. Pappy operated the Facility under Refuse Disposal Permit 2004-WRF-0104 until the Facility ceased accepting waste in 2007. The MDE formally approved the closure of the landfill in a letter dated June 19, 2009, and the Facility was maintained in post-closure care in accordance with COMAR 26.04.07.22 for a minimum of five years. Refuse Disposal Permit 2004-WRF-0104 was allowed to expire on March 21, 2010, by MDE and not required to be renewed.

The Facility consists of approximately 20.3 acres of unlined cells (Phases I-III) and an approximate 15.9-acre-lined cell with leachate collection system (Phase IV). The final landfill cover consists of two feet of soil underlain by a double-sided geocomposite drainage layer and geomembrane followed by another two feet of protective soil cap.

The Facility is located south of Pulaski Highway on Oak Avenue, as presented on Drawing 1 (Site Location Map). Access to the landfill is by way of a gated entrance at the end of Oak Avenue. The landfill's western boundary follows Joppa Road, and the southwest perimeter is bordered by Trimble Road. Site topography slopes to the south and east towards Foster Branch, a tributary to the Gunpowder River. The surrounding land is wooded and zoned for residential or commercial use.

3.0 GROUNDWATER MONITORING PROGRAM

As a condition of the current GDP No. 2020-GWD-2445, the Facility is required to monitor groundwater semi-annually in accordance with the Groundwater and Surface Water Monitoring (GSWM) Plan and submit semi-annual reports to MDE within 90-days of the end of the first and third calendar quarters. The Facility operator currently monitors groundwater in accordance with the site-specific GSWM Plan dated September 12, 2011, and prepared by Marks Environmental, Inc.

Analytical data for the first semi-annual 2025 event completed on March 11-12, 2025, were received on March 31, 2025. The first semi-annual 2025 laboratory data were compared to the most recent United States Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCLs) and MDE standards for organic and inorganic chemicals in drinking water (COMAR 26.04.01.06-07) using a value-to-standard comparison. Based on the evaluation there were no standard exceedances except for manganese which exceeded the MDE standard of 0.043 mg/L in most wells.

4.0 GROUNDWATER SURFACE ELEVATIONS

The following sections describe the site information pertaining to the geologic and hydrogeologic framework for the Facility.

4.1 SITE GEOLOGY

The Facility is located in the Middle River Lowland District of the Atlantic Coastal Plain Physiographical Province in Maryland and is underlain by alluvial soils derived from the Potomac Group including Raritan and Patapsco Formations. The Early to Late Cretaceous Raritan and Patapsco Formations make up the silt-clay, clay and mostly fine- to medium-grained sands beneath the Facility. The Raritan and Patapsco Formations are intermixed and range from several feet to up to 150 feet thick in the vicinity of the site. This upper unconsolidated unit overlies weathered crystalline bedrock that is primarily composed of a weathered schist.

A low permeability clay approximately 15 to 25 feet thick is generally encountered between 30 and 70 feet above mean sea level and tends to retard vertical groundwater movement at the Facility. As a result, the sand and silt lithologies encountered above the clay unit contain discontinuous pockets of groundwater that are saturated above the confining unit and perch vertical movement of groundwater. The elevation of the perched groundwater varies significantly and does not represent a continuous water table.

4.2 GROUNDWATER MONITORING NETWORK

The Facility has an early detection groundwater monitoring system that consists of 13 monitoring wells; the locations are presented in **Figure 2** and the well construction information is summarized in **Table 1**. The groundwater monitoring wells monitor a variable upper and lower hydrostratigrahic unit beneath the Facility. Deep monitoring wells are screened above bedrock and represent the lower regional aquifer. The deep monitoring well network consists of upgradient monitoring well MW-1 and downgradient monitoring wells MW-2, MW-3, MW-7, MW-8, MW-11, MW-12, and MW-13. The upper perched groundwater is monitored using downgradient monitoring wells MW-4, MW-5, MW-6, MW-9, and MW-10. Wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, and MW-13 are downgradient of the waste disposal area and represent the Facility's downgradient compliance wells. The monitoring wells are screened in the upper perched and lower regional aquifer and are sampled with dedicated bladder pumps using low-flow sampling procedures.

Table 2 summarizes water level measurements collected at the Facility from 2016 to the present. Hydrographs illustrating the trends in the historical static water level data for the compliance wells are presented in **Figure 3**. Review of the static water level data presented in the hydrograph suggests that the potentiometric surface in the upper and lower regional aquifer beneath the Facility has been relatively stable, fluctuating around a long-term average elevation.

Groundwater surface contours using static water level data obtained during the first semi-annual 2025 sampling event are presented in **Figure 2**. Throughout most of the Facility, groundwater in the regional aquifer traverses in a west-to-south (i.e., towards the south) direction. An idealized flow arrow is indicative of the interpreted groundwater flow direction in the lower aquifer. As presented, the groundwater flow direction is consistent with previous interpretations.

5.0 FIELD PROGRAM AND DISCUSSION

Sampling activities performed during the first semi-annual 2025 sampling event are discussed in the following sections.

5.1 FIRST SEMI-ANNUAL 2025 COMPLIANCE EVENT

On March 11-12, 2025, Tetra Tech personnel visited the Facility to purge and sample monitoring wells MW 1, MW 2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, and MW-13. Depth-to-water measurements were obtained at the monitoring wells using an electronic water level indicator prior to purging the wells. The measurements, which were recorded to the nearest 0.01 foot on Field Information Forms, are summarized in **Table 2**.

The monitoring wells were purged with dedicated bladder pumps using micropurge low-flow sampling procedures. Measurements of pH, temperature, turbidity, specific conductance, dissolved oxygen, and oxidation reduction potential were recorded at regular 5-minute intervals during the purge with field-calibrated Horiba U-52 water quality meter to monitor for stabilization of water quality. During the purge, the laboratory-supplied, pre-preserved sample containers were prepared and labeled. Each sample container was labeled to identify the sample identification number, sampling personnel, date and time of sample collection, project name and number, and requested chemical analyses.

After purging was completed based on stabilization of the water quality parameters, groundwater samples were collected directly from a polypropylene discharge hose on the bladder pumps into the labeled, preserved, laboratory-supplied sample containers. The samples as well as a field blank were submitted under chain of custody control to Geochemical Testing of Somerset, PA (Geochemical) for analysis of the constituents listed in Table I and II of the GDP. A trip blank was also submitted with the samples and was tested for Table I volatile organic compounds (VOCs).

Sampling personnel completed a Field Information Form for each monitoring well, copies of which are presented in **Appendix A**. Each form includes a description of sampling equipment, sampling method, field observations, and water quality measurements.

6.0 LABORATORY AND FIELD QA/QC

A description of the laboratory Quality Assurance/Quality Control (QA/QC) data associated with the first semi-annual 2025 sampling event is discussed in the following sections.

6.1 FIRST SEMI-ANNUAL 2025 COMPLIANCE MONITORING EVENT

A field blank was collected each day that sampling occurred as part of the field sampling and analysis activities and was submitted to Geochemical Testing for analysis of the constituents listed in Table I and II of the GDP. In addition, a laboratory-prepared trip blank accompanied the volatile sample containers to and from the laboratory, and was analyzed for Table I, VOCs. The laboratory report with chain-of-custody forms for the first semi-annual 2025 event are presented in **Appendix A**.

A description of the laboratory QA/QC data associated with the March 2025 sampling event is summarized in the following sections.

6.2 HOLDING TIMES

Samples submitted to the contracted laboratory were analyzed within the required holding times as determined by the analytical method. No data qualification is required.

6.3 METHOD BLANKS

There were no quantified detections of any analyzed parameters in the method, field, and trip blanks collected during the March 2025 sampling event except for low levels of sodium in the field blanks.

6.4 LABORATORY CONTROL DATA

Laboratory control limits were within allowable limits for analyzed parameters during the March 2025 sampling event.

7.0 GROUNDWATER MONITORING ANALYTICAL RESULTS

The analytical results from the March 11-12, 2025, sampling event are summarized in **Table 3**; the laboratory report with chain-of-custody forms is in **Appendix A**. The following sections discuss the analytical results for the March 2025 sampling event.

7.1 GROUNDWATER PROTECTION STANDARD COMPARISON

The analytical results were compared to the most recent EPA MCLs and MDE standards for organic and inorganic chemicals in drinking water (COMAR 26.04.01.06-07) using a value-to-value comparison. Note that for compounds where the MCL is different from the MDE standard, the lower standard is used for comparison to the analytical results. Manganese exceeded the MDE standard of 0.043 mg/L in most wells; there were no other MCL or MDE standard exceedances.

7.2 HISTORICAL GROUNDWATER TREND ANALYSIS

The following is a summary of the historical groundwater trend analysis as required by Part I.B.3. of the GDP. A statistical trend evaluation of the downgradient data concentrations was performed by applying the Mann-Kendall test for trend at a 95% confidence level (upward and downward trends) for the most recent four (4) sampling events (September 2023 through March 2025). A summary of the statistical analysis and graphs of the results are presented in **Appendix B**. Based on the Mann-Kendall analysis, the following wells have constituents with statistically-significant increasing trends:

MW-1	Alkalinity (Total), Barium, Calcium, Hardness, Total Dissolved Solids
MW-3	Lead
MW-4	Calcium, Chloride, pH (lab)
MW-6	Potassium
MW-7	pH (lab)
MW-8	Barium
MW-10	Sulfate

The results of the trend analysis for the first semi-annual sampling event of 2025 are generally consistent with the historic results. An evaluation of the detections with increasing trends for the second 2023 semi-annual sampling event, both 2024 semi-annual sampling events, and the first 2025 semi-annual sampling

event was performed. The September 2023, 2024, and March 2025 analyte concentration data from each of the 13 wells was considered for statistical analysis to evaluate chemistry changes in the wells. Each sample was analyzed for 85 different compounds, although only 36 compounds have measurements above detection limits in at least one well. A set of 312 Mann-Kendall trend analyses were performed, with any constituent/well combination exhibiting a concentration above detection limits for any of the four most recent sampling events being included in the analysis. Based on this evaluation, the number of constituent/well combinations which have exhibited increasing trends in the past has increased relative to previous similar evaluations. Constituents that have continued to increase and are consistent with previously established trends include alkalinity (total) in MW-1, total dissolved solids in MW-1, chloride in MW-4, pH (lab) in MW-7, and barium in MW-8. An additional set of well-compound combinations identified as having a statistically-significant increasing trend as the result of the addition of the March 2025 dataset includes barium in MW-1, calcium in MW-1, hardness in MW-1, lead in MW-3, calcium in MW-4, pH (lab) in MW-4, potassium in MW-6, and sulfate in MW-10.

Of the 312 Mann-Kendall trend analyses, six (6) analyses of constituent/well combinations indicate a decreasing trend across the four most recent sampling events. Based on the statistical trend analysis, the following wells have constituents with potential decreasing trends:

MW-6	Total Dissolved Solids
MW-7	Nitrogen Nitrate-Nitrite
MW-13	Chloride, Magnesium, Nitrogen Nitrate-Nitrite, Sodium

Based on an evaluation of detections for the above listed constituents with increasing trends, since 2009 the concentrations have fluctuated with the groundwater geochemistry. Based on these historical fluctuations in concentrations, these increasing trends are believed to represent naturally occurring variability in groundwater quality at this Facility. These trends will continue to be evaluated on a semi-annual basis.

8.0 LEACHATE SAMPLING RESULTS

Data summarizing the operation of the leachate collection system, including disposal volumes, sampling and analysis are included in the fourth quarter 2024 and first quarter 2025 water quality reports, which are included as **Appendix C**. As presented and compared to the limits in the landfill's Harford County Wastewater Discharge Permit Number A-O-003, there were no exceedances reported in leachate samples collected during the fourth quarter of 2024 and first quarter of 2025.

9.0 LANDFILL BOUNDARY PROBE RESULTS

Landfill perimeter boundary probes are monitored by Pappy on a quarterly basis. The boundary probe monitoring results from November 2024 and February 2025 are presented in **Appendix D**. During the November 2024 monitoring, total methane at probes WMPLPB05, WMPLPB04, WMPLPB06 and WMPLPB17 measured 0.6%, 5.6%, 11.1%, and 20.4%, respectively; at all other probes the readings were 0% methane except for probe WMPLPB20 where 0.1% methane was measured. During the February 2025 monitoring, total methane at probes WMPLPB04 and WMPLPB06 measured 0.2%and 4.8% respectively; at all other probes the readings were 0% methane.

10.0 TOPOGRAPHIC SURVEY

A copy of the most recent topographic survey map of the Facility is presented as **Appendix E**. This survey represents the facility topography post-closure of the landfill and includes monitoring well locations and gas monitoring locations as of July 2008.

11.0 SUMMARY

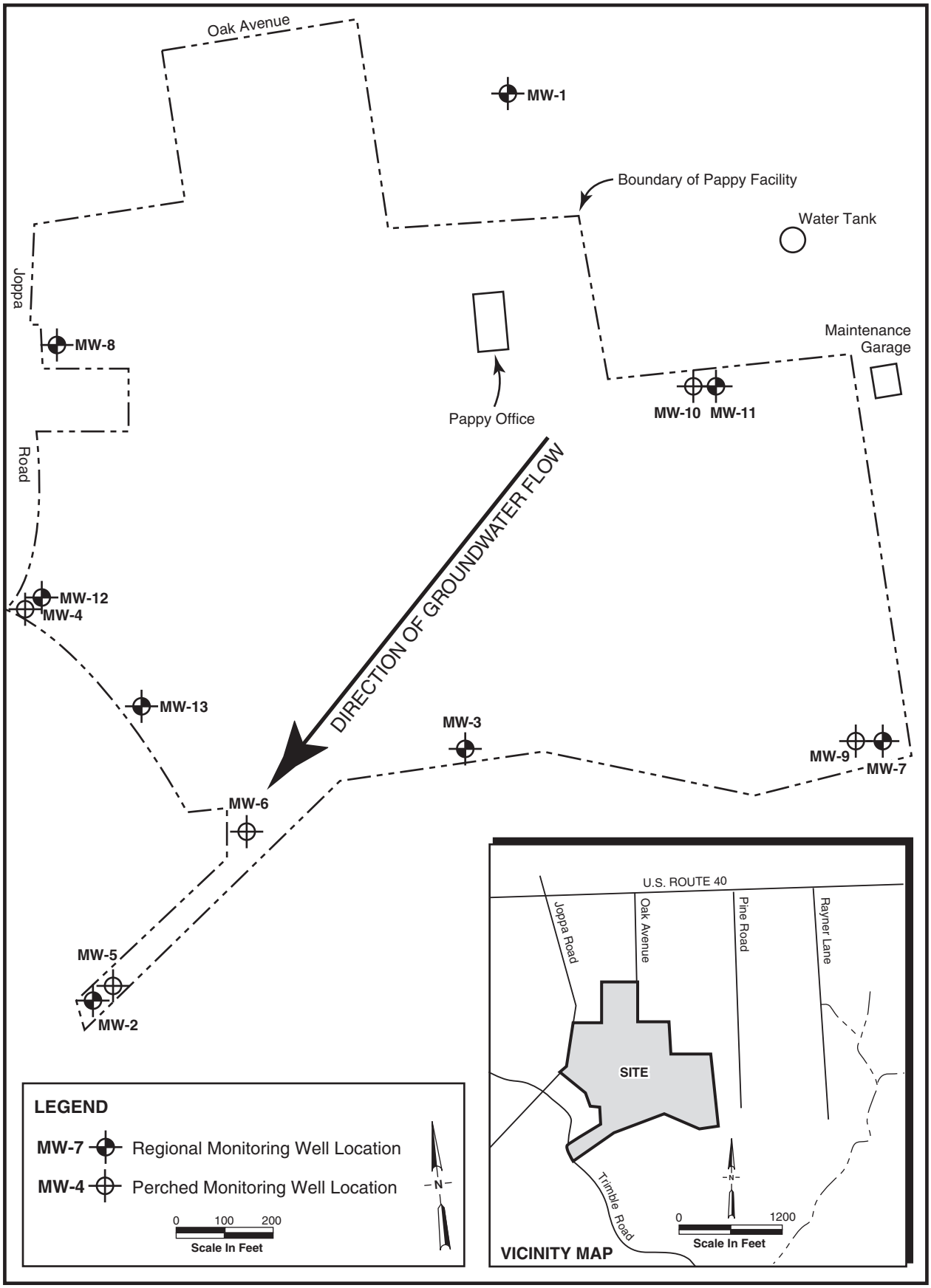
The groundwater monitoring network at the Facility continues to adequately monitor groundwater quality in the uppermost aquifer beneath the waste disposal area based on the hydrogeologic and analytical data presented herein.

Analytical results from the first semi-annual 2025 sampling event were compared to the EPA MCLs and MDE groundwater standards in accordance with the Facility's GDP. Manganese exceeded the MDE standard in most wells; however, this compound is ubiquitous in the region. No other exceedances were reported for the first semi-annual 2025 sampling event. Based on the results of a groundwater trend analysis, the increasing trends are a natural fluctuation in the groundwater geochemistry and are below the EPA MCLs and MDE standards, therefore no further action is required at this time.

A comparison of the analytical results for the leachate samples collected during the fourth quarter of 2024 and first quarter of 2025 to the Harford County wastewater discharge permit limits indicated no exceedances.

The second semi-annual compliance sampling event for the Oak Avenue Rubble Landfill in 2025 is tentatively scheduled for September 2025. This event will include analysis for per- and polyfluoroalkyl substances (PFAS).

FIGURES

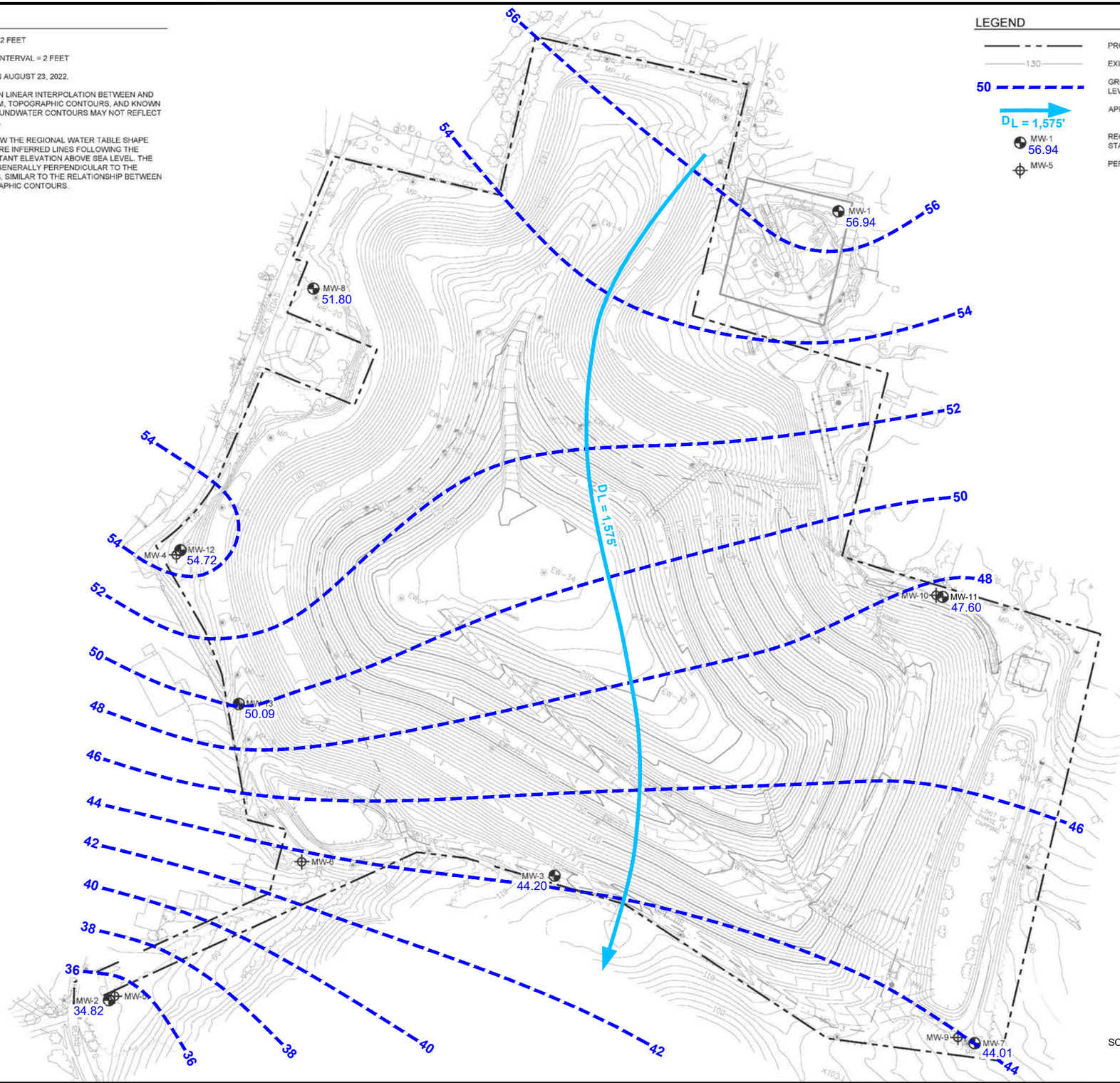


OAK BASE

FIGURE 1 SITE LOCATION MAP AND SITE PLAN MAP, PAPPY FACILITY, JOPPA, MARYLAND

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 2 FEET
3. STATIC WATER LEVELS MEASURED ON AUGUST 23, 2022.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. GROUNDWATER CONTOUR LINES SHOW THE REGIONAL WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.



LEGEND

- PROPERTY / FACILITY BOUNDARY
- 130 — EXISTING TOPOGRAPHIC CONTOUR
- 50 — GROUNDWATER SURFACE CONTOUR [FEET ABOVE MEAN SEA LEVEL (AMSL)]
- DL = 1,575' — APPROXIMATE GROUNDWATER FLOW DIRECTION
- MW-1 56.94 — REGIONAL MONITORING WELL LOCATION AND IDENTIFICATION WITH STATIC WATER LEVEL ELEVATION (AMSL)
- MW-5 — PERCHED MONITORING WELL LOCATION AND IDENTIFICATION

N

0 100 200 400
Feet

SOURCE: GOLDER ASSOCIATES, OAK AVENUE RUBBLE LANDFILL, GROUNDWATER SURFACE CONTOUR MAP DATED AUGUST 23, 2022.

Bar Measures 1 inch

TETRA TECH
www.tetratech.com
980 AWALD ROAD
ANNAPOLIS, MD 21403
PHONE: 410.990.4607

OAK AVENUE RUBBLE LANDFILL
1020 OAK AVENUE
JOPPATOWNE, MARYLAND 21085

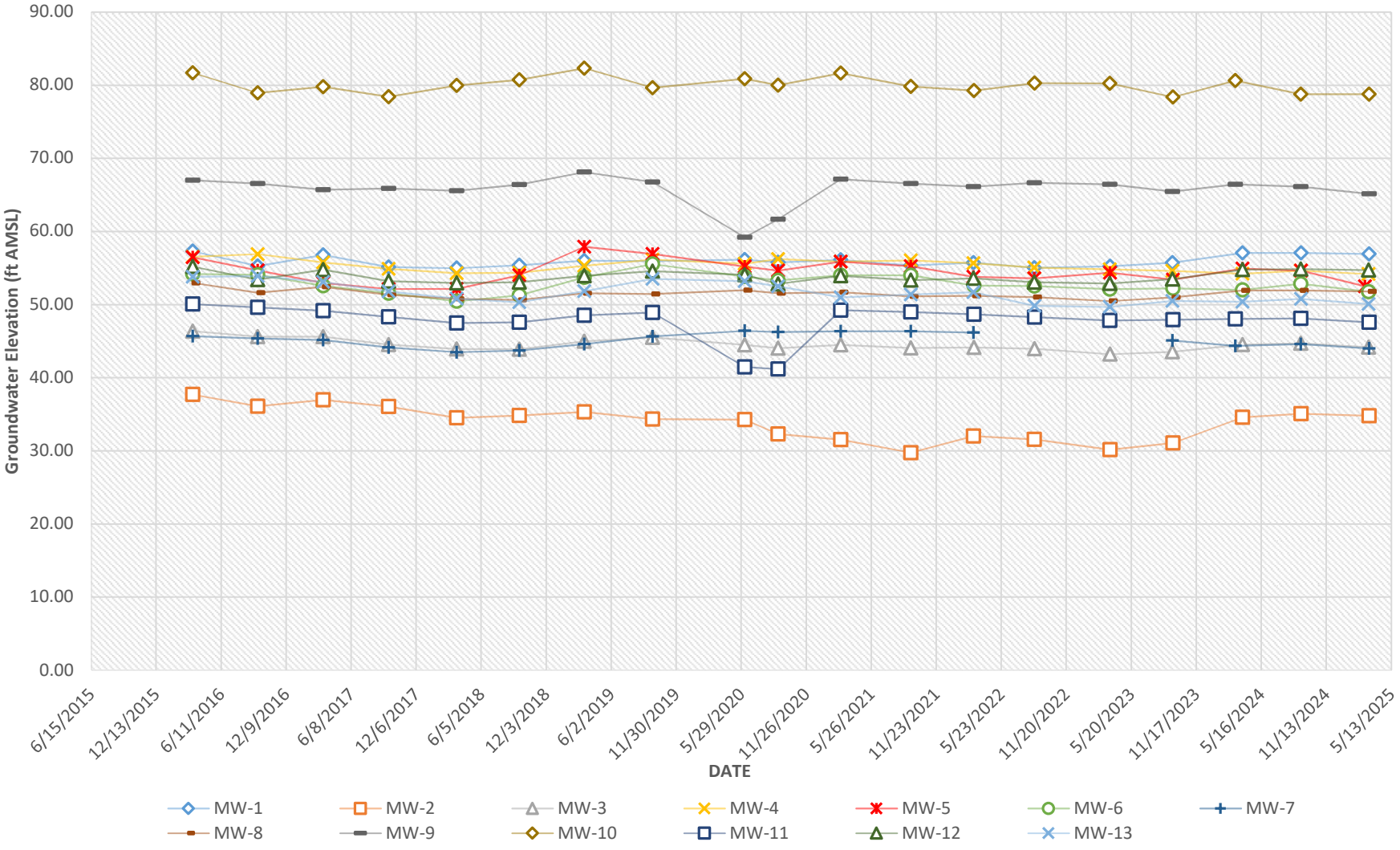
GROUNDWATER SURFACE CONTOUR MAP
MARCH 11-12, 2025

Project No.:	117-023300-24009
Date:	03/31/25
Drawn By:	CP
Checked By:	BC

FIGURE
2

3/31/2025 4:08:55 PM - P:\ACAD\023300-24009-PAPP\023300-24009-004A.DWG - PAUGH, CHRISTINA

FIGURE 3
Combined Hydrograph (Monitoring Wells)
Oak Avenue Rubble Landfill , Joppa, Maryland



TABLES

TABLE 1
MONITORING WELL CONSTRUCTION SUMMARY
Oak Avenue Rubble Landfill
Joppa, Maryland

MONITORING WELL ID	TOTAL DEPTH (BTOC)	SCREENED INTERVAL (BTOC)	TOP OF SANDPACK (BTOC)	WELL DIAM. (inches)/ MATERIAL	DEPTH OF PUMP INTAKE FT. (BTOC)	ELEVATION OF MEASURING POINT FEET (AMSL)	MONITORED AQUIFER
MW - 1	142.5	132.5 - 142.5	124.5	4/PVC	137.5	123.86	Regional
MW - 2	149.8	139.7 - 149.7	134.7	4/PVC	144.8	74.86	Regional
MW - 3	140.2	130.2 - 140.2	124.7	4/PVC	135.2	122.33	Regional
MW - 4	79.90	69.9 - 79.9	Approx. 67.9	4/PVC	79	133.23	Perched
MW - 5	22.7	12.6 - 22.6	Approx. 10.6	4/PVC	22	74.97	Perched
MW - 6	53.7	43.6 - 53.6	Approx. 41.6	4/PVC	48.7	94.24	Perched
MW - 7	108.6	98.6 - 108.6	93.6	4/PVC	100	93.20	Regional
MW - 8	149.0	138.9 - 148.9	133.9	4/PVC	144	135.70	Regional
MW - 9	42.9	32.9 - 42.9	29.9	4/PVC	37.9	92.75	Perched
MW - 10	17.2	7.1 - 17.1	5.1	4/PVC	12.2	93.35	Perched
MW - 11	94.5	84.4 - 94.4	78.4	4/PVC	89.5	93.25	Regional
MW - 12	148.5	128.5 - 148.5	125.5	4/PVC	143.5	133.79	Regional
MW - 13	136.1	116.0 - 136.0	109.5	4/PVC	131.1	113.89	Regional

Notes:
BTOC = Below top of well casing
AMSL = Above mean sea level

TABLE 2

SUMMARY OF STATIC WATER LEVEL DATA

Oak Avenue Rubble Landfill

Joppa, Maryland

Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)	Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)
MW-1	123.86	57.32	142.5	3/24/2016	66.54	57.32	**MW-2**	74.86	37.72	149.8	3/24/2016	37.14	37.72
				9/21/2016	68.57	55.29					9/21/2016	38.75	36.11
				3/22/2017	67.06	56.80					3/22/2017	37.87	36.99
				9/20/2017	68.72	55.14					9/20/2017	38.80	36.06
				3/29/2018	68.86	55.00					3/29/2018	40.33	34.53
				9/19/2018	68.47	55.39					9/19/2018	40.03	34.83
				3/19/2019	67.82	56.04					3/19/2019	39.52	35.34
				9/25/2019	67.91	55.95					9/25/2019	40.50	34.36
				6/8/2020	67.70	56.16					6/8/2020	40.58	34.28
				9/9/2020	68.09	55.77					9/9/2020	42.55	32.31
				3/2/2021	67.72	56.14					3/2/2021	43.31	31.55
				9/13/2021	68.50	55.36					9/13/2021	45.10	29.76
				3/7/2022	68.10	55.76					3/7/2022	42.83	32.03
				8/23/2022	68.80	55.06					8/23/2022	43.29	31.57
				3/22/2023	68.60	55.26					3/22/2023	44.70	30.16
				9/12/2023	68.11	55.75					9/13/2023	43.79	31.07
				3/25/2024	66.79	57.07					3/25/2024	40.25	34.61
				9/4/2024	66.78	57.08					9/4/2024	39.77	35.09
				3/12/2025	66.92	56.94					3/12/2025	40.04	34.82
MW-3	122.33	75.81	140.2	3/24/2016	75.96	46.37	**MW-4**	133.23	46.27	79.9	3/24/2016	76.69	56.54
				9/21/2016	76.71	45.62					9/21/2016	76.31	56.92
				3/22/2017	76.71	45.62					3/22/2017	77.44	55.79
				9/20/2017	77.78	44.55					9/20/2017	78.31	54.92
				3/29/2018	78.38	43.95					3/29/2018	78.93	54.30
				9/19/2018	78.41	43.92					9/19/2018	78.85	54.38
				3/19/2019	77.34	44.99					3/19/2019	77.92	55.31
				9/25/2019	76.80	45.53					9/25/2019	77.07	56.16
				6/8/2020	77.84	44.49					6/8/2020	77.64	55.59
				9/9/2020	78.29	44.04					9/9/2020	76.98	56.25
				3/2/2021	77.84	44.49					3/2/2021	77.35	55.88
				9/13/2021	78.26	44.07					9/13/2021	77.16	56.07
				3/8/2022	78.18	44.15					3/7/2022	77.54	55.69
				8/24/2022	78.35	43.98					8/23/2022	78.14	55.09
				3/22/2023	79.10	43.23					3/21/2023	78.40	54.83
				9/12/2023	78.77	43.56					9/12/2023	78.60	54.63
				3/25/2024	77.80	44.53					3/25/2024	79.01	54.22
				9/3/2024	77.60	44.73					9/3/2024	78.58	54.65
				3/11/2025	78.13	44.20					3/11/2025	79.04	54.19
MW-5	74.97	57.80	22.7	3/24/2016	18.47	56.50	**MW-6**	94.24	50.08	53.7	3/24/2016	40.03	54.21
				9/21/2016	20.27	54.70					9/21/2016	40.14	54.10
				3/22/2017	22.01	52.96					3/22/2017	41.65	52.59
				9/20/2017	22.83	52.14					9/20/2017	42.69	51.55
				3/29/2018	22.79	52.18					3/29/2018	43.78	50.46
				9/19/2018	20.93	54.04					9/19/2018	42.94	51.30
				3/19/2019	17.05	57.92					3/19/2019	40.48	53.76
				9/25/2019	18.02	56.95					9/25/2019	38.68	55.56
				6/8/2020	19.75	55.22					6/8/2020	40.39	53.85
				9/9/2020	20.30	54.67					9/9/2020	40.92	53.32
				3/2/2021	19.08	55.89					3/2/2021	40.22	54.02
				9/13/2021	19.73	55.24					9/13/2021	40.20	54.04
				3/7/2022	21.15	53.82					3/8/2022	41.63	52.61
				8/23/2022	21.37	53.60					8/23/2022	41.68	52.56
				3/22/2023	20.60	54.37					3/21/2023	42.10	52.14
				9/13/2023	21.55	53.42					9/13/2023	42.01	52.23
				3/25/2024	20.03	54.94					3/25/2024	42.21	52.03
				9/4/2024	20.32	54.65					9/3/2024	41.36	52.88
				3/1/2025	22.45	52.52					3/11/2025	42.45	51.79

TABLE 2

SUMMARY OF STATIC WATER LEVEL DATA

Oak Avenue Rubble Landfill

Joppa, Maryland

Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)	Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)
MW-7	93.20	55.21	108.6	3/24/2016	47.50	45.70	**MW-8**	135.70	54.63	149.0	3/24/2016	82.72	52.98
				9/21/2016	47.82	45.38					9/21/2016	84.07	51.63
				3/22/2017	48.02	45.18					3/22/2017	83.27	52.43
				9/20/2017	49.03	44.17					9/20/2017	84.35	51.35
				3/29/2018	49.71	43.49					3/29/2018	84.91	50.79
				9/19/2018	49.46	43.74					9/19/2018	85.06	50.64
				3/19/2019	48.59	44.61					3/19/2019	84.13	51.57
				9/25/2019	47.55	45.65					9/25/2019	84.25	51.45
				6/8/2020	46.78	46.42					6/8/2020	83.73	51.97
				9/9/2020	46.93	46.27					9/9/2020	84.13	51.57
				3/2/2021	46.85	46.35					3/2/2021	84.00	51.70
				9/13/2021	46.82	46.38					9/13/2021	84.57	51.13
				3/7/2022	47.00	46.20					3/7/2022	84.49	51.21
				8/24/2022	below top of pump-unable to measure						8/23/2022	84.66	51.04
				3/21/2023							3/22/2023	85.20	50.50
				9/12/2023	48.09	45.11					9/13/2023	84.69	51.01
				3/5/2024	48.82	44.38					3/25/2024	83.75	51.95
				9/3/2024	48.58	44.62					9/4/2024	83.74	51.96
				3/12/2025	49.19	44.01					3/12/2025	83.90	51.80
MW-9	92.75	60.15	42.9	3/24/2016	25.72	67.03	**MW-10**	93.35	60.44	17.2	3/24/2016	11.63	81.72
				9/21/2016	26.19	66.56					9/21/2016	14.40	78.95
				3/22/2017	27.04	65.71					3/22/2017	13.54	79.81
				9/20/2017	26.86	65.89					9/20/2017	14.92	78.43
				3/29/2018	27.18	65.57					3/29/2018	13.37	79.98
				9/19/2018	26.31	66.44					9/19/2018	12.58	80.77
				3/19/2019	24.61	68.14					3/19/2019	11.01	82.34
				9/25/2019	25.98	66.77					9/25/2019	13.67	79.68
				6/8/2020	33.52	59.23					6/8/2020	12.45	80.90
				9/9/2020	31.07	61.68					9/9/2020	13.32	80.03
				3/2/2021	25.57	67.18					3/2/2021	11.68	81.67
				9/13/2021	26.18	66.57					9/13/2021	13.50	79.85
				3/7/2022	26.60	66.15					3/8/2022	14.05	79.30
				8/23/2022	26.09	66.66					8/24/2022	13.06	80.29
				3/21/2023	26.30	66.45					3/21/2023	13.10	80.25
				9/12/2023	27.28	65.47					9/13/2023	14.96	78.39
				3/5/2024	26.30	66.45					3/5/2024	12.70	80.65
				9/3/2024	26.62	66.13					9/3/2024	14.57	78.78
				3/12/2025	27.58	65.17					3/12/2025	14.56	78.79
MW-11	93.25	80.38	94.5	3/24/2016	43.17	50.08	**MW-12**	133.79	73.95	148.5	3/24/2016	78.58	55.21
				9/21/2016	43.60	49.65					9/21/2016	80.37	53.42
				3/22/2017	44.07	49.18					3/22/2017	78.98	54.81
				9/20/2017	44.90	48.35					9/20/2017	80.58	53.21
				3/29/2018	45.77	47.48					3/29/2018	80.81	52.98
				9/19/2018	45.65	47.60					9/19/2018	80.70	53.09
				3/19/2019	44.70	48.55					3/19/2019	79.82	53.97
				9/25/2019	44.33	48.92					9/25/2019	79.21	54.58
				6/8/2020	51.78	41.47					6/8/2020	79.70	54.09
				9/9/2020	52.06	41.19					9/9/2020	80.95	52.84
				3/2/2021	44.00	49.25					3/2/2021	79.85	53.94
				9/13/2021	44.26	48.99					9/13/2021	80.42	53.37
				3/8/2022	44.55	48.70					3/7/2022	80.20	53.59
				8/24/2022	44.95	48.30					8/23/2022	80.71	53.08
				3/21/2023	45.40	47.85					3/21/2023	80.90	52.89
				9/13/2023	45.30	47.95					9/12/2023	80.28	53.51
				3/5/2024	45.20	48.05					3/25/2024	78.99	54.80
				9/3/2024	45.13	48.12					9/3/2024	78.93	54.86
				3/12/2025	45.65	47.60					3/11/2025	79.07	54.72

TABLE 2

SUMMARY OF STATIC WATER LEVEL DATA

Oak Avenue Rubble Landfill

Joppa, Maryland

Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)	Well ID	Measuring Point Elev. (ft AMSL)	Historical High Static Water Level Elevation	Depth to Bottom (ft)	Date Measured	Depth to Water (ft)	Ground water Elevation (ft AMSL)
MW-13	113.89	84.15	136.1	3/24/2016	60.06	53.83							
				9/21/2016	59.97	53.92							
				3/22/2017	60.77	53.12							
				9/20/2017	62.07	51.82							
				3/29/2018	63.07	50.82							
				9/19/2018	63.56	50.33							
				3/19/2019	62.06	51.83							
				9/25/2019	60.37	53.52							
				6/8/2020	60.69	53.20							
				9/9/2020	61.39	52.50							
				3/2/2021	62.88	51.01							
				9/13/2021	62.50	51.39							
				3/7/2022	62.19	51.70							
				8/24/2022	64.04	49.85							
				3/21/2023	64.20	49.69							
				9/12/2023	63.39	50.50							
				3/25/2024	63.50	50.39							
				9/4/2024	63.08	50.81							
				3/11/2025	63.80	50.09							

NOTES: The measuring point for each well is the top of the PVC well casing.
ft AMSL = feet above mean sea level
ft = feet

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,1,1,2-Tetrachloroethane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,1,2-Tetrachloroethane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,1,2-Tetrachloroethane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1,1,2-Tetrachloroethane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1,1,2-Tetrachloroethane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1,2-Tetrachloroethane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5
1,1,1,2-Tetrachloroethane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5
1,1,1,2-Tetrachloroethane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5
1,1,1,2-Tetrachloroethane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5
1,1,1,2-Tetrachloroethane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5
1,1,1-Trichloroethane	SW8260	03/12-13/2009	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,1-Trichloroethane	SW8260	06/16-17/2009	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,1-Trichloroethane	SW8260	09/16-18/2009	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	12/08-09/2009	ug/L	200	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	12/08-19/2009	ug/L	200	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	SW8260	03/29-30/2010	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	06/16-17/2010	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/07-08/2010	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	12/07-08/2010	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/28-29/2011	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/27-28/2011	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/13-14/2012	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/17-19/2012	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/19-20/2013	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/23-24/2013	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/10-11/2014	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/16-17/2014	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/29/2014	ug/L	200	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1,1-Trichloroethane	SW8260	03/17-18/2015	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/14-15/2015	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1,1-Trichloroethane	SW8260	09/30/2015	ug/L	200	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1,1-Trichloroethane	SW8260	03/23-24/2016	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/20-21/2016	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/21-22/2017	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/20-21/2017	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/29-30/2018	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,1,1-Trichloroethane	SW8260	09/19-20/2018	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/18-19/2019	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/25-26/2019	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	06/08-09/2020	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/09-10/2020	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/02-03/2021	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	09/13-14/2021	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/07-08/2022	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	08/23-24/2022	ug/L	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,1-Trichloroethane	SW8260	03/21-23/2023	ug/L	200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,1-Trichloroethane	SW8260	09/12-13/2023	ug/L	200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,1-Trichloroethane	SW8260	03/25-26/2024	ug/L	200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,1-Trichloroethane	SW8260	09/03-04/2024	ug/L	200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,1-Trichloroethane	SW8260	03/11-12/2025	ug/L	200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2,2-Tetrachloroethane	SW8260	03/12-13/2009	ug/L	0.076 (PQL =1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,2,2-Tetrachloroethane	SW8260	06/16-17/2009	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,2,2-Tetrachloroethane	SW8260	09/16-18/2009	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	12/08-09/2009	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	12/08-19/2009	ug/L	0.076 (PQL = 1)	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	SW8260	03/29-30/2010	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	06/16-17/2010	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/07-08/2010	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	12/07-08/2010	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/28-29/2011	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/27-28/2011	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/13-14/2012	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/17-19/2012	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/19-20/2013	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/23-24/2013	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/10-11/2014	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/16-17/2014	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/29/2014	ug/L	0.076 (PQL = 1)	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	SW8260	03/17-18/2015	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/14-15/2015	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1,2,2-Tetrachloroethane	SW8260	09/30/2015	ug/L	0.076 (PQL = 1)	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1,2,2-Tetrachloroethane	SW8260	03/23-24/2016	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/20-21/2016	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/21-22/2017	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/20-21/2017	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/29-30/2018	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/19-20/2018	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/18-19/2019	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/25-26/2019	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	06/08-09/2020	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/09-10/2020	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/02-03/2021	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	09/13-14/2021	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/07-08/2022	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	08/23-24/2022	ug/L	0.076 (PQL = 1)	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2,2-Tetrachloroethane	SW8260	03/21-23/2023	ug/L	0.076 (PQL = 1)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2,2-Tetrachloroethane	SW8260	09/12-13/2023	ug/L	0.076 (PQL = 1)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2,2-Tetrachloroethane	SW8260	03/25-26/2024	ug/L	0.076 (PQL = 1)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2,2-Tetrachloroethane	SW8260	09/03-04/2024	ug/L	0.076 (PQL = 1)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2,2-Tetrachloroethane	SW8260	03/11-12/2025	ug/L	0.076 (PQL = 1)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,1,2-Trichloroethane	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,2-Trichloroethane	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1,2-Trichloroethane	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1,2-Trichloroethane	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1,2-Trichloroethane	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1,2-Trichloroethane	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1,2-Trichloroethane	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2-Trichloroethane	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2-Trichloroethane	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2-Trichloroethane	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1,2-Trichloroethane	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethane	SW8260	03/12-13/2009	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	1	< 1	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethane	SW8260	06/16-17/2009	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethane	SW8260	09/16-18/2009	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	12/08-09/2009	ug/L	2.8	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	12/08-19/2009	ug/L	2.8	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	SW8260	03/29-30/2010	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	06/16-17/2010	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/07-08/2010	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	12/07-08/2010	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/28-29/2011	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/27-28/2011	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/13-14/2012	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/17-19/2012	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/19-20/2013	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/23-24/2013	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/10-11/2014	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/16-17/2014	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/29/2014	ug/L	2.8	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1-Dichloroethane	SW8260	03/17-18/2015	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/14-15/2015	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethane	SW8260	09/30/2015	ug/L	2.8	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1-Dichloroethane	SW8260	03/23-24/2016	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/20-21/2016	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/21-22/2017	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/20-21/2017	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/29-30/2018	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,1-Dichloroethane	SW8260	09/19-20/2018	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/18-19/2019	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/25-26/2019	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	06/08-09/2020	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/09-10/2020	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/02-03/2021	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	09/13-14/2021	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/07-08/2022	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	08/23-24/2022	ug/L	2.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethane	SW8260	03/21-23/2023	ug/L	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethane	SW8260	09/12-13/2023	ug/L	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethane	SW8260	03/25-26/2024	ug/L	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethane	SW8260	09/03-04/2024	ug/L	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethane	SW8260	03/11-12/2025	ug/L	2.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethene	SW8260	03/12-13/2009	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethene	SW8260	06/16-17/2009	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethene	SW8260	09/16-18/2009	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	12/08-09/2009	ug/L	7	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	12/08-19/2009	ug/L	7	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethene	SW8260	03/29-30/2010	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	06/16-17/2010	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/07-08/2010	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	12/07-08/2010	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/28-29/2011	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/27-28/2011	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/13-14/2012	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/17-19/2012	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/19-20/2013	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/23-24/2013	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/10-11/2014	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/16-17/2014	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/29/2014	ug/L	7	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,1-Dichloroethene	SW8260	03/17-18/2015	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/14-15/2015	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,1-Dichloroethene	SW8260	09/30/2015	ug/L	7	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,1-Dichloroethene	SW8260	03/23-24/2016	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/20-21/2016	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/21-22/2017	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/20-21/2017	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/29-30/2018	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/19-20/2018	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/18-19/2019	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/25-26/2019	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	06/08-09/2020	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/09-10/2020	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/02-03/2021	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	09/13-14/2021	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/07-08/2022	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	08/23-24/2022	ug/L	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,1-Dichloroethene	SW8260	03/21-23/2023	ug/L	7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethene	SW8260	09/12-13/2023	ug/L	7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethene	SW8260	03/25-26/2024	ug/L	7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethene	SW8260	09/03-04/2024	ug/L	7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,1-Dichloroethene	SW8260	03/11-12/2025	ug/L	7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,2,3-Trichloropropane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2,3-Trichloropropane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2,3-Trichloropropane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2,3-Trichloropropane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2,3-Trichloropropane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2,3-Trichloropropane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2,3-Trichloropropane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2,3-Trichloropropane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2,3-Trichloropropane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2,3-Trichloropropane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2,3-Trichloropropane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/12-13/2009	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	06/16-17/2009	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/16-18/2009	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	12/08-09/2009	ug/L	0.2	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	12/08-19/2009	ug/L	0.2	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/29-30/2010	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	06/16-17/2010	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/07-08/2010	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	12/07-08/2010	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/28-29/2011	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/27-28/2011	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/13-14/2012	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/17-19/2012	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/19-20/2013	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/23-24/2013	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/10-11/2014	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/16-17/2014	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/29/2014	ug/L	0.2	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/17-18/2015	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/14-15/2015	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/30/2015	ug/L	0.2	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/23-24/2016	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/20-21/2016	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/21-22/2017	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/20-21/2017	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/29-30/2018	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/19-20/2018	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/18-19/2019	ug/L	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/25-26/2019	ug/L	0.2	< 0.04	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	06/08-09/2020	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/09-10/2020	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/02-03/2021	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/13-14/2021	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/07-08/2022	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	08/23-24/2022	ug/L	0.2	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/21-23/2023	ug/L	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/12-13/2023	ug/L	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/25-26/2024	ug/L	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	09/03-04/2024	ug/L	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromo-3-chloropropane (DBCP)	SW8011	03/11-12/2025	ug/L	0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromoethane (EDB)	SW8011	03/12-13/2009	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	06/16-17/2009	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/16-18/2009	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	12/08-09/2009	ug/L	0.05	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	12/08-19/2009	ug/L	0.05	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane (EDB)	SW8011	03/29-30/2010	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	06/16-17/2010	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/07-08/2010	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	12/07-08/2010	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	03/28-29/2011	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/27-28/2011	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	03/13-14/2012	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/17-19/2012	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	03/19-20/2013	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/23-24/2013	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	03/10-11/2014	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/16-17/2014	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/29/2014	ug/L	0.05	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2-Dibromoethane (EDB)	SW8011	03/17-18/2015	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/14-15/2015	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/30/2015	ug/L	0.05	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2-Dibromoethane (EDB)	SW8011	03/23-24/2016	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	09/20-21/2016	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dibromoethane (EDB)	SW8011	03/21-22/2017	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	09/20-21/2017	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	03/29-30/2018	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	09/19-20/2018	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	03/18-19/2019	ug/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	09/25-26/2019	ug/L	0.05	< 0.04	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	06/08-09/2020	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	09/09-10/2020	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	03/02-03/2021	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	09/13-14/2021	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	03/07-08/2022	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	08/23-24/2022	ug/L	0.05	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	< 0.04
1,2-Dibromoethane (EDB)	SW8011	03/21-23/2023	ug/L	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromoethane (EDB)	SW8011	09/12-13/2023	ug/L	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromoethane (EDB)	SW8011	03/25-26/2024	ug/L	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromoethane (EDB)	SW8011	09/03-04/2024	ug/L	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01
1,2-Dibromoethane (EDB)	SW8011	03/11-12/2025	ug/L	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	--	< 0.01

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,2-Dichlorobenzene	SW8260	03/12-13/2009	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichlorobenzene	SW8260	06/16-17/2009	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichlorobenzene	SW8260	09/16-18/2009	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	12/08-09/2009	ug/L	600	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	12/08-19/2009	ug/L	600	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8260	03/29-30/2010	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	06/16-17/2010	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/07-08/2010	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	12/07-08/2010	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/28-29/2011	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/27-28/2011	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/13-14/2012	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/17-19/2012	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/19-20/2013	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/23-24/2013	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/10-11/2014	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/16-17/2014	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/29/2014	ug/L	600	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8260	03/17-18/2015	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/14-15/2015	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dichlorobenzene	SW8260	09/30/2015	ug/L	600	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2-Dichlorobenzene	SW8260	03/23-24/2016	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/20-21/2016	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/21-22/2017	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/20-21/2017	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/29-30/2018	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/19-20/2018	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/18-19/2019	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/25-26/2019	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	06/08-09/2020	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/09-10/2020	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/02-03/2021	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	09/13-14/2021	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/07-08/2022	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	08/23-24/2022	ug/L	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichlorobenzene	SW8260	03/21-23/2023	ug/L	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichlorobenzene	SW8260	09/12-13/2023	ug/L	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichlorobenzene	SW8260	03/25-26/2024	ug/L	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichlorobenzene	SW8260	09/03-04/2024	ug/L	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichlorobenzene	SW8260	03/11-12/2025	ug/L	600	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloroethane	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichloroethane	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichloroethane	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2-Dichloroethane	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dichloroethane	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2-Dichloroethane	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,2-Dichloroethane	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloroethane	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloroethane	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloroethane	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloroethane	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloroethane	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloropropane	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichloropropane	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,2-Dichloropropane	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,2-Dichloropropane	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,2-Dichloropropane	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,2-Dichloropropane	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,2-Dichloropropane	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloropropane	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloropropane	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloropropane	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,2-Dichloropropane	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
1,4-Dichlorobenzene	SW8260	03/12-13/2009	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,4-Dichlorobenzene	SW8260	06/16-17/2009	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
1,4-Dichlorobenzene	SW8260	09/16-18/2009	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	12/08-09/2009	ug/L	75	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	12/08-19/2009	ug/L	75	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8260	03/29-30/2010	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	06/16-17/2010	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/07-08/2010	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	12/07-08/2010	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/28-29/2011	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/27-28/2011	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/13-14/2012	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/17-19/2012	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/19-20/2013	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/23-24/2013	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/10-11/2014	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/16-17/2014	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/29/2014	ug/L	75	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8260	03/17-18/2015	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/14-15/2015	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
1,4-Dichlorobenzene	SW8260	09/30/2015	ug/L	75	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
1,4-Dichlorobenzene	SW8260	03/23-24/2016	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/20-21/2016	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/21-22/2017	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/20-21/2017	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/29-30/2018	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/19-20/2018	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/18-19/2019	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/25-26/2019	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	06/08-09/2020	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/09-10/2020	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/02-03/2021	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	09/13-14/2021	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/07-08/2022	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	08/23-24/2022	ug/L	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
1,4-Dichlorobenzene	SW8260	03/21-23/2023	ug/L	75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,4-Dichlorobenzene	SW8260	09/12-13/2023	ug/L	75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,4-Dichlorobenzene	SW8260	03/25-26/2024	ug/L	75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,4-Dichlorobenzene	SW8260	09/03-04/2024	ug/L	75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
1,4-Dichlorobenzene	SW8260	03/11-12/2025	ug/L	75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
2-Butanone	SW8260	03/12-13/2009	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 2	< 5	< 5	< 5	< 5	< 5	< 5	--	--
2-Butanone	SW8260	06/16-17/2009	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
2-Butanone	SW8260	09/16-18/2009	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	12/08-09/2009	ug/L	560	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	1.3	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	12/08-19/2009	ug/L	560	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone	SW8260	03/29-30/2010	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	06/16-17/2010	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/07-08/2010	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	12/07-08/2010	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/28-29/2011	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/27-28/2011	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/13-14/2012	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/17-19/2012	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/19-20/2013	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	16.9	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/23-24/2013	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/10-11/2014	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/16-17/2014	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/29/2014	ug/L	560	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
2-Butanone	SW8260	03/17-18/2015	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/14-15/2015	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
2-Butanone	SW8260	09/30/2015	ug/L	560	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
2-Butanone	SW8260	03/23-24/2016	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/20-21/2016	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/21-22/2017	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/20-21/2017	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/29-30/2018	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
2-Butanone	SW8260	09/19-20/2018	ug/L	560	< 5	1.7	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/18-19/2019	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/25-26/2019	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	06/08-09/2020	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/09-10/2020	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	1.9	--	< 5
2-Butanone	SW8260	03/02-03/2021	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	09/13-14/2021	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/07-08/2022	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	08/23-24/2022	ug/L	560	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Butanone	SW8260	03/21-23/2023	ug/L	560	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Butanone	SW8260	09/12-13/2023	ug/L	560	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Butanone	SW8260	03/25-26/2024	ug/L	560	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Butanone	SW8260	09/03-04/2024	ug/L	560	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Butanone	SW8260	03/11-12/2025	ug/L	560	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Hexanone	SW8260	03/12-13/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
2-Hexanone	SW8260	06/16-17/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
2-Hexanone	SW8260	09/16-18/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	12/08-09/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	12/08-19/2009	ug/L	PQL = 5 ug/L	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	SW8260	03/29-30/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	06/16-17/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	12/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/28-29/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/27-28/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/13-14/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/17-19/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/19-20/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/23-24/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/10-11/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/16-17/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/29/2014	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
2-Hexanone	SW8260	03/17-18/2015	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/14-15/2015	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
2-Hexanone	SW8260	09/30/2015	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
2-Hexanone	SW8260	03/23-24/2016	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/20-21/2016	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/21-22/2017	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/20-21/2017	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/29-30/2018	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/19-20/2018	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/18-19/2019	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/25-26/2019	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	06/08-09/2020	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/09-10/2020	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/02-03/2021	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	09/13-14/2021	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/07-08/2022	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	08/23-24/2022	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
2-Hexanone	SW8260	03/21-23/2023	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Hexanone	SW8260	09/12-13/2023	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Hexanone	SW8260	03/25-26/2024	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Hexanone	SW8260	09/03-04/2024	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
2-Hexanone	SW8260	03/11-12/2025	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
4-Methyl-2-pentanone	SW8260	03/12-13/2009	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
4-Methyl-2-pentanone	SW8260	06/16-17/2009	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
4-Methyl-2-pentanone	SW8260	09/16-18/2009	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	12/08-09/2009	ug/L	630	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	12/08-19/2009	ug/L	630	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone	SW8260	03/29-30/2010	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	06/16-17/2010	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/07-08/2010	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	12/07-08/2010	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	03/28-29/2011	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/27-28/2011	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	03/13-14/2012	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/17-19/2012	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	03/19-20/2013	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/23-24/2013	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	03/10-11/2014	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/16-17/2014	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/29/2014	ug/L	630	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
4-Methyl-2-pentanone	SW8260	03/17-18/2015	ug/L	630	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
4-Methyl-2-pentanone	SW8260	09/14-15/2015	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
4-Methyl-2-pentanone	SW8260	09/30/2015	ug/L	630	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
4-Methyl-2-pentanone	SW8260	03/23-24/2016	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/20-21/2016	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/21-22/2017	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/20-21/2017	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/29-30/2018	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/19-20/2018	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/18-19/2019	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/25-26/2019	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	06/08-09/2020	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/09-10/2020	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/02-03/2021	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	09/13-14/2021	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/07-08/2022	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	08/23-24/2022	ug/L	630	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
4-Methyl-2-pentanone	SW8260	03/21-23/2023	ug/L	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
4-Methyl-2-pentanone	SW8260	09/12-13/2023	ug/L	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
4-Methyl-2-pentanone	SW8260	03/25-26/2024	ug/L	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
4-Methyl-2-pentanone	SW8260	09/03-04/2024	ug/L	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
4-Methyl-2-pentanone	SW8260	03/11-12/2025	ug/L	630	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Acetone	SW8260	03/12-13/2009	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Acetone	SW8260	06/16-17/2009	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Acetone	SW8260	09/16-18/2009	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	12/08-09/2009	ug/L	1400	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	12/08-19/2009	ug/L	1400	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	SW8260	03/29-30/2010	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	06/16-17/2010	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/07-08/2010	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	12/07-08/2010	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/28-29/2011	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/27-28/2011	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/13-14/2012	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/17-19/2012	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/19-20/2013	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	99.7	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/23-24/2013	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/10-11/2014	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/16-17/2014	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/29/2014	ug/L	1400	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	--	--
Acetone	SW8260	03/17-18/2015	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/14-15/2015	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	--	--
Acetone	SW8260	09/30/2015	ug/L	1400	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	< 10	--
Acetone	SW8260	03/23-24/2016	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/20-21/2016	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/21-22/2017	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/20-21/2017	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/29-30/2018	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Acetone	SW8260	09/19-20/2018	ug/L	1400	< 10	5.1	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/18-19/2019	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/25-26/2019	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	06/08-09/2020	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/09-10/2020	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	36.7	--	< 10
Acetone	SW8260	03/02-03/2021	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	09/13-14/2021	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/07-08/2022	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	08/23-24/2022	ug/L	1400	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6.2	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10
Acetone	SW8260	03/21-23/2023	ug/L	1400	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acetone	SW8260	09/12-13/2023	ug/L	1400	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acetone	SW8260	03/25-26/2024	ug/L	1400	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acetone	SW8260	09/03-04/2024	ug/L	1400	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acetone	SW8260	03/11-12/2025	ug/L	1400	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/12-13/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Acrylonitrile	SW8260	06/16-17/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Acrylonitrile	SW8260	09/16-18/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	12/08-09/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	12/08-19/2009	ug/L	PQL = 5 ug/L	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	SW8260	03/29-30/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	06/16-17/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	12/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/28-29/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/27-28/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/13-14/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/17-19/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/19-20/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/23-24/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/10-11/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/16-17/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/29/2014	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
Acrylonitrile	SW8260	03/17-18/2015	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/14-15/2015	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Acrylonitrile	SW8260	09/30/2015	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
Acrylonitrile	SW8260	03/23-24/2016	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/20-21/2016	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/21-22/2017	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/20-21/2017	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/29-30/2018	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/19-20/2018	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/18-19/2019	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/25-26/2019	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	06/08-09/2020	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/09-10/2020	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/02-03/2021	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	09/13-14/2021	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/07-08/2022	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	08/23-24/2022	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Acrylonitrile	SW8260	03/21-23/2023	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Acrylonitrile	SW8260	09/12-13/2023	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Acrylonitrile	SW8260	03/25-26/2024	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Acrylonitrile	SW8260	09/03-04/2024	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Acrylonitrile	SW8260	03/11-12/2025	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Alkalinity, Total	SM2320B	03/12-13/2009	mg/L	PQL = 1 mg/L	387	268	5	119	52	126	97	--	11	77	10	32	14	--	--	--	--
Alkalinity, Total	SM2320B	06/16-17/2009	mg/L	PQL = 1 mg/L	381	321	< 5	123	54	99	98	< 5	5	62	10	32	8	--	--	--	--
Alkalinity, Total	SM2320B	09/16-18/2009	mg/L	PQL = 1 mg/L	319	312	< 5	129	51	58	97	< 5	6	99	12	29	6	--	--	--	--
Alkalinity, Total	SM2320B	12/08-09/2009	mg/L	PQL = 1 mg/L	252	374	< 5	--	49	61	102	< 5	8	66	10	40	9	--	--	--	--
Alkalinity, Total	SM2320B	12/08-19/2009	mg/L	PQL = 1 mg/L	--	--	--	132	--	--	--	--	--	--	--	--	--	--	--	--	--
Alkalinity, Total	SM2320B	03/29-30/2010	mg/L	PQL = 1 mg/L	55	531	4	120	47	87	105	3	61	85	33	37	9	--	--	--	--
Alkalinity, Total	SM2320B	06/16-17/2010	mg/L	PQL = 1 mg/L	59	332	< 5	139	46	69	103	< 5	21	69	31	30	7	--	--	--	--
Alkalinity, Total	SM2320B	09/07-08/2010	mg/L	PQL = 1 mg/L	50	328	< 5	153	45	78	103	< 5	14	53	15	22	8	--	--	--	--
Alkalinity, Total	SM2320B	12/07-08/2010	mg/L	PQL = 1 mg/L	45	383	< 5	147	45	107	103	< 5	14	51	20	15	9	--	--	--	--
Alkalinity, Total	SM2320B	03/28-29/2011	mg/L	PQL = 1 mg/L	52	583	5	131	44	120	107	2	18	47	15	17	12	--	--	--	--
Alkalinity, Total	D1067	09/27-28/2011	mg/L	PQL = 1 mg/L	37	387	4	119	48	237	102	< 5	18	37	30	11	10	--	--	--	--
Alkalinity, Total	D1067	03/13-14/2012	mg/L	PQL = 1 mg/L	40	517	8	118	55	198	102	3	26	25	32	14	11	--	--	--	--
Alkalinity, Total	D1067	09/17-19/2012	mg/L	PQL = 1 mg/L	63	455	4	113	55	157	98	< 5	17	19	13	11	8	--	--	--	--
Alkalinity, Total	D1067	03/19-20/2013	mg/L	PQL = 1 mg/L	94	612	6	115	62	160	100	58	19	19	8	11	8	--	--	--	--
Alkalinity, Total	D1067	09/23-24/2013	mg/L	PQL = 1 mg/L	97	527	6	113	64	156	102	20	15	16	18	12	10	--	--	--	--
Alkalinity, Total	D1067	03/10-11/2014	mg/L	PQL = 1 mg/L	108	438	5	110	64	134	104	195	12	9	19	10	9	--	--	--	--
Alkalinity, Total	D1067	09/16-17/2014	mg/L	PQL = 1 mg/L	80	496	6	109	60	134	105	111	18	12	--	11	10	--	--	--	--
Alkalinity, Total	D1067	09/29/2014	mg/L	PQL = 1 mg/L	--	--	--	--	--	--	--	--	--	--	35	--	--	--	--	--	--
Alkalinity, Total	D1067	03/17-18/2015	mg/L	PQL = 1 mg/L	56	602	6	110	63	216	105	139	17	9	26	12	11	--	--	--	--
Alkalinity, Total	D1067	09/14-15/2015	mg/L	PQL = 1 mg/L	98	593	6	107	63	232	109	138	20	8	--	12	10	--	--	--	--
Alkalinity, Total	D1067	09/30/2015	mg/L	PQL = 1 mg/L	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--
Alkalinity, Total	D1067	03/23-24/2016	mg/L	PQL = 1 mg/L	59	635	5	107	66	240	106	125	24	8	18	17	11	--	--	--	--
Alkalinity, Total	D1067	09/20-21/2016	mg/L	PQL = 1 mg/L	49	508	< 10	108	61	207	103	93	12	7	10	17	10	--	--	--	--
Alkalinity, Total	D1067	03/21-22/2017	mg/L	PQL = 1 mg/L	64	421	6	106	63	217	103	58	16	7	10	11	10	--	--	--	--
Alkalinity, Total	D1067	09/20-21/2017	mg/L	PQL = 1 mg/L	61	503	6	111	68	170	104	26	12	6	11	9	12	--	--	--	--
Alkalinity, Total	D1067	03/29-30/2018	mg/L	PQL = 1 mg/L	54	285	5	106	68	131	247	66	15	7	12	11	12	--	--	--	--
Alkalinity, Total	D1067	09/19-20/2018	mg/L	PQL = 1 mg/L	59	457	< 10	106	63	121	114	167	9	5	12	7	8	--	--	--	--
Alkalinity, Total	D1067	03/18-19/2019	mg/L	PQL = 1 mg/L	72	655	6	105	63	141	102	84	29	8	22	9	10	--	--	--	--
Alkalinity, Total	D1067	09/25-26/2019	mg/L	PQL = 1 mg/L	76	411	5	108	52	129	100	75	14	7	51	7	9	--	--	--	--
Alkalinity, Total	D1067	06/08-09/2020	mg/L	PQL = 1 mg/L	80	473	5	105	52	216	101	71	46	6	16	5	9	--	--	--	--
Alkalinity, Total	D1067	09/09-10/2020	mg/L	PQL = 1 mg/L	70	470	< 10	110	55	210	81	84	22	7	16	7	11	--	--	--	--
Alkalinity, Total	D1067	03/02-03/2021	mg/L	PQL = 1 mg/L	78	515	6	107	63	206	79	37	20	5	21	5	10	--	--	--	--
Alkalinity, Total	D1067	09/13-14/2021	mg/L	PQL = 1 mg/L	72	419	< 10	105	61	113	96	44	25	5	14	5	8	--	--	--	--
Alkalinity, Total	D1067	03/07-08/2022	mg/L	PQL = 1 mg/L	127	326	< 10	106	57	246	89	10	16	5	10	< 10	9	--	--	--	--
Alkalinity, Total	D1067	08/23-24/2022	mg/L	PQL = 1 mg/L	74	386	< 10	108	64	116	56	5	25	5	14	5	8	--	--	--	--
Alkalinity, Total	D1067	03/21-22/2023	mg/L	PQL = 1 mg/L	54	655	< 5	105	65	295	101	<10	15	<10	10	8 J	< 10	--	--	--	--
Alkalinity, Total	D1067	09/12-13/2023	mg/L	PQL = 1 mg/L	111	366	< 5	107	59	195	96	5 J	30	6 J	12	6 J	6 J	--	--	--	--
Alkalinity, Total	D1067	03/25-26/2024	mg/L	PQL = 1 mg/L	133	356	5 J	105	64	259	54	< 5	13	6 J	10	5 J	11	--	--	--	--
Alkalinity, Total	D1067	09/03-04/2024	mg/L	PQL = 1 mg/L	200	405	< 5	106	70	337	102	10	11	<10	12	58	< 10	--	--	--	--
Alkalinity, Total	D1067	03/11-12/2025	mg/L	PQL = 1 mg/L	231	340	< 5	106	67	316	98	8 J	17	5 J	12	45	9 J	--	--	--	--
Ammonia	E350.1	03/12-13/2009	mg/L	PQL = 1 mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	06/16-17/2009	mg/L	PQL = 1 mg/L	< 1	0.23	< 1	< 1	< 1	< 1	0.06	< 1	< 1	0.18	< 1	0.18	< 1	--	--	--	--
Ammonia	E350.1	09/16-18/2009	mg/L	PQL = 1 mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	12/08-09/2009	mg/L	PQL = 1 mg/L	< 1	0.48	< 1	--	< 1	< 1	< 1	< 1	< 1	0.5	< 1	0.27	< 1	--	--	--	--
Ammonia	E350.1	12/08-19/2009	mg/L	PQL = 1 mg/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Ammonia	E350.1	03/29-30/2010	mg/L	PQL = 1 mg/L	< 1	0.1	< 1	< 1	< 1	< 1	< 1	0.12	< 1	0.48	< 1	0.25	< 1	--	--	--	--
Ammonia	E350.1	06/16-17/2010	mg/L	PQL = 1 mg/L	0.05	0.9	< 1	0.54	< 1	< 1	0.07	< 1	< 1	< 1	< 1	0.49	< 1	--	--	--	--
Ammonia	E350.1	09/07-08/2010	mg/L	PQL = 1 mg/L	0.05	0.8	< 1	< 1	< 1	< 1	0.06	< 1	0.05	0.43	< 1	0.12	0.07	--	--	--	--
Ammonia	E350.1	12/07-08/2010	mg/L	PQL = 1 mg/L	0.1	0.08	< 1	< 1	< 1	0.06	0.09	< 1	< 1	0.42	0.04	< 1	0.05	--	--	--	--
Ammonia	E350.1	03/28-29/2011	mg/L	PQL = 1 mg/L	0.06	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.33	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	09/27-28/2011	mg/L	PQL = 1 mg/L	< 1	0.73	< 1	< 1	0.04	0.06	0.07	< 1	< 1	0.44	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	03/13-14/2012	mg/L	PQL = 1 mg/L	0.05	0.19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.26	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	09/17-19/2012	mg/L	PQL = 1 mg/L	0.04	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.2	< 1	0.04	< 1	--	--	--	--
Ammonia	E350.1	03/19-20/2013	mg/L	PQL = 1 mg/L	0.05	< 1	< 1	< 1	< 1	< 1	< 1	0.25	< 1	0.08	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	09/23-24/2013	mg/L	PQL = 1 mg/L	< 1	0.41	< 1	< 1	< 1	< 1	< 1	0.48	< 1	0.15	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	03/10-11/2014	mg/L	PQL = 1 mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.21	< 1	< 1	< 1	< 1	< 1	--	--	--	--
Ammonia	E350.1	09/16-17/2014	mg/L	PQL = 1 mg/L	0.07	0.64	< 0.1	< 0.1	< 0.1	< 0.1	0.05	3.12	< 0.1	< 0.1	--	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/29/2014	mg/L	PQL = 1 mg/L	--	--	--	--	--	--	--	--	--	--	< 0.1	--	--	--	--	--	--
Ammonia	E350.1	03/17-18/2015	mg/L	PQL = 1 mg/L	0.06	0.29	< 0.1	< 0.1	< 0.1	< 0.1	0.04	2.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/14-15/2015	mg/L	PQL = 1 mg/L	0.05	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1.3	< 0.1	< 0.1	--	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/30/2015	mg/L	PQL = 1 mg/L	--	--	--	--	--	--	--	--	--	--	< 0.1	--	--	--	--	--	--
Ammonia	E350.1	03/23-24/2016	mg/L	PQL = 1 mg/L	< 0.1	0.33	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.63	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/20-21/2016	mg/L	PQL = 1 mg/L	0.08	1.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.44	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/21-22/2017	mg/L	PQL = 1 mg/L	0.06	0.36	< 0.1	< 0.1	< 0.1	0.05	0.04	0.09	< 0.1	< 0.1	< 0.1	0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/20-21/2017	mg/L	PQL = 1 mg/L	< 0.1	1.03	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/29-30/2018	mg/L	PQL = 1 mg/L	0.04	0.24	< 0.1	< 0.1	< 0.1	0.05	0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Ammonia	E350.1	09/19-20/2018	mg/L	PQL = 1 mg/L	0.06	0.82	< 0.1	< 0.1	< 0.1	0.05	0.07	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/18-19/2019	mg/L	PQL = 1 mg/L	< 0.1	0.22	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/25-26/2019	mg/L	PQL = 1 mg/L	< 0.1	1.39	< 0.1	< 0.1	< 0.1	< 0.1	0.05	0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	06/08-09/2020	mg/L	PQL = 1 mg/L	0.05	0.61	< 0.1	0.06	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.06	--	--	--	--
Ammonia	E350.1	09/09-10/2020	mg/L	PQL = 1 mg/L	0.13	0.91	< 0.1	< 0.1	< 0.1	0.04	0.05	0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/02-03/2021	mg/L	PQL = 1 mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	09/13-14/2021	mg/L	PQL = 1 mg/L	< 0.1	0.26	< 0.1	< 0.1	< 0.1	0.07	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/07-08/2022	mg/L	PQL = 1 mg/L	< 0.1	0.27	< 0.1	0.06	< 0.1	0.08	0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	08/23-24/2022	mg/L	PQL = 1 mg/L	< 0.1	0.63	< 0.1	< 0.1	< 0.1	0.07	0.05	0.09	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--	--	--
Ammonia	E350.1	03/21-22/2023	mg/L	PQL = 1 mg/L	< 0.04	<0.1	< 0.04	<0.1	< 0.04	0.06 J	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	--	--	--
Ammonia	E350.1	09/12-13/2023	mg/L	PQL = 1 mg/L	< 0.04	0.9	< 0.04	< 0.04	< 0.04	0.07 J	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	--	--	--
Ammonia	E350.1	03/25-26/2024	mg/L	PQL = 1 mg/L	0.1	< 0.04	< 0.04	0.05 J	< 0.04	0.07 J	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	--	--	--	--
Ammonia	E350.1	09/03-04/2024	mg/L	PQL = 1 mg/L	< 0.04	0.53	< 0.04	< 0.04	< 0.04	0.06 J	< 0.1	< 0.04	< 0.04	< 0.1	< 0.04	0.18	< 0.04	--	--	--	--
Ammonia	E350.1	03/11-12/2025	mg/L	PQL = 1 mg/L	0.06 J	0.07 J	< 0.04	< 0.04	< 0.04	0.05 J	0.04 J	< 0.04	< 0.04	< 0.04	< 0.04	0.19	< 0.04	--	--	--	--
Antimony	E200.8	03/12-13/2009	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	06/16-17/2009	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/16-18/2009	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 0.04	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	12/08-09/2009	ug/L	6	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	0.9	< 2	< 2	< 2	0.7	< 2	< 2	--	--
Antimony	E200.8	12/08-19/2009	ug/L	6	--	--	--	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	E200.8	03/29-30/2010	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.7	< 2	< 2	< 2	0.9	< 2	< 2	--	--
Antimony	E200.8	06/16-17/2010	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.8	< 2	< 2	--	--
Antimony	E200.8	09/07-08/2010	ug/L	6	0.5	< 2	< 2	< 2	< 2	0.6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	12/07-08/2010	ug/L	6	< 2	0.7	< 2	< 2	< 2	0.5	< 2	< 2	< 1	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	03/28-29/2011	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/27-28/2011	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	03/13-14/2012	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/17-19/2012	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	03/19-20/2013	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.6	< 2	< 2	< 2	0.8	< 2	< 2	--	--
Antimony	E200.8	09/23-24/2013	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	03/10-11/2014	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/16-17/2014	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/29/2014	ug/L	6	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	--	--
Antimony	E200.8	03/17-18/2015	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1.8	< 2	< 2	< 2	1.4	< 2	< 2	--	--
Antimony	E200.8	09/14-15/2015	ug/L	6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/30/2015	ug/L	6	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	< 2	--
Antimony	E200.8	03/23-24/2016	ug/L	6	0.6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	09/20-21/2016	ug/L	6	0.8	< 2	< 2	< 2	< 2	< 2	< 2	4.8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Antimony	E200.8	03/21-22/2017	ug/L	6	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	09/20-21/2017	ug/L	6	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	03/29-30/2018	ug/L	6	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	09/19-20/2018	ug/L	6	0.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	03/18-19/2019	ug/L	6	1.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	09/25-26/2019	ug/L	6	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	06/08-09/2020	ug/L	6	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	09/09-10/2020	ug/L	6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	03/02-03/2021	ug/L	6	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	09/13-14/2021	ug/L	6	0.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	03/07-08/2022	ug/L	6	0.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	08/23-24/2022	ug/L	6	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Antimony	E200.8	03/21-22/2023	ug/L	6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Antimony	E200.8	09/12-13/2023	ug/L	6	0.9 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Antimony	E200.8	03/25-26/2024	ug/L	6	0.6 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9 J	< 0.5	< 0.5	< 0.5	--	--
Antimony	E200.8	09/03-04/2024	ug/L	6	0.6 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Antimony	E200.8	03/11-12/2025	ug/L	6	0.6 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Arsenic	E200.8	03/12-13/2009	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	2.6	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	06/16-17/2009	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.8	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/16-18/2009	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.5	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	12/08-09/2009	ug/L	10	< 1	1.1	< 1	--	< 1	< 1	< 1	0.6	< 1	3.5	0.8	1.4	< 1	< 1	< 1	--	--
Arsenic	E200.8	12/08-19/2009	ug/L	10	--	--	--	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	E200.8	03/29-30/2010	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.2	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	06/16-17/2010	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.3	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/07-08/2010	ug/L	10	< 1	1.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.2	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	12/07-08/2010	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/28-29/2011	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/27-28/2011	ug/L	10	< 1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.5	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/13-14/2012	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	0.8	< 1	0.7	2.4	< 1	< 1	< 1	< 1	0.6	--	--
Arsenic	E200.8	09/17-19/2012	ug/L	10	< 1	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/19-20/2013	ug/L	10	< 1	0.7	< 1	< 1	< 1	< 1	< 1	2.9	< 1	2.3	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/23-24/2013	ug/L	10	< 1	0.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/10-11/2014	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.3	0.6	0.8	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/16-17/2014	ug/L	10	< 1	0.9	< 1	< 1	< 1	< 1	< 1	0.5	0.6	< 1	--	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/29/2014	ug/L	10	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Arsenic	E200.8	03/17-18/2015	ug/L	10	< 1	0.6	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/14-15/2015	ug/L	10	< 1	0.9	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/30/2015	ug/L	10	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Arsenic	E200.8	03/23-24/2016	ug/L	10	< 1	1.4	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/20-21/2016	ug/L	10	< 1	3.8	< 1	< 1	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/21-22/2017	ug/L	10	< 1	1.8	< 1	< 1	< 1	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/20-21/2017	ug/L	10	< 1	2.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/29-30/2018	ug/L	10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/19-20/2018	ug/L	10	< 1	2.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/18-19/2019	ug/L	10	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/25-26/2019	ug/L	10	< 1	8.4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	06/08-09/2020	ug/L	10	< 1	7.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/09-10/2020	ug/L	10	< 1	6.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/02-03/2021	ug/L	10	< 1	0.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	09/13-14/2021	ug/L	10	< 1	8.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/07-08/2022	ug/L	10	< 1	1.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	08/23-24/2022	ug/L	10	< 1	3.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Arsenic	E200.8	03/21-22/2023	ug/L	10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Arsenic	E200.8	09/12-13/2023	ug/L	10	< 0.5	4.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Arsenic	E200.8	03/25-26/2024	ug/L	10	< 0.5	1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8 J	< 0.5	< 0.5	< 0.5	--	--
Arsenic	E200.8	09/03-04/2024	ug/L	10	< 0.5	6.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Arsenic	E200.8	03/11-12/2025	ug/L	10	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Barium	E200.7	03/12-13/2009	ug/L	2000	148	22	< 10	73	36	94	219	--	75	88	36	47	< 10	< 10	< 10	--	--
Barium	E200.7	06/16-17/2009	ug/L	2000	199	28.9	10.2	67.3	33.1	71.6	249	327	63.1	94.5	37.5	46.7	< 10	8.2	6.1	--	--
Barium	E200.7	09/16-18/2009	ug/L	2000	175	30	11	80	33	50	292	277	65	83	34	43	< 10	< 10	< 10	--	--
Barium	E200.7	12/08-09/2009	ug/L	2000	151	26	10	--	31	51	277	274	61	95	34	51	< 10	< 10	< 10	--	--
Barium	E200.7	12/08-19/2009	ug/L	2000	--	--	--	83	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	E200.7	03/29-30/2010	ug/L	2000	55.6	27.8	10.1	81.6	30.6	86.6	288	112	57.7	90.3	34.4	54.2	6.5	< 10	< 10	--	--
Barium	E200.7	06/16-17/2010	ug/L	2000	46	27	12	80	27	64	237	198	72	75	29	51	< 10	< 10	< 10	--	--
Barium	E200.7	09/07-08/2010	ug/L	2000	42.1	31.5	10.7	78.5	26.1	71	234	168	67.5	64.4	26	43.8	< 10	< 10	< 10	--	--
Barium	E200.7	12/07-08/2010	ug/L	2000	40.4	19.4	10.6	74.7	27.2	89.8	207	165	56.2	63.1	30.8	41	6.7	< 10	< 10	--	--
Barium	E200.7	03/28-29/2011	ug/L	2000	39	9	9	73	27	124	226	204	72	63	26	38	< 10	< 10	< 10	--	--
Barium	E200.7	09/27-28/2011	ug/L	2000	32	38	11	71	31	139	227	219	58	54	28	37	< 10	< 10	< 10	--	--
Barium	E200.7	03/13-14/2012	ug/L	2000	37	15	10	74	37	123	235	263	58	52	29	40	< 10	< 10	< 10	--	--
Barium	E200.7	09/17-19/2012	ug/L	2000	41	36	14	78	43	129	254	290	71	54	34	39	5	< 10	< 10	--	--
Barium	E200.7	03/19-20/2013	ug/L	2000	44.4	12.8	10.6	70.4	45.4	101	272	285	73.4	66.5	32.6	35.8	< 10	< 10	< 10	--	--
Barium	E200.7	09/23-24/2013	ug/L	2000	43	32	10	72	49	113	215	296	61	56	37	35	< 10	< 10	< 10	--	--
Barium	E200.7	03/10-11/2014	ug/L	2000	42	13	12	72	54	112	224	334	65	69	35	35	< 10	< 10	< 10	--	--
Barium	E200.7	09/16-17/2014	ug/L	2000	42.9	26.1	9.4	68.1	48.9	140	169	284	67.7	50.9	--	31.1	< 10	< 10	< 10	--	--
Barium	E200.7	09/29/2014	ug/L	2000	--	--	--	--	--	--	--	--	--	--	57	--	--	--	--	--	--
Barium	E200.7	03/17-18/2015	ug/L	2000	42.8	12.3	10.6	71.7	58	136	179	285	51.7	58.6	37.2	34.7	5.4	11.7	11.5	--	--
Barium	E200.7	09/14-15/2015	ug/L	2000	49.1	13.4	10.7	70.8	67.4	161	198	210	64.1	72.5	--	34.7	< 10	< 10	< 10	--	--
Barium	E200.7	09/30/2015	ug/L	2000	--	--	--	--	--	--	--	--	--	--	35.7	--	--	--	--	< 10	--
Barium	E200.7	03/23-24/2016	ug/L	2000	43.4	25.4	10.5	66.9	75.5	156	197	205	58.3	65.6	34.4	34.5	< 10	< 10	< 10	--	--
Barium	E200.7	09/20-21/2016	ug/L	2000	36	76.6	11.2	66.5	79.4	142	177	174	62	65.4	37.7	35.3	< 10	< 10	< 10	--	--
Barium	E200.7	03/21-22/2017	ug/L	2000	31.6	51.7	9.8	63.9	76.1	139	200	167	70.1	61	47	31	6	< 10	< 10	--	--
Barium	E200.7	09/20-21/2017	ug/L	2000	17.8	64.6	9.6	90.6	81.2	101	156	74.5	74.3	54.6	36.4	29.7	< 10	< 10	< 10	--	--
Barium	E200.7	03/29-30/2018	ug/L	2000	17.3	24.1	10.3	71.8	81.8	93.9	833	114	57	74.6	39.7	36.9	< 10	< 10	< 10	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Barium	E200.7	09/19-20/2018	ug/L	2000	19.5	27.6	7.9	69.9	71.9	98.1	153	289	56.9	79.3	35.5	33.5	< 10	< 10	< 10	--	--
Barium	E200.7	03/18-19/2019	ug/L	2000	48.3	14.2	10.1	71.4	57.9	104	132	184	51.1	63.1	31.5	35.7	< 10	< 10	< 10	--	--
Barium	E200.7	09/25-26/2019	ug/L	2000	54.2	179	11.6	71.9	43.8	127	153	263	66.5	87.9	41.7	36.5	5.1	< 10	< 10	--	--
Barium	E200.7	06/08-09/2020	ug/L	2000	32	79	12	77	58	132	176	195	62	70	29	32	< 10	< 10	< 10	--	--
Barium	E200.7	09/09-10/2020	ug/L	2000	38	87	13	69	67	133	272	187	49	94	29	31	< 10	< 10	< 10	--	--
Barium	E200.7	03/02-03/2021	ug/L	2000	75	35	17	70	81	148	221	182	51	88	39	34	< 10	< 10	< 10	--	--
Barium	E200.7	09/13-14/2021	ug/L	2000	34	83	14	79	70	163	245	210	47	93	42	34	< 10	< 10	< 10	--	--
Barium	E200.7	03/07-08/2022	ug/L	2000	44	46.2	13.1	76.6	63.3	169	250	251	47.3	75.5	41.8	33.5	< 10	< 10	< 10	--	--
Barium	E200.7	08/23-24/2022	ug/L	2000	47.7	66	11.8	74	70.9	179	274	304	56.1	93.8	37.4	35.9	< 10	< 10	< 10	--	--
Barium	E200.7	03/21-22/2023	ug/L	2000	48	32.9	14.2	82.3	71.1	17.8	19.4	119	59.6	89.6	38.5	34.5	< 10	< 5	< 5	--	--
Barium	E200.7	09/12-13/2023	ug/L	2000	47.7	67.8	14.4	78.9	54.5	19.3	26.2	148	61.9	81.8	32.4	36	< 5	< 5	< 5	--	--
Barium	E200.7	03/25-26/2024	ug/L	2000	58.5	30.8	13.3	139	55.4	184	312	167	43.7	77.3	33.1	37.9	5.2 J	7.5 J	35.2	--	--
Barium	E200.7	09/03-04/2024	ug/L	2000	83.3	55.1	12.8	77	56.4	202	221	200	51.1	73.7	26.5	46.8	< 5	< 5	< 5	--	--
Barium	E200.7	03/11-12/2025	ug/L	2000	92.4	28.4	14.2	98.3	46.6	190	190	187	51.6	79.3	27.4	49.8	< 5	7.2 J	5.6 J	--	--
Benzene	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Benzene	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Benzene	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Benzene	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Benzene	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Benzene	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Benzene	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Benzene	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Benzene	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Benzene	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Benzene	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Beryllium	E200.7	03/12-13/2009	ug/L	4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	06/16-17/2009	ug/L	4	< 2	< 2	0.6	< 2	< 2	< 2	< 2	3.1	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	09/16-18/2009	ug/L	4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	12/08-09/2009	ug/L	4	< 2	< 2	0.6	--	< 2	< 2	< 2	2.2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	12/08-19/2009	ug/L	4	--	--	--	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	E200.7	03/29-30/2010	ug/L	4	< 2	< 2	0.5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	06/16-17/2010	ug/L	4	< 2	< 2	0.7	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	09/07-08/2010	ug/L	4	< 2	< 2	1	< 2	< 2	< 2	< 2	0.9	0.8	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	12/07-08/2010	ug/L	4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0.7	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	03/28-29/2011	ug/L	4	< 2	< 2	0.6	< 2	< 2	< 2	< 2	1.6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	09/27-28/2011	ug/L	4	< 2	< 2	0.5	< 2	< 2	< 2	< 2	1.6	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	03/13-14/2012	ug/L	4	< 2	< 2	0.5	< 2	< 2	< 2	< 2	0.8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	09/17-19/2012	ug/L	4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	03/19-20/2013	ug/L	4	< 2	< 2	1	< 2	0.6	< 2	< 2	< 2	0.6	0.6	0.8	0.6	< 2	< 2	< 2	--	--
Beryllium	E200.7	09/23-24/2013	ug/L	4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	1.7	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Beryllium	E200.7	03/10-11/2014	ug/L	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/16-17/2014	ug/L	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/29/2014	ug/L	4	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Beryllium	E200.7	03/17-18/2015	ug/L	4	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	0.8	< 1	0.5	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/14-15/2015	ug/L	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/30/2015	ug/L	4	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Beryllium	E200.7	03/23-24/2016	ug/L	4	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/20-21/2016	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	1.5	< 1	0.5	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	03/21-22/2017	ug/L	4	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/20-21/2017	ug/L	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	03/29-30/2018	ug/L	4	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/19-20/2018	ug/L	4	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	1	0.5	0.5	< 1	0.6	< 1	< 1	--	--
Beryllium	E200.7	03/18-19/2019	ug/L	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/25-26/2019	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	0.9	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	06/08-09/2020	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/09-10/2020	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	03/02-03/2021	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	09/13-14/2021	ug/L	4	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	0.5	0.5	0.5	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	03/07-08/2022	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	0.5	< 1	< 1	< 1	--	--
Beryllium	E200.7	08/23-24/2022	ug/L	4	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Beryllium	E200.7	03/21-22/2023	ug/L	4	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Beryllium	E200.7	09/12-13/2023	ug/L	4	< 0.5	< 0.5	0.6 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Beryllium	E200.7	03/25-26/2024	ug/L	4	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5 J	< 0.5	< 0.5	< 0.5	--	--
Beryllium	E200.7	09/03-04/2024	ug/L	4	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Beryllium	E200.7	03/11-12/2025	ug/L	4	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
Bicarbonate	SM4500-CO2 D	03/12-13/2009	mg/L	--	387	268	5	118	52	126	92	--	11	77	10	32	14	--	--	--	--
Bicarbonate	SM4500-CO2 D	06/16-17/2009	mg/L	--	381	321	6	123	54	2	91	< 5	10	62	14	181	14	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/16-18/2009	mg/L	--	319	312	6	128	51	< 5	90	< 5	6	99	12	29	14	--	--	--	--
Bicarbonate	SM4500-CO2 D	12/08-09/2009	mg/L	--	250	374	5	--	49	60	101	< 5	10	66	12	40	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	12/08-19/2009	mg/L	--	--	--	--	131	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/29-30/2010	mg/L	--	41	531	4	120	47	4	105	3	61	85	33	37	13	--	--	--	--
Bicarbonate	SM4500-CO2 D	06/16-17/2010	mg/L	--	54	332	< 5	138	46	2	103	< 5	21	69	31	30	7	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/07-08/2010	mg/L	--	45	327	< 5	152	45	2	103	< 5	14	53	15	22	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	12/07-08/2010	mg/L	--	32	382	< 5	146	45	< 5	103	< 5	14	51	20	15	9	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/28-29/2011	mg/L	--	41	582	5	131	44	4	107	2	18	47	15	17	12	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/27-28/2011	mg/L	--	30	387	5	118	48	< 5	102	< 5	18	37	30	11	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/13-14/2012	mg/L	--	36	515	8	117	55	30	102	3	26	25	32	14	11	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/17-19/2012	mg/L	--	11	450	4	112	55	< 5	97	< 5	17	19	13	11	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/19-20/2013	mg/L	--	2	611	6	114	62	< 5	100	58	19	19	8	11	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/23-24/2013	mg/L	--	5	526	6	112	64	< 5	101	20	15	16	18	12	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/10-11/2014	mg/L	--	3	437	5	109	64	< 5	103	195	12	9	19	10	9	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/16-17/2014	mg/L	--	12	495	6	108	60	< 5	104	111	18	12	--	11	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/29/2014	mg/L	--	--	--	--	--	--	--	--	--	--	--	35	--	--	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/17-18/2015	mg/L	--	5	601	6	110	63	< 5	105	139	17	9	26	12	11	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/14-15/2015	mg/L	--	8	592	6	106	63	< 10	102	138	20	8	--	12	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/30/2015	mg/L	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/23-24/2016	mg/L	--	7	634	5	106	66	< 10	104	125	24	8	18	17	11	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/20-21/2016	mg/L	--	17	508	< 10	107	61	< 10	102	93	12	7	10	17	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/21-22/2017	mg/L	--	62	420	6	106	63	< 10	102	58	16	7	10	11	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/20-21/2017	mg/L	--	58	503	6	111	68	< 10	103	26	12	6	11	9	12	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/29-30/2018	mg/L	--	54	284	5	106	68	< 10	247	66	15	7	12	11	12	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Bicarbonate	SM4500-CO2 D	09/19-20/2018	mg/L	--	59	457	< 10	105	63	5	113	167	9	5	12	7	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/18-19/2019	mg/L	--	72	654	6	105	63	< 10	102	84	29	8	22	9	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/25-26/2019	mg/L	--	76	410	5	107	52	< 10	100	75	14	7	51	7	9	--	--	--	--
Bicarbonate	SM4500-CO2 D	06/08-09/2020	mg/L	--	76	472	5	104	52	< 10	100	71	46	6	16	5	9	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/09-10/2020	mg/L	--	70	470	< 10	110	55	< 10	74	84	22	7	16	7	11	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/02-03/2021	mg/L	--	77	512	6	105	63	< 10	36	37	20	5	21	5	10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/13-14/2021	mg/L	--	24	418	< 10	104	61	< 10	93	44	25	5	14	5	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/07-08/2022	mg/L	--	< 10	326	< 10	105	57	< 10	83	10	16	5	10	< 10	9	--	--	--	--
Bicarbonate	SM4500-CO2 D	08/23-24/2022	mg/L	--	18	385	< 10	107	64	< 10	47	5	25	5	14	5	8	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/21-22/2023	mg/L	--	24	655	< 5	105	65	< 5	99	<10	15	<10	10	8 J	<10	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/12-13/2023	mg/L	--	< 5	365	< 5	107	59	< 5	87	5 J	30	6 J	12	6 J	6 J	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/25-26/2024	mg/L	--	< 5	354	5 J	104	64	< 5	20	< 5	13	6 J	10	5 J	11	--	--	--	--
Bicarbonate	SM4500-CO2 D	09/03-04/2024	mg/L	--	< 5	404	< 5	105	70	< 5	99	10	11	<10	12	58	<10	--	--	--	--
Bicarbonate	SM4500-CO2 D	03/11-12/2025	mg/L	--	< 5	337	< 5	106	67	< 5	94	8 J	17	5 J	12	45	9 J	--	--	--	--
Bromochloromethane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromochloromethane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromochloromethane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Bromochloromethane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Bromochloromethane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Bromochloromethane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromochloromethane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromochloromethane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromochloromethane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromochloromethane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromochloromethane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Bromodichloromethane	SW8260	03/12-13/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromodichloromethane	SW8260	06/16-17/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromodichloromethane	SW8260	09/16-18/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	12/08-09/2009	ug/L	80	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	12/08-19/2009	ug/L	80	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	SW8260	03/29-30/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	06/16-17/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	12/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/28-29/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/27-28/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/13-14/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/17-19/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/19-20/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/23-24/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/10-11/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/16-17/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/29/2014	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Bromodichloromethane	SW8260	03/17-18/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/14-15/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Bromodichloromethane	SW8260	09/30/2015	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Bromodichloromethane	SW8260	03/23-24/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/20-21/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/21-22/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/20-21/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/29-30/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/19-20/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/18-19/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/25-26/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	06/08-09/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/09-10/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/02-03/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	09/13-14/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/07-08/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	08/23-24/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromodichloromethane	SW8260	03/21-23/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromodichloromethane	SW8260	09/12-13/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromodichloromethane	SW8260	03/25-26/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromodichloromethane	SW8260	09/03-04/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromodichloromethane	SW8260	03/11-12/2025	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromoform	SW8260	03/12-13/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromoform	SW8260	06/16-17/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromoform	SW8260	09/16-18/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	12/08-09/2009	ug/L	80	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	12/08-19/2009	ug/L	80	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	SW8260	03/29-30/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	06/16-17/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	12/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/28-29/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/27-28/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/13-14/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/17-19/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/19-20/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/23-24/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/10-11/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/16-17/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/29/2014	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Bromoform	SW8260	03/17-18/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/14-15/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Bromoform	SW8260	09/30/2015	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Bromoform	SW8260	03/23-24/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/20-21/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/21-22/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/20-21/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/29-30/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Bromoform	SW8260	09/19-20/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/18-19/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/25-26/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	06/08-09/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/09-10/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/02-03/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	09/13-14/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/07-08/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	08/23-24/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromoform	SW8260	03/21-23/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromoform	SW8260	09/12-13/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromoform	SW8260	03/25-26/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromoform	SW8260	09/03-04/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromoform	SW8260	03/11-12/2025	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromomethane	SW8260	03/12-13/2009	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromomethane	SW8260	06/16-17/2009	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Bromomethane	SW8260	09/16-18/2009	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	12/08-09/2009	ug/L	0.75	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	12/08-19/2009	ug/L	0.75	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane	SW8260	03/29-30/2010	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	06/16-17/2010	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/07-08/2010	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	12/07-08/2010	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/28-29/2011	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/27-28/2011	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/13-14/2012	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/17-19/2012	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/19-20/2013	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/23-24/2013	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/10-11/2014	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/16-17/2014	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/29/2014	ug/L	0.75	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Bromomethane	SW8260	03/17-18/2015	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/14-15/2015	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Bromomethane	SW8260	09/30/2015	ug/L	0.75	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Bromomethane	SW8260	03/23-24/2016	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/20-21/2016	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/21-22/2017	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/20-21/2017	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/29-30/2018	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/19-20/2018	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/18-19/2019	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/25-26/2019	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	06/08-09/2020	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/09-10/2020	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/02-03/2021	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	09/13-14/2021	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/07-08/2022	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	08/23-24/2022	ug/L	0.75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Bromomethane	SW8260	03/21-23/2023	ug/L	0.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromomethane	SW8260	09/12-13/2023	ug/L	0.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromomethane	SW8260	03/25-26/2024	ug/L	0.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromomethane	SW8260	09/03-04/2024	ug/L	0.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Bromomethane	SW8260	03/11-12/2025	ug/L	0.75	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Cadmium	E200.7	03/12-13/2009	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	06/16-17/2009	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	09/16-18/2009	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	12/08-09/2009	ug/L	5	< 4	< 4	< 4	--	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	12/08-19/2009	ug/L	5	--	--	--	< 4	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	E200.7	03/29-30/2010	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	06/16-17/2010	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	09/07-08/2010	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	12/07-08/2010	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	03/28-29/2011	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	09/27-28/2011	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	03/13-14/2012	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	09/17-19/2012	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	03/19-20/2013	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	09/23-24/2013	ug/L	5	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	--	--
Cadmium	E200.7	03/10-11/2014	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/16-17/2014	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	--	--
Cadmium	E200.7	03/17-18/2015	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/14-15/2015	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	< 2	--
Cadmium	E200.7	03/23-24/2016	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/20-21/2016	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/21-22/2017	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/20-21/2017	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/29-30/2018	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/19-20/2018	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/18-19/2019	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/25-26/2019	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	06/08-09/2020	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/09-10/2020	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/02-03/2021	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	09/13-14/2021	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/07-08/2022	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	08/23-24/2022	ug/L	5	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Cadmium	E200.7	03/21-22/2023	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Cadmium	E200.7	09/12-13/2023	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Cadmium	E200.7	03/25-26/2024	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Cadmium	E200.7	09/03-04/2024	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Cadmium	E200.7	03/11-12/2025	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Calcium	E200.7	03/12-13/2009	mg/L	PQL = 0.08 mg/L	141	157	0.86	28.5	21.9	31.7	19	--	17.8	10.3	6.6	5.23	0.63	0.27	< 0.1	--	--
Calcium	E200.7	06/16-17/2009	mg/L	PQL = 0.08 mg/L	142	162	0.84	26.8	20.5	23.8	16.9	14.7	21.4	8.64	7.62	4.78	0.56	0.11	0.07	--	--
Calcium	E200.7	09/16-18/2009	mg/L	PQL = 0.08 mg/L	135	174	0.87	35	21.7	8.57	19.7	14.8	15	12	6.54	4.85	0.72	< 0.1	< 0.1	--	--
Calcium	E200.7	12/08-09/2009	mg/L	PQL = 0.08 mg/L	81.8	184	0.82	--	19.9	7.29	22.1	14.4	17.1	12.5	6.71	5.49	0.73	< 0.1	< 0.1	--	--
Calcium	E200.7	12/08-19/2009	mg/L	PQL = 0.08 mg/L	--	--	--	34.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	E200.7	03/29-30/2010	mg/L	PQL = 0.08 mg/L	54.3	240	0.98	31.9	20.6	21	25.8	15.1	30.4	13	17.1	6.16	1.11	0.05	0.06	--	--
Calcium	E200.7	06/16-17/2010	mg/L	PQL = 0.08 mg/L	39.9	138	0.87	36.3	17	11.9	22.2	13.3	14.8	9.64	13.7	6.05	1.09	0.08	0.05	--	--
Calcium	E200.7	09/07-08/2010	mg/L	PQL = 0.08 mg/L	37.8	130	0.97	42.3	17.8	15.3	23.8	11.8	15.4	7.99	7.89	4.86	0.81	0.12	0.14	--	--
Calcium	E200.7	12/07-08/2010	mg/L	PQL = 0.08 mg/L	35.8	154	0.76	37.6	17.5	26.1	22.7	9.08	13	7.16	8.16	4.46	0.66	< 0.1	< 0.1	--	--
Calcium	E200.7	03/28-29/2011	mg/L	PQL = 0.08 mg/L	34.9	200	0.88	33.7	18.1	52.8	24	10.5	16.4	7.14	6.99	4.31	0.65	< 0.1	< 0.1	--	--
Calcium	E200.7	09/27-28/2011	mg/L	PQL = 0.08 mg/L	25	152	0.94	27.9	19.4	90.2	24.4	11.2	14.5	5.75	12.9	4.04	0.69	0.1	0.11	--	--
Calcium	E200.7	03/13-14/2012	mg/L	PQL = 0.08 mg/L	33.8	182	0.9	30.8	23.2	78.5	25.9	15.1	16.6	5.64	14.5	4.29	0.6	0.07	0.08	--	--
Calcium	E200.7	09/17-19/2012	mg/L	PQL = 0.08 mg/L	37	152	0.95	28.5	23.6	80.1	24.9	13.7	15.9	4.89	7.23	3.73	0.64	0.13	0.07	--	--
Calcium	E200.7	03/19-20/2013	mg/L	PQL = 0.08 mg/L	45.9	175	0.83	26.4	25.9	57.7	26	21.7	13.1	5.36	5.67	3.47	0.57	0.1	0.1	--	--
Calcium	E200.7	09/23-24/2013	mg/L	PQL = 0.08 mg/L	46.5	158	1.09	25.6	27.6	75.1	24.3	16.6	10.8	4.69	8.48	3.35	0.61	< 0.1	0.06	--	--
Calcium	E200.7	03/10-11/2014	mg/L	PQL = 0.08 mg/L	45.4	135	0.94	27.4	30.4	65	26.9	38.4	14.1	5.63	10.4	3.54	0.64	< 0.1	< 0.1	--	--
Calcium	E200.7	09/16-17/2014	mg/L	PQL = 0.08 mg/L	45.4	166	0.96	24.6	27.1	106	24.5	22.2	17.8	4.28	--	3.32	0.64	< 0.1	< 0.1	--	--
Calcium	E200.7	09/29/2014	mg/L	PQL = 0.08 mg/L	--	--	--	--	--	--	--	--	--	--	15.2	--	--	--	--	--	--
Calcium	E200.7	03/17-18/2015	mg/L	PQL = 0.08 mg/L	37.8	176	0.9	24.6	29.6	91.1	25.6	29.7	15.6	5.22	11.7	3.53	0.67	0.12	0.11	--	--
Calcium	E200.7	09/14-15/2015	mg/L	PQL = 0.08 mg/L	44.4	182	0.87	25.2	32	120	27.4	25	18.7	4.82	--	3.36	0.62	< 0.1	< 0.1	--	--
Calcium	E200.7	09/30/2015	mg/L	PQL = 0.08 mg/L	--	--	--	--	--	--	--	--	--	--	9.02	--	--	--	--	< 0.1	--
Calcium	E200.7	03/23-24/2016	mg/L	PQL = 0.08 mg/L	38.4	205	0.97	24.9	35.7	116	27.5	25.3	17.2	5.55	9.33	3.71	0.77	< 0.1	< 0.1	--	--
Calcium	E200.7	09/20-21/2016	mg/L	PQL = 0.08 mg/L	29	148	0.93	25.2	34.5	110	26.7	22.5	15.4	5.31	6.73	3.53	0.68	< 0.1	< 0.1	--	--
Calcium	E200.7	03/21-22/2017	mg/L	PQL = 0.08 mg/L	19.7	129	0.94	24.9	34.5	97.1	26.6	19.3	11	4.6	6.8	4.03	0.65	< 0.1	< 0.1	--	--
Calcium	E200.7	09/20-21/2017	mg/L	PQL = 0.08 mg/L	18.6	140	0.77	22.1	34.4	62.6	22.6	11.2	11.2	4.58	6.4	3.6	0.6	< 0.1	< 0.1	--	--
Calcium	E200.7	03/29-30/2018	mg/L	PQL = 0.08 mg/L	15.2	82	0.81	22.8	34.8	53.3	78.6	21.5	13.5	6.35	6.73	4.86	0.57	0.06	0.05	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Calcium	E200.7	09/19-20/2018	mg/L	PQL = 0.08 mg/L	15.5	148	0.66	25	34.2	44.4	27.9	47.6	14.7	6.88	7.58	4.48	0.45	< 0.1	< 0.1	--	--
Calcium	E200.7	03/18-19/2019	mg/L	PQL = 0.08 mg/L	23	184	0.83	24	28	50.3	25.9	35.8	20.3	5	9.53	4.36	0.67	< 0.1	0.05	--	--
Calcium	E200.7	09/25-26/2019	mg/L	PQL = 0.08 mg/L	25.6	129	0.95	26.4	23.9	74.4	26.1	35.1	12.4	6.85	19.3	4.34	0.87	< 0.1	< 0.1	--	--
Calcium	E200.7	06/08-09/2020	mg/L	PQL = 0.08 mg/L	22.1	143	0.97	24.1	27.6	79.8	24.5	24.2	21.7	6.02	8.32	4.08	0.63	0.07	< 0.1	--	--
Calcium	E200.7	09/09-10/2020	mg/L	PQL = 0.08 mg/L	18.4	133	1.07	23.9	29.3	78.2	23.2	24.8	13.2	7.18	6.38	4.19	0.73	< 0.1	< 0.1	--	--
Calcium	E200.7	03/02-03/2021	mg/L	PQL = 0.08 mg/L	29.6	166	1.15	23.4	35.9	85.3	17.4	21.2	11.6	7.14	10.2	4.42	0.68	< 0.1	< 0.1	--	--
Calcium	E200.7	09/13-14/2021	mg/L	PQL = 0.08 mg/L	36.8	119	1.07	23.5	30.1	101	23.8	26.5	8.23	7.35	8.21	4.22	0.65	0.31	0.13	--	--
Calcium	E200.7	03/07-08/2022	mg/L	PQL = 0.08 mg/L	51.7	97	1.13	23	29.7	110	20.8	25.6	7.3	6.11	7.18	4.49	0.73	< 0.1	0.05	--	--
Calcium	E200.7	08/23-24/2022	mg/L	PQL = 0.08 mg/L	53.6	117	0.99	22.8	33.3	117	14	25.5	10.2	7	8.07	4.57	0.6	< 0.1	< 0.1	--	--
Calcium	E200.7	03/21-22/2023	mg/L	PQL = 0.08 mg/L	50.4	203	1.26	23.1	31.2	113	25.5	21	11.4	6.75	6.66	4.49	0.71	<0.05	<0.05	--	--
Calcium	E200.7	09/12-13/2023	mg/L	PQL = 0.08 mg/L	47.4	106	1.3	23	28.6	127	24.5	19.5	11.5	6.28	6.53	4.75	0.65	<0.05	<0.05	--	--
Calcium	E200.7	03/25-26/2024	mg/L	PQL = 0.08 mg/L	61.5	97.3	1.1	22.3	28.5	123	21.6	19.9	11.7	5.84	6.37	4.61	0.63	<0.05	0.19	--	--
Calcium	E200.7	09/03-04/2024	mg/L	PQL = 0.08 mg/L	91.1	115	1.61	21.5	31.6	139	23.9	22.4	11.2	5.79	5.73	10.4	0.68	<0.05	0.19	--	--
Calcium	E200.7	03/11-12/2025	mg/L	PQL = 0.08 mg/L	98.6	95	1.33	23.3	28.3	130	22.8	22.6	8.58	6.22	6.11	10.6	0.64	0.07 J	0.05 J	--	--
Carbon disulfide	SW8260	03/12-13/2009	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Carbon disulfide	SW8260	06/16-17/2009	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Carbon disulfide	SW8260	09/16-18/2009	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	12/08-09/2009	ug/L	81	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	12/08-19/2009	ug/L	81	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	SW8260	03/29-30/2010	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	06/16-17/2010	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/07-08/2010	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	12/07-08/2010	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/28-29/2011	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/27-28/2011	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/13-14/2012	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/17-19/2012	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/19-20/2013	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/23-24/2013	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/10-11/2014	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/16-17/2014	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/29/2014	ug/L	81	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Carbon disulfide	SW8260	03/17-18/2015	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/14-15/2015	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Carbon disulfide	SW8260	09/30/2015	ug/L	81	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Carbon disulfide	SW8260	03/23-24/2016	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/20-21/2016	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/21-22/2017	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/20-21/2017	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/29-30/2018	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/19-20/2018	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/18-19/2019	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/25-26/2019	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	06/08-09/2020	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/09-10/2020	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/02-03/2021	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	09/13-14/2021	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/07-08/2022	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	08/23-24/2022	ug/L	81	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon disulfide	SW8260	03/21-23/2023	ug/L	81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon disulfide	SW8260	09/12-13/2023	ug/L	81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon disulfide	SW8260	03/25-26/2024	ug/L	81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon disulfide	SW8260	09/03-04/2024	ug/L	81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon disulfide	SW8260	03/11-12/2025	ug/L	81	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Carbon tetrachloride	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Carbon tetrachloride	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Carbon tetrachloride	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon tetrachloride	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Carbon tetrachloride	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Carbon tetrachloride	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Carbon tetrachloride	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Carbon tetrachloride	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon tetrachloride	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon tetrachloride	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon tetrachloride	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbon tetrachloride	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Carbonate (CO3)	SM4500-CO2 D	03/12-13/2009	mg/L	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	06/16-17/2009	mg/L	--	< 5	< 5	< 5	< 5	< 5	31	7	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/16-18/2009	mg/L	--	< 5	< 5	< 5	< 5	< 5	6	6	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	12/08-09/2009	mg/L	--	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	12/08-19/2009	mg/L	--	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/29-30/2010	mg/L	--	13	< 5	< 5	< 5	< 5	35	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	06/16-17/2010	mg/L	--	< 5	< 5	< 5	< 5	< 5	21	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/07-08/2010	mg/L	--	5	< 5	< 5	< 5	< 5	20	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	12/07-08/2010	mg/L	--	11	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/28-29/2011	mg/L	--	10	< 5	< 5	< 5	< 5	49	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/27-28/2011	mg/L	--	6	< 5	< 5	< 5	< 5	41	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/13-14/2012	mg/L	--	< 5	< 5	< 5	< 5	< 5	143	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/17-19/2012	mg/L	--	35	5	< 5	< 5	< 5	27	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/19-20/2013	mg/L	--	26	< 5	< 5	< 5	< 5	5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/23-24/2013	mg/L	--	46	< 5	< 5	< 5	< 5	29	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/10-11/2014	mg/L	--	40	< 5	< 5	< 5	< 5	19	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/16-17/2014	mg/L	--	47	< 5	< 5	< 5	< 5	16	< 5	< 5	< 5	< 5	--	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/29/2014	mg/L	--	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/17-18/2015	mg/L	--	25	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/14-15/2015	mg/L	--	55	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	< 10	--	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/30/2015	mg/L	--	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/23-24/2016	mg/L	--	29	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/20-21/2016	mg/L	--	24	< 10	< 10	< 10	< 10	29	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/21-22/2017	mg/L	--	< 10	< 10	< 10	< 10	< 10	8	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/20-21/2017	mg/L	--	< 10	< 10	< 10	< 10	< 10	22	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/29-30/2018	mg/L	--	< 10	< 10	< 10	< 10	< 10	36	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Carbonate (CO3)	SM4500-CO2 D	09/19-20/2018	mg/L	--	< 10	< 10	< 10	< 10	< 10	58	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/18-19/2019	mg/L	--	< 10	< 10	< 10	< 10	< 10	32	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/25-26/2019	mg/L	--	< 10	< 10	< 10	< 10	< 10	21	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	06/08-09/2020	mg/L	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/09-10/2020	mg/L	--	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/02-03/2021	mg/L	--	< 10	< 10	< 10	< 10	< 10	< 10	37	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/13-14/2021	mg/L	--	39	< 10	< 10	< 10	< 10	35	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/07-08/2022	mg/L	--	24	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	08/23-24/2022	mg/L	--	43	< 10	< 10	< 10	< 10	27	8	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/21-22/2023	mg/L	--	25	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/12-13/2023	mg/L	--	36	< 5	< 5	< 5	< 5	< 5	9 J	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/25-26/2024	mg/L	--	< 5	< 5	< 5	< 5	< 5	< 5	27	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	09/03-04/2024	mg/L	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Carbonate (CO3)	SM4500-CO2 D	03/11-12/2025	mg/L	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Chemical Oxygen Demand	H8000	03/12-13/2009	mg/L	PQL = 10 mg/L	< 10	25	< 10	< 10	< 10	< 10	< 10	--	< 10	23	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	06/16-17/2009	mg/L	PQL = 10 mg/L	< 10	38	< 10	6	6	< 10	< 10	10	9	30	< 10	12	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/16-18/2009	mg/L	PQL = 10 mg/L	< 10	30	< 10	< 10	< 10	< 10	< 10	< 10	< 10	26	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	12/08-09/2009	mg/L	PQL = 10 mg/L	< 10	43	< 10	--	< 10	8	< 10	9	6	23	< 10	10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	12/08-19/2009	mg/L	PQL = 10 mg/L	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Chemical Oxygen Demand	H8000	03/29-30/2010	mg/L	PQL = 10 mg/L	< 10	47	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	06/16-17/2010	mg/L	PQL = 10 mg/L	< 10	11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/07-08/2010	mg/L	PQL = 10 mg/L	< 10	23	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	12/07-08/2010	mg/L	PQL = 10 mg/L	< 10	48	< 10	< 10	< 10	< 10	< 10	8	< 10	15	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/28-29/2011	mg/L	PQL = 10 mg/L	< 10	47	< 10	< 10	< 10	< 10	< 10	11	< 10	10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/27-28/2011	mg/L	PQL = 10 mg/L	< 10	18	< 10	< 10	< 10	< 10	< 10	11	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/13-14/2012	mg/L	PQL = 10 mg/L	< 10	41	< 10	< 10	< 10	< 10	< 10	12	< 10	7	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/17-19/2012	mg/L	PQL = 10 mg/L	< 10	30	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/19-20/2013	mg/L	PQL = 10 mg/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	99	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/23-24/2013	mg/L	PQL = 10 mg/L	< 10	39	< 10	< 10	< 10	< 10	< 10	22	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/10-11/2014	mg/L	PQL = 10 mg/L	< 10	35	< 10	< 10	< 10	< 10	< 10	82	< 10	6	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/16-17/2014	mg/L	PQL = 10 mg/L	< 10	33	< 10	< 10	< 10	< 10	< 10	50	6	8	--	7	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/29/2014	mg/L	PQL = 10 mg/L	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	--	--
Chemical Oxygen Demand	H8000	03/17-18/2015	mg/L	PQL = 10 mg/L	< 10	27	< 10	< 10	< 10	< 10	< 10	61	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/14-15/2015	mg/L	PQL = 10 mg/L	< 10	30	< 10	< 10	< 10	< 10	< 10	67	< 10	< 10	--	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/30/2015	mg/L	PQL = 10 mg/L	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	--	--
Chemical Oxygen Demand	H8000	03/23-24/2016	mg/L	PQL = 10 mg/L	< 10	37	< 10	< 10	7	< 10	5	62	< 10	9	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/20-21/2016	mg/L	PQL = 10 mg/L	< 10	20	< 10	< 10	< 10	< 10	< 10	27	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/21-22/2017	mg/L	PQL = 10 mg/L	< 10	34	6	7	10	< 10	6	31	10	6	< 10	9	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/20-21/2017	mg/L	PQL = 10 mg/L	< 10	21	< 10	< 10	< 10	< 10	< 10	38	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/29-30/2018	mg/L	PQL = 10 mg/L	< 10	31	< 10	5	< 10	< 10	< 10	58	8	< 10	8	< 10	5	--	--	--	--
Chemical Oxygen Demand	H8000	09/19-20/2018	mg/L	PQL = 10 mg/L	< 10	37	< 10	7	< 10	< 10	< 10	69	10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/18-19/2019	mg/L	PQL = 10 mg/L	< 10	33	< 10	< 10	< 10	< 10	< 10	33	< 10	7	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/25-26/2019	mg/L	PQL = 10 mg/L	< 10	23	< 10	< 10	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	06/08-09/2020	mg/L	PQL = 10 mg/L	< 10	25	< 10	< 10	< 10	< 10	< 10	20	< 10	5	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/09-10/2020	mg/L	PQL = 10 mg/L	< 10	29	< 10	< 10	< 10	< 10	< 10	16	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/02-03/2021	mg/L	PQL = 10 mg/L	< 10	24	< 10	< 10	< 10	< 10	< 10	14	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	09/13-14/2021	mg/L	PQL = 10 mg/L	< 10	26	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/07-08/2022	mg/L	PQL = 10 mg/L	< 10	21	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	< 10	< 10	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	08/23-24/2022	mg/L	PQL = 10 mg/L	< 10	32	6	< 10	7	8	6	27	17	12	13	6	< 10	--	--	--	--
Chemical Oxygen Demand	H8000	03/21-22/2023	mg/L	PQL = 10 mg/L	< 5	27	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Chemical Oxygen Demand	H8000	09/12-13/2023	mg/L	PQL = 10 mg/L	< 5	23	< 5	< 5	< 5	< 5	< 5	9 J	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Chemical Oxygen Demand	H8000	03/25-26/2024	mg/L	PQL = 10 mg/L	< 5	< 5	< 5	< 5	< 5	5 J	< 5	13	7 J	9 J	< 5	30	< 5	--	--	--	--
Chemical Oxygen Demand	H8000	09/03-04/2024	mg/L	PQL = 10 mg/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	--	--	--	--
Chemical Oxygen Demand	H8000	03/11-12/2025	mg/L	PQL = 10 mg/L	< 5	17	< 5	< 5	< 5	< 5	< 5	10	< 5	< 5	< 5	5 J	< 5	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Chloride	E300	03/12-13/2009	mg/L	PQL = 0.39 mg/L	9.58	34.4	2.8	1.43	15.8	10.1	1.51	--	29.5	28.5	24.4	19.2	3.25	--	--	--	--
Chloride	E300	06/16-17/2009	mg/L	PQL = 0.39 mg/L	15.3	31.2	2.27	1.33	14	8.41	1.21	223	60	26	20.8	17.8	2.74	--	--	--	--
Chloride	E300	09/16-18/2009	mg/L	PQL = 0.39 mg/L	10.9	37.9	2.4	1.26	14.7	9.58	1.28	257	103	23.8	23.5	21.8	3.22	--	--	--	--
Chloride	E300	12/08-09/2009	mg/L	PQL = 0.39 mg/L	5.69	36.2	2.21	--	11.4	8.37	1.19	270	44.7	20	19.8	18.8	3.04	--	--	--	--
Chloride	E300	12/08-19/2009	mg/L	PQL = 0.39 mg/L	--	--	--	1.28	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	E300	03/29-30/2010	mg/L	PQL = 0.39 mg/L	7.39	25.3	2.25	1.44	9.17	8.14	1.37	165	89.1	15.4	15.5	3.66	2.98	--	--	--	--
Chloride	E300	06/16-17/2010	mg/L	PQL = 0.39 mg/L	5.32	15.9	1.7	1.07	7.39	7.25	0.96	178	68.8	10.8	12.3	14.6	2.4	--	--	--	--
Chloride	E300	09/07-08/2010	mg/L	PQL = 0.39 mg/L	6.08	20.4	2.08	1.29	9.42	9.15	1.06	181	92.4	10.1	14	17.2	2.97	--	--	--	--
Chloride	E300	12/07-08/2010	mg/L	PQL = 0.39 mg/L	5.45	27	2.08	1.3	9.3	9.06	1.2	161	54.4	13.8	13.1	17.7	2.78	--	--	--	--
Chloride	E300	03/28-29/2011	mg/L	PQL = 0.39 mg/L	5.59	22.2	2.11	1.21	9.71	9.23	1.12	176	67.7	8.3	13.7	19.1	3.17	--	--	--	--
Chloride	E300	09/27-28/2011	mg/L	PQL = 0.39 mg/L	5.36	20.7	2.54	1.21	11.2	8.82	1.07	194	58.7	8.16	11.7	16.3	2.97	--	--	--	--
Chloride	E300	03/13-14/2012	mg/L	PQL = 0.39 mg/L	5.05	15	2.11	1.17	12	8.63	1.06	208	45	6.73	11.3	17.9	3.15	--	--	--	--
Chloride	E300	09/17-19/2012	mg/L	PQL = 0.39 mg/L	6	18.9	2.3	1.2	12.9	8.3	1.1	213	66.7	6.7	12.9	17.1	3.1	--	--	--	--
Chloride	E300	03/19-20/2013	mg/L	PQL = 0.39 mg/L	6.68	15.6	2.18	1.21	17.8	8.28	1.31	145	52.3	24.5	15.4	17.3	3.3	--	--	--	--
Chloride	E300	09/23-24/2013	mg/L	PQL = 0.39 mg/L	8.6	18.9	2.8	1.7	27	10.1	1.7	210	42.9	22.5	17.9	22.2	4.2	--	--	--	--
Chloride	E300	03/10-11/2014	mg/L	PQL = 0.39 mg/L	8.68	21.8	2.52	1.45	29.1	9.31	1.32	39.2	25.2	35.5	18.6	21.3	3.82	--	--	--	--
Chloride	E300	09/16-17/2014	mg/L	PQL = 0.39 mg/L	9.63	27.4	2.67	1.32	31	10.9	1.25	51.4	63.6	8.06	--	20.7	3.83	--	--	--	--
Chloride	E300	09/29/2014	mg/L	PQL = 0.39 mg/L	--	--	--	--	--	--	--	--	--	--	16.2	--	--	--	--	--	--
Chloride	E300	03/17-18/2015	mg/L	PQL = 0.39 mg/L	9.23	16.6	2.56	1.26	37.4	10.1	1.25	47.2	43.1	28	18.4	20.1	3.73	--	--	--	--
Chloride	E300	09/14-15/2015	mg/L	PQL = 0.39 mg/L	11.6	17	2.64	1.32	46.9	12	1.25	30.4	36.6	11.1	--	21.2	4.18	--	--	--	--
Chloride	E300	09/30/2015	mg/L	PQL = 0.39 mg/L	--	--	--	--	--	--	--	--	--	--	16.9	--	--	--	--	--	--
Chloride	E300	03/23-24/2016	mg/L	PQL = 0.39 mg/L	11.6	26.3	2.54	24.8	56.9	18.3	1.26	35.3	47.5	40.8	20.7	26	3.71	--	--	--	--
Chloride	E300	09/20-21/2016	mg/L	PQL = 0.39 mg/L	13.7	15.4	3.31	1.35	57.7	12.6	1.22	62.9	69.3	36.3	21	20.3	3.76	--	--	--	--
Chloride	E300	03/21-22/2017	mg/L	PQL = 0.39 mg/L	9.2	14.4	2.82	1.39	68.6	13.7	1.34	102	56.8	30.9	24.9	21.8	5.26	--	--	--	--
Chloride	E300	09/20-21/2017	mg/L	PQL = 0.39 mg/L	14.8	24.6	2.78	4.57	73.4	12	1.55	62	76.9	38.5	25.9	22.3	4.58	--	--	--	--
Chloride	E300	03/29-30/2018	mg/L	PQL = 0.39 mg/L	13.8	9.7	2.96	1.54	60	12	1.56	54.3	8.57	44.4	23.7	21.1	4.14	--	--	--	--
Chloride	E300	09/19-20/2018	mg/L	PQL = 0.39 mg/L	8.97	12.2	2.92	1.63	57.9	13	1.45	110	27.7	53	20.5	22.4	4.53	--	--	--	--
Chloride	E300	03/18-19/2019	mg/L	PQL = 0.39 mg/L	15.4	8.09	2.9	1.47	35.9	12.8	1.4	189	50.3	11.3	16	23	4.61	--	--	--	--
Chloride	E300	09/25-26/2019	mg/L	PQL = 0.39 mg/L	15.1	9.35	3.46	1.7	20.4	13.6	1.33	169	98.6	20	14	23.9	4.96	--	--	--	--
Chloride	E300	06/08-09/2020	mg/L	PQL = 0.39 mg/L	13.9	11.7	3.74	1.57	44.2	14.6	1.52	131	99.2	44.4	16.2	24.1	4.84	--	--	--	--
Chloride	E300	09/09-10/2020	mg/L	PQL = 0.39 mg/L	9.89	8.7	4.06	1.46	50.9	12.6	1.42	124	49.8	45.6	15.8	22.5	4.89	--	--	--	--
Chloride	E300	03/02-03/2021	mg/L	PQL = 0.39 mg/L	21.3	5.19	4.3	1.5	56	13.2	1.51	161	43.4	58.5	18.2	23.3	4.88	--	--	--	--
Chloride	E300	09/13-14/2021	mg/L	PQL = 0.39 mg/L	24.4	7.42	4.73	1.53	48.6	13.9	1.48	198	46.7	29.5	20.6	23.6	4.9	--	--	--	--
Chloride	E300	03/07-08/2022	mg/L	PQL = 0.39 mg/L	26	6.59	4.77	1.7	55.2	14.3	1.61	282	34.8	51.1	23.4	24.7	5.31	--	--	--	--
Chloride	E300	08/23-24/2022	mg/L	PQL = 0.39 mg/L	24.2	9.12	4.57	1.63	58.9	15.3	1.62	313	101	30.5	23.4	27.2	5.59	--	--	--	--
Chloride	E300	03/21-22/2023	mg/L	PQL = 0.39 mg/L	24.2	4.22	4.04	1.72	48.1	14.6	2.57	266	34.2	30.6	18.1	25.4	5.25	--	--	--	--
Chloride	E300	09/12-13/2023	mg/L	PQL = 0.39 mg/L	23.8	5.72	3.88	1.58	44.2	13.8	1.64	290	39.2	28.9	18	24	5.28	--	--	--	--
Chloride	E300	03/25-26/2024	mg/L	PQL = 0.39 mg/L	25.3	3.98	3.21	1.46	40.2	14.5	1.46	296	6.82	25.8	15.2	26.4	4.71	--	--	--	--
Chloride	E300	09/03-04/2024	mg/L	PQL = 0.39 mg/L	24.4	4.77	3.45	2.41	30.6	14.2	1.38	304	20.8	17	13.7	17	4.89	--	--	--	--
Chloride	E300	03/11-12/2025	mg/L	PQL = 0.39 mg/L	28.1	4.43	3.65	1.5	30.3	15.2	1.46	328	32.1	23.8	14.6	18	5.5	--	--	--	--
Chlorobenzene	SW8260	03/12-13/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chlorobenzene	SW8260	06/16-17/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chlorobenzene	SW8260	09/16-18/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	12/08-09/2009	ug/L	100	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	12/08-19/2009	ug/L	100	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	SW8260	03/29-30/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	06/16-17/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	12/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/28-29/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/27-28/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/13-14/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/17-19/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/19-20/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/23-24/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/10-11/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/16-17/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/29/2014	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Chlorobenzene	SW8260	03/17-18/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/14-15/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Chlorobenzene	SW8260	09/30/2015	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Chlorobenzene	SW8260	03/23-24/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/20-21/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/21-22/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/20-21/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/29-30/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Chlorobenzene	SW8260	09/19-20/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/18-19/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/25-26/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	06/08-09/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/09-10/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/02-03/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	09/13-14/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/07-08/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	08/23-24/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorobenzene	SW8260	03/21-23/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorobenzene	SW8260	09/12-13/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorobenzene	SW8260	03/25-26/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorobenzene	SW8260	09/03-04/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorobenzene	SW8260	03/11-12/2025	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroethane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chloroethane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	< 1	--	--
Chloroethane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.8	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Chloroethane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Chloroethane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Chloroethane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroethane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroethane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroethane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroethane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroethane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Chloroform (Trichloromethane)	SW8260	03/12-13/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chloroform (Trichloromethane)	SW8260	06/16-17/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chloroform (Trichloromethane)	SW8260	09/16-18/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	12/08-09/2009	ug/L	80	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	12/08-19/2009	ug/L	80	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroform (Trichloromethane)	SW8260	03/29-30/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	06/16-17/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.6	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.3	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	12/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/28-29/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/27-28/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/13-14/2012	ug/L	80	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/17-19/2012	ug/L	80	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/19-20/2013	ug/L	80	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/23-24/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/10-11/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/16-17/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.7	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/29/2014	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Chloroform (Trichloromethane)	SW8260	03/17-18/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.9	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/14-15/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	--	0.5	< 1	< 1	< 1	--	--
Chloroform (Trichloromethane)	SW8260	09/30/2015	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Chloroform (Trichloromethane)	SW8260	03/23-24/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.9	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/20-21/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/21-22/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/20-21/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/29-30/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/19-20/2018	ug/L	80	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/18-19/2019	ug/L	80	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/25-26/2019	ug/L	80	< 1	< 1	< 1	< 1	0.8	< 1	< 1	1	1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	06/08-09/2020	ug/L	80	< 1	< 1	< 1	< 1	0.5	< 1	< 1	0.9	0.7	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/09-10/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/02-03/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	09/13-14/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/07-08/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.8	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	08/23-24/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloroform (Trichloromethane)	SW8260	03/21-23/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroform (Trichloromethane)	SW8260	09/12-13/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroform (Trichloromethane)	SW8260	03/25-26/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	0.6 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroform (Trichloromethane)	SW8260	09/03-04/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloroform (Trichloromethane)	SW8260	03/11-12/2025	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloromethane	SW8260	03/12-13/2009	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chloromethane	SW8260	06/16-17/2009	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chloromethane	SW8260	09/16-18/2009	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	12/08-09/2009	ug/L	19	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	12/08-19/2009	ug/L	19	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloromethane	SW8260	03/29-30/2010	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	06/16-17/2010	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/07-08/2010	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	12/07-08/2010	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/28-29/2011	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/27-28/2011	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/13-14/2012	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/17-19/2012	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/19-20/2013	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/23-24/2013	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/10-11/2014	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/16-17/2014	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/29/2014	ug/L	19	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Chloromethane	SW8260	03/17-18/2015	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/14-15/2015	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Chloromethane	SW8260	09/30/2015	ug/L	19	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Chloromethane	SW8260	03/23-24/2016	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/20-21/2016	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/21-22/2017	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/20-21/2017	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/29-30/2018	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Chloromethane	SW8260	09/19-20/2018	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/18-19/2019	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/25-26/2019	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	06/08-09/2020	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/09-10/2020	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/02-03/2021	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	09/13-14/2021	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/07-08/2022	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	08/23-24/2022	ug/L	19	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chloromethane	SW8260	03/21-23/2023	ug/L	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloromethane	SW8260	09/12-13/2023	ug/L	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloromethane	SW8260	03/25-26/2024	ug/L	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloromethane	SW8260	09/03-04/2024	ug/L	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chloromethane	SW8260	03/11-12/2025	ug/L	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chromium	E200.7	03/12-13/2009	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	06/16-17/2009	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	09/16-18/2009	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	12/08-09/2009	ug/L	100	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5	< 10	< 10	--	--
Chromium	E200.7	12/08-19/2009	ug/L	100	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	E200.7	03/29-30/2010	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	06/16-17/2010	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	09/07-08/2010	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	12/07-08/2010	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/28-29/2011	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	09/27-28/2011	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/13-14/2012	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	09/17-19/2012	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/19-20/2013	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	8	< 10	< 10	--	--
Chromium	E200.7	09/23-24/2013	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	03/10-11/2014	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5	< 10	< 10	--	--
Chromium	E200.7	09/16-17/2014	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	09/29/2014	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	--	--
Chromium	E200.7	03/17-18/2015	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5	< 10	< 10	--	--
Chromium	E200.7	09/14-15/2015	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	8	< 10	< 10	--	--
Chromium	E200.7	09/30/2015	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	< 10	--
Chromium	E200.7	03/23-24/2016	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	--	--
Chromium	E200.7	09/20-21/2016	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	--	--
Chromium	E200.7	03/21-22/2017	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	--	--
Chromium	E200.7	09/20-21/2017	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/29-30/2018	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	09/19-20/2018	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/18-19/2019	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	09/25-26/2019	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	06/08-09/2020	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	09/09-10/2020	ug/L	100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	03/02-03/2021	ug/L	100	5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	--	--
Chromium	E200.7	09/13-14/2021	ug/L	100	7	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	03/07-08/2022	ug/L	100	7	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	< 10	--	--
Chromium	E200.7	08/23-24/2022	ug/L	100	5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Chromium	E200.7	03/21-22/2023	ug/L	100	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	--	--
Chromium	E200.7	09/12-13/2023	ug/L	100	8 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	6 J	< 5	< 5	--	--
Chromium	E200.7	03/25-26/2024	ug/L	100	7 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	7 J	< 5	< 5	--	--
Chromium	E200.7	09/03-04/2024	ug/L	100	7 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 10	< 5	< 5	--	--
Chromium	E200.7	03/11-12/2025	ug/L	100	6 J	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	7 J	< 5	< 5	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
cis-1,2-Dichloroethene	SW8260	03/12-13/2009	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	1	< 1	< 1	< 1	< 1	< 1	--	--
cis-1,2-Dichloroethene	SW8260	06/16-17/2009	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	--	--
cis-1,2-Dichloroethene	SW8260	09/16-18/2009	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	12/08-09/2009	ug/L	70	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	12/08-19/2009	ug/L	70	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,2-Dichloroethene	SW8260	03/29-30/2010	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	06/16-17/2010	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/07-08/2010	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	12/07-08/2010	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/28-29/2011	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/27-28/2011	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/13-14/2012	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/17-19/2012	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/19-20/2013	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/23-24/2013	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/10-11/2014	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/16-17/2014	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/29/2014	ug/L	70	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
cis-1,2-Dichloroethene	SW8260	03/17-18/2015	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/14-15/2015	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
cis-1,2-Dichloroethene	SW8260	09/30/2015	ug/L	70	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
cis-1,2-Dichloroethene	SW8260	03/23-24/2016	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/20-21/2016	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/21-22/2017	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/20-21/2017	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/29-30/2018	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/19-20/2018	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/18-19/2019	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/25-26/2019	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	06/08-09/2020	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/09-10/2020	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/02-03/2021	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	09/13-14/2021	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/07-08/2022	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	08/23-24/2022	ug/L	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,2-Dichloroethene	SW8260	03/21-23/2023	ug/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,2-Dichloroethene	SW8260	09/12-13/2023	ug/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,2-Dichloroethene	SW8260	03/25-26/2024	ug/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,2-Dichloroethene	SW8260	09/03-04/2024	ug/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,2-Dichloroethene	SW8260	03/11-12/2025	ug/L	70	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,3-Dichloropropene	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
cis-1,3-Dichloropropene	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
cis-1,3-Dichloropropene	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
cis-1,3-Dichloropropene	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
cis-1,3-Dichloropropene	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
cis-1,3-Dichloropropene	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
cis-1,3-Dichloropropene	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
cis-1,3-Dichloropropene	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
cis-1,3-Dichloropropene	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,3-Dichloropropene	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,3-Dichloropropene	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,3-Dichloropropene	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
cis-1,3-Dichloropropene	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Cobalt	E200.7	03/12-13/2009	ug/L	PQL = 10 ug/L	< 10	< 10	10	< 10	< 10	< 10	< 10	--	< 10	18	13	< 10	< 10	< 10	< 10	--	--
Cobalt	E200.7	06/16-17/2009	ug/L	PQL = 10 ug/L	< 10	4	11	< 10	3	< 10	< 10	89	< 10	42	13	9	< 10	< 10	< 10	--	--
Cobalt	E200.7	09/16-18/2009	ug/L	PQL = 10 ug/L	< 10	< 10	10	< 10	< 10	< 10	< 10	73	< 10	22	10	< 10	< 10	< 10	< 10	--	--
Cobalt	E200.7	12/08-09/2009	ug/L	PQL = 10 ug/L	4	3	10	--	3	< 10	< 10	71	< 10	23	12	10	< 10	< 10	< 10	--	--
Cobalt	E200.7	12/08-19/2009	ug/L	PQL = 10 ug/L	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	E200.7	03/29-30/2010	ug/L	PQL = 10 ug/L	< 10	< 10	9	< 10	2	< 10	< 10	18	< 10	23	9	8	< 10	< 10	< 10	--	--
Cobalt	E200.7	06/16-17/2010	ug/L	PQL = 10 ug/L	< 10	5	11	< 10	2	< 10	< 10	36	4	22	9	7	< 10	< 10	< 10	--	--
Cobalt	E200.7	09/07-08/2010	ug/L	PQL = 10 ug/L	< 10	7	10	< 10	2	< 10	< 10	39	3	19	9	8	< 10	< 10	< 10	--	--
Cobalt	E200.7	12/07-08/2010	ug/L	PQL = 10 ug/L	< 10	< 10	11	< 10	3	< 10	< 10	49	< 10	18	10	9	< 10	< 10	< 10	--	--
Cobalt	E200.7	03/28-29/2011	ug/L	PQL = 10 ug/L	< 10	2	10	< 10	2	< 10	< 10	59	< 10	16	8	9	< 10	< 10	< 10	--	--
Cobalt	E200.7	09/27-28/2011	ug/L	PQL = 10 ug/L	< 10	9	11	< 10	3	< 10	< 10	58	< 10	14	8	8	< 10	< 10	< 10	--	--
Cobalt	E200.7	03/13-14/2012	ug/L	PQL = 10 ug/L	< 10	6	11	< 10	4	< 10	< 10	46	3	16	9	8	< 10	< 10	< 10	--	--
Cobalt	E200.7	09/17-19/2012	ug/L	PQL = 10 ug/L	< 10	5	11	< 10	4	< 10	< 10	59	< 10	15	9	6	< 10	< 10	< 10	--	--
Cobalt	E200.7	03/19-20/2013	ug/L	PQL = 10 ug/L	< 10	4	10	< 10	4	< 10	< 10	10	< 10	61	11	7	< 10	< 10	< 10	--	--
Cobalt	E200.7	09/23-24/2013	ug/L	PQL = 10 ug/L	< 10	8	11	< 10	4	< 10	< 10	39	< 10	73	12	6	< 10	< 10	< 10	--	--
Cobalt	E200.7	03/10-11/2014	ug/L	PQL = 10 ug/L	< 5	3	12	< 5	6	< 5	< 5	28	< 5	94	12	6	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/16-17/2014	ug/L	PQL = 10 ug/L	< 5	9	11	< 5	4	< 5	< 5	73	9	31	--	2	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/29/2014	ug/L	PQL = 10 ug/L	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--
Cobalt	E200.7	03/17-18/2015	ug/L	PQL = 10 ug/L	< 5	7	10	6	5	< 5	2	14	4	42	10	5	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/14-15/2015	ug/L	PQL = 10 ug/L	< 5	5	12	3	6	< 5	3	22	6	40	--	11	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/30/2015	ug/L	PQL = 10 ug/L	--	--	--	--	--	--	--	--	--	--	10	--	--	--	--	< 5	--
Cobalt	E200.7	03/23-24/2016	ug/L	PQL = 10 ug/L	< 5	6	11	< 5	6	< 5	< 5	14	< 5	48	11	13	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/20-21/2016	ug/L	PQL = 10 ug/L	< 5	14	11	< 5	7	< 5	< 5	14	3	50	13	13	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/21-22/2017	ug/L	PQL = 10 ug/L	< 5	6	11	< 5	6	< 5	< 5	3	< 5	41	12	10	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/20-21/2017	ug/L	PQL = 10 ug/L	< 5	10	10	11	7	< 5	2	< 5	< 5	37	12	11	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/29-30/2018	ug/L	PQL = 10 ug/L	< 5	< 5	10	4	6	< 5	3	< 5	< 5	55	13	11	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/19-20/2018	ug/L	PQL = 10 ug/L	< 5	3	9	2	6	< 5	< 5	< 5	< 5	58	10	10	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/18-19/2019	ug/L	PQL = 10 ug/L	< 5	4	11	3	3	< 5	3	< 5	< 5	36	9	9	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/25-26/2019	ug/L	PQL = 10 ug/L	< 5	19	12	3	2	< 5	3	< 5	4	31	12	4	< 5	< 5	< 5	--	--
Cobalt	E200.7	06/08-09/2020	ug/L	PQL = 10 ug/L	< 5	9	12	6	4	< 5	3	< 5	< 5	40	9	4	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/09-10/2020	ug/L	PQL = 10 ug/L	< 5	10	14	< 5	4	< 5	< 5	< 5	2	44	10	8	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/02-03/2021	ug/L	PQL = 10 ug/L	< 5	< 5	14	3	5	< 5	< 5	< 5	< 5	59	14	10	< 5	< 5	< 5	--	--
Cobalt	E200.7	09/13-14/2021	ug/L	PQL = 10 ug/L	< 5	13	15	9	5	< 5	2	< 5	< 5	41	16	9	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/07-08/2022	ug/L	PQL = 10 ug/L	< 5	2	14	8	5	< 5	< 5	< 5	< 5	47	15	8	< 5	< 5	< 5	--	--
Cobalt	E200.7	08/23-24/2022	ug/L	PQL = 10 ug/L	< 5	6	14	9	5	< 5	< 5	5	< 5	40	13	6	< 5	< 5	< 5	--	--
Cobalt	E200.7	03/21-22/2023	ug/L	PQL = 10 ug/L	< 2	< 5	13	12	6	< 2	< 2	< 2	< 2	37	14	5	< 2	< 2	< 2	--	--
Cobalt	E200.7	09/12-13/2023	ug/L	PQL = 10 ug/L	< 2	7	12	7	2 J	< 2	< 2	< 2	< 2	28	11	6	< 2	< 2	< 2	--	--
Cobalt	E200.7	03/25-26/2024	ug/L	PQL = 10 ug/L	< 2	< 2	13	45	4 J	< 2	2 J	< 2	< 2	30	11	23	< 2	< 2	< 2	--	--
Cobalt	E200.7	09/03-04/2024	ug/L	PQL = 10 ug/L	< 2	< 5	12	5	3 J	< 2	< 5	< 2	< 2	22	10	14	< 2	< 2	< 2	--	--
Cobalt	E200.7	03/11-12/2025	ug/L	PQL = 10 ug/L	< 2	< 2	12	24	3 J	< 2	< 2	< 2	< 2	25	10	15	< 2	< 2	< 2	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Conductivity, field measured	FIELD	03/13-14/2012	umhos/cm	--	469.4	812	33	239.9	172.6	1050	212.4	754	251.7	170.6	134.1	131.2	36.9	--	--	--	--
Conductivity, field measured	FIELD	09/17-19/2012	umhos/cm	--	401.4	955	23.8	201.2	145.3	838	186.9	743	318	121	98	102.7	28.7	--	--	--	--
Conductivity, field measured	FIELD	03/19-20/2013	umhos/cm	--	642	1082	21.6	224.8	163.5	628	175.9	528	362.6	150.9	77.3	98.4	39.1	--	--	--	--
Conductivity, field measured	FIELD	09/23-24/2013	umhos/cm	--	646	1003	26.7	223.5	227.8	818	187.5	774	299.6	162.4	123.9	119.8	34.9	--	--	--	--
Conductivity, field measured	FIELD	03/10-11/2014	umhos/cm	--	582	886	20.4	173.5	229.6	942	182.3	570	204	138.9	134.2	94.9	35.9	--	--	--	--
Conductivity, field measured	FIELD	09/16-17/2014	umhos/cm	--	725	923	35.8	230.2	251	1349	221.3	393.8	317.8	144.4	--	136	37.4	--	--	--	--
Conductivity, field measured	FIELD	09/29/2014	umhos/cm	--	--	--	--	--	--	--	--	--	--	--	1420	--	--	--	--	--	--
Conductivity, field measured	FIELD	03/17-18/2015	umhos/cm	--	443.1	1100	61.2	225.5	271.7	1240	219.2	516	239.6	172.3	151.4	144.6	31.7	--	--	--	--
Conductivity, field measured	FIELD	09/14-15/2015	umhos/cm	--	655	1151	43.8	233.7	271.7	1471	231.3	453.4	349.6	187.9	--	138.5	47	--	--	--	--
Conductivity, field measured	FIELD	09/30/2015	umhos/cm	--	--	--	--	--	--	--	--	--	--	--	134.4	--	--	--	--	--	--
Conductivity, field measured	FIELD	03/23-24/2016	umhos/cm	--	192.8	1170	30.8	223.9	336.7	1593	203.4	449.3	276.5	215.9	143	111.8	36.5	--	--	--	--
Conductivity, field measured	FIELD	09/20-21/2016	umhos/cm	--	290.1	1006	31.3	227.2	362	1464	225.6	478.1	464.1	157.2	141	144.1	41.1	--	--	--	--
Conductivity, field measured	FIELD	03/21-22/2017	umhos/cm	--	163.3	683	36.1	222.7	369.9	1215	215	535.4	368.1	171.9	142.6	133.1	47.6	--	--	--	--
Conductivity, field measured	FIELD	09/20-21/2017	umhos/cm	--	179.4	941	26.2	228.2	396.1	793	220	324.3	361.2	144.4	145.2	110.7	40.1	--	--	--	--
Conductivity, field measured	FIELD	03/29-30/2018	umhos/cm	--	154.1	660	29.7	225.7	385	721	445.1	547.3	232.3	211.7	140.5	137.4	47.2	--	--	--	--
Conductivity, field measured	FIELD	09/19-20/2018	umhos/cm	--	153.3	999	32.7	231.2	352.4	674	238.1	820	283.6	238.2	136.3	133.9	46.5	--	--	--	--
Conductivity, field measured	FIELD	03/18-19/2019	umhos/cm	--	233.7	1226	55.6	219.2	287.3	776	226.4	947	415.6	150	120.9	132.3	51.7	--	--	--	--
Conductivity, field measured	FIELD	09/25-26/2019	umhos/cm	--	201.4	905	33.3	234.3	190.9	937	223.7	819	519	203.9	170.9	134.9	51.1	--	--	--	--
Conductivity, field measured	FIELD	06/08-09/2020	umhos/cm	--	190.6	968	28.5	231.2	286.7	1098	211.3	660	278.9	227.6	117.9	150.3	47.8	--	--	--	--
Conductivity, field measured	FIELD	09/09-10/2020	umhos/cm	--	166.8	0.932	39.4	188.7	308.7	864	201.3	687	365.7	274.4	112.2	131.1	49.2	--	--	--	--
Conductivity, field measured	FIELD	03/02-03/2021	umhos/cm	--	236.5	959	37.1	204	313.1	924	497.2	679	281.7	269.2	133.4	123.6	42.2	--	--	--	--
Conductivity, field measured	FIELD	09/13-14/2021	umhos/cm	--	479.7	914	68.2	231.3	326.3	1286	183.1	841	339.1	247.4	159.8	131.5	41.3	--	--	--	--
Conductivity, field measured	FIELD	03/07-08/2022	umhos/cm	--	691	710	39.7	225	333.2	1450	198.3	1080	289.3	265.5	140.9	139.4	43.3	--	--	--	--
Conductivity, field measured	FIELD	08/23-24/2022	umhos/cm	--	640	841	36.1	233.8	359.6	1470	188.4	965	514	225.9	154.2	140.3	42	--	--	--	--
Conductivity, field measured	FIELD	03/21-22/2023	umhos/cm	--	550	1080	33	202	303	1370	191	973	262	210	121	122	39	--	--	--	--
Conductivity, field measured	FIELD	09/12-13/2023	umhos/cm	--	390	547	24	152	207	1070	142	686	240	158	88	104	30	--	--	--	--
Conductivity, field measured	FIELD	03/25-26/2024	umhos/cm	--	708	493	19	193	267	1490	368	1000	170	185	79	--	44	--	--	--	--
Conductivity, field measured	FIELD	09/03-04/2024	umhos/cm	--	609	495	18	125	0	953	121	680	146	107	62	130	22	--	--	--	--
Conductivity, field measured	FIELD	03/11-12/2025	umhos/cm	--	1050	618	26	187	218	1510	171	1010	223	169	98	187	34	--	--	--	--
Copper	E200.7	03/12-13/2009	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	12	< 10	47	< 10	< 10	--	--
Copper	E200.7	06/16-17/2009	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	81	< 10	< 10	10	< 10	60	< 10	< 10	--	--
Copper	E200.7	09/16-18/2009	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	62	< 10	< 10	< 10	15	67	< 10	< 10	--	--
Copper	E200.7	12/08-09/2009	ug/L	1300	< 10	< 10	< 10	--	< 10	< 10	< 10	52	< 10	< 10	10	15	34	< 10	< 10	--	--
Copper	E200.7	12/08-19/2009	ug/L	1300	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	E200.7	03/29-30/2010	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	8	< 10	< 10	10	8	51	< 10	< 10	--	--
Copper	E200.7	06/16-17/2010	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	9	16	42	< 10	< 10	--	--
Copper	E200.7	09/07-08/2010	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	< 10	8	42	60	< 10	< 10	--	--
Copper	E200.7	12/07-08/2010	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	18	< 10	< 10	6	22	83	< 10	< 10	--	--
Copper	E200.7	03/28-29/2011	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	21	< 10	< 10	8	15	53	< 10	< 10	--	--
Copper	E200.7	09/27-28/2011	ug/L	1300	< 10	< 10	< 10	8	< 10	< 10	< 10	32	< 10	< 10	9	12	51	< 10	< 10	--	--
Copper	E200.7	03/13-14/2012	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	19	< 10	< 10	10	12	41	< 10	< 10	--	--
Copper	E200.7	09/17-19/2012	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	21	< 10	< 10	7	10	74	< 10	< 10	--	--
Copper	E200.7	03/19-20/2013	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	18	< 10	< 10	14	12	26	< 10	< 10	--	--
Copper	E200.7	09/23-24/2013	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	27	< 10	< 10	6	7	45	< 10	< 10	--	--
Copper	E200.7	03/10-11/2014	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	9	6	7	59	< 10	< 10	--	--
Copper	E200.7	09/16-17/2014	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	13	< 10	9	--	7	69	< 10	< 10	--	--
Copper	E200.7	09/29/2014	ug/L	1300	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--	--	--
Copper	E200.7	03/17-18/2015	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6	< 10	16	7	9	67	< 10	< 10	--	--
Copper	E200.7	09/14-15/2015	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	50	--	< 10	33	< 10	< 10	--	--
Copper	E200.7	09/30/2015	ug/L	1300	--	--	--	--	--	--	--	--	--	--	< 10	--	--	--	--	< 10	--
Copper	E200.7	03/23-24/2016	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	13	12	9	65	< 10	< 10	--	--
Copper	E200.7	09/20-21/2016	ug/L	1300	< 10	< 10	18	< 10	< 10	< 10	< 10	< 10	< 10	8	11	< 10	71	< 10	< 10	--	--
Copper	E200.7	03/21-22/2017	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	8	12	19	64	< 10	< 10	--	--
Copper	E200.7	09/20-21/2017	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	5	< 10	7	11	34	64	< 10	< 10	--	--
Copper	E200.7	03/29-30/2018	ug/L	1300	< 10	< 10	< 10	< 10	6	< 10	< 10	15	< 10	7	13	35	54	< 10	< 10	--	--
Copper	E200.7	09/19-20/2018	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	23	61	< 10	< 10	--	--
Copper	E200.7	03/18-19/2019	ug/L	1300	< 10	< 10	< 10	< 10	19	< 10	< 10	< 10	< 10	18	6	29	63	< 10	< 10	--	--
Copper	E200.7	09/25-26/2019	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	20	< 10	24	65	< 10	< 10	--	--
Copper	E200.7	06/08-09/2020	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	12	9	28	46	< 10	< 10	--	--
Copper	E200.7	09/09-10/2020	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	7	< 10	21	9	35	61	< 10	< 10	--	--
Copper	E200.7	03/02-03/2021	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	9	5	32	58	< 10	< 10	--	--
Copper	E200.7	09/13-14/2021	ug/L	1300	< 10	< 10	6	< 10	< 10	< 10	< 10	< 10	< 10	21	8	32	54	< 10	< 10	--	--
Copper	E200.7	03/07-08/2022	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	9	8	28	51	< 10	< 10	--	--
Copper	E200.7	08/23-24/2022	ug/L	1300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	16	8	25	47	< 10	< 10	--	--
Copper	E200.7	03/21-22/2023	ug/L	1300	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	< 5	21	< 10	39	68	< 5	< 5	--	--
Copper	E200.7	09/12-13/2023	ug/L	1300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	6 J	< 5	15	13	29	48	< 5	< 5	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Copper	E200.7	03/25-26/2024	ug/L	1300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	13	9	42	46	< 5	< 5	--	--
Copper	E200.7	09/03-04/2024	ug/L	1300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	12	< 10	< 5	48	< 5	< 5	--	--
Copper	E200.7	03/11-12/2025	ug/L	1300	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	13	8 J	< 5	39	< 5	< 5	--	--
Dibromochloromethane (Chlorodibromomethane)	SW8260	03/12-13/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chlorodibromomethane	SW8260	06/16-17/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Chlorodibromomethane	SW8260	09/16-18/2009	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	12/08-09/2009	ug/L	80	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	12/08-19/2009	ug/L	80	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorodibromomethane	SW8260	03/29-30/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	06/16-17/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	12/07-08/2010	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/28-29/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/27-28/2011	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/13-14/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/17-19/2012	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/19-20/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/23-24/2013	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/10-11/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/16-17/2014	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/29/2014	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Chlorodibromomethane	SW8260	03/17-18/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/14-15/2015	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Chlorodibromomethane	SW8260	09/30/2015	ug/L	80	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Chlorodibromomethane	SW8260	03/23-24/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/20-21/2016	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/21-22/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/20-21/2017	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/29-30/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/19-20/2018	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/18-19/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/25-26/2019	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	06/08-09/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/09-10/2020	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/02-03/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	09/13-14/2021	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/07-08/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	08/23-24/2022	ug/L	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Chlorodibromomethane	SW8260	03/21-23/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorodibromomethane	SW8260	09/12-13/2023	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorodibromomethane	SW8260	03/25-26/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorodibromomethane	SW8260	09/05-06/2024	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Chlorodibromomethane	SW8260	03/11-12/2025	ug/L	80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Dibromomethane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Dibromomethane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Dibromomethane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Dibromomethane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Dibromomethane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Dibromomethane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Dibromomethane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Dibromomethane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Dibromomethane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Dibromomethane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Dibromomethane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Ethylbenzene	SW8260	03/12-13/2009	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Ethylbenzene	SW8260	06/16-17/2009	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Ethylbenzene	SW8260	09/16-18/2009	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	12/08-09/2009	ug/L	700	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	12/08-19/2009	ug/L	700	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	SW8260	03/29-30/2010	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	06/16-17/2010	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/07-08/2010	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	12/07-08/2010	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/28-29/2011	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/27-28/2011	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/13-14/2012	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/17-19/2012	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/19-20/2013	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/23-24/2013	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/10-11/2014	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/16-17/2014	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/29/2014	ug/L	700	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Ethylbenzene	SW8260	03/17-18/2015	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/14-15/2015	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Ethylbenzene	SW8260	09/30/2015	ug/L	700	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Ethylbenzene	SW8260	03/23-24/2016	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/20-21/2016	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/21-22/2017	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/20-21/2017	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/29-30/2018	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/19-20/2018	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/18-19/2019	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/25-26/2019	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	06/08-09/2020	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/09-10/2020	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/02-03/2021	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	09/13-14/2021	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	03/07-08/2022	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Ethylbenzene	SW8260	08/23-24/2022	ug/L	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Ethylbenzene	SW8260	03/21-23/2023	ug/L	700	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Ethylbenzene	SW8260	09/12-13/2023	ug/L	700	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Ethylbenzene	SW8260	03/25-26/2024	ug/L	700	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Ethylbenzene	SW8260	09/03-04/2024	ug/L	700	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Ethylbenzene	SW8260	03/11-12/2025	ug/L	700	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Hardness	E200.7	03/12-13/2009	mg/L	PQL = 0.5 mg/L	364	513	4.1	91.4	64.4	82.7	55.5	--	93.3	66.4	26.9	27.2	2.3	0.7	< 0.5	--	--
Hardness	E200.7	06/16-17/2009	mg/L	PQL = 0.5 mg/L	367	539	3.9	83.6	60.7	59.3	51	102	98.8	54.1	28.9	26.7	2	< 0.5	< 0.5	--	--
Hardness	E200.7	09/16-18/2009	mg/L	PQL = 0.5 mg/L	355	591	4	105	63.3	21.4	61.3	102	80.5	75.3	26.6	27.9	2.4	< 0.5	< 0.5	--	--
Hardness	E200.7	12/08-09/2009	mg/L	PQL = 0.5 mg/L	225	595	3.9	--	57.9	19.6	69.1	94.7	85.7	76.7	26.1	30.4	2.7	< 0.5	< 0.5	--	--
Hardness	E200.7	12/08-19/2009	mg/L	PQL = 0.5 mg/L	--	--	--	104	--	--	--	--	--	--	--	--	--	--	--	--	--
Hardness	E200.7	03/29-30/2010	mg/L	PQL = 0.5 mg/L	147	772	4.5	96.7	59.6	52.6	80.2	77.2	154	80.6	51.3	33.1	3.7	< 0.5	< 0.5	--	--
Hardness	E200.7	06/16-17/2010	mg/L	PQL = 0.5 mg/L	110	463	4.1	107	49.8	30.1	70.2	77	72.2	62.1	41.5	31.6	3.7	< 0.5	< 0.5	--	--
Hardness	E200.7	09/07-08/2010	mg/L	PQL = 0.5 mg/L	104	446	4.4	122	51.5	38.2	73.9	68.6	74.2	51.6	26.5	26.5	2.8	< 0.5	< 0.5	--	--
Hardness	E200.7	12/07-08/2010	mg/L	PQL = 0.5 mg/L	97	540	3.9	109	50.5	65.1	70.4	57.7	65.1	48.4	27.5	24	2.4	< 0.5	< 0.5	--	--
Hardness	E200.7	03/28-29/2011	mg/L	PQL = 0.5 mg/L	93.3	656	4	98.9	51.9	132	73.6	64.2	79.6	46.7	24	22	2.3	< 0.5	< 0.5	--	--
Hardness	E200.7	09/27-28/2011	mg/L	PQL = 0.5 mg/L	66.8	502	4.4	85.5	56.7	225	74.5	74.4	69.8	39.3	38.9	21.6	2.6	< 0.5	< 0.5	--	--
Hardness	E200.7	03/13-14/2012	mg/L	PQL = 0.5 mg/L	88.1	619	4.4	94.1	67.8	196	79.3	103	76.3	38.1	43.3	22.9	2.4	< 0.5	< 0.5	--	--
Hardness	E200.7	09/17-19/2012	mg/L	PQL = 0.5 mg/L	93.6	533	4.4	86.8	68.3	200	74.7	90.5	77.2	33.7	25.4	19.3	2.4	< 0.5	< 0.5	--	--
Hardness	E200.7	03/19-20/2013	mg/L	PQL = 0.5 mg/L	116	598	4	81.9	76.2	144	80.9	136	76.9	36	22.5	18.4	2.3	< 0.5	< 0.5	--	--
Hardness	E200.7	09/23-24/2013	mg/L	PQL = 0.5 mg/L	117	586	7.5	80.2	82.7	187	75.6	109	61.6	33.2	29.9	18.3	2.4	< 0.5	< 0.5	--	--
Hardness	E200.7	03/10-11/2014	mg/L	PQL = 0.5 mg/L	114	462	4.3	85.3	91	162	82.5	183	76.6	35.7	34.7	18.4	2.5	< 1	< 1	--	--
Hardness	E200.7	09/16-17/2014	mg/L	PQL = 0.5 mg/L	114	563	4.3	77.3	82.2	265	75.3	109	85.7	28.3	--	17.4	2.4	< 1	< 1	--	--
Hardness	E200.7	09/29/2014	mg/L	PQL = 0.5 mg/L	--	--	--	--	--	--	--	--	--	--	49.6	--	--	--	--	--	--
Hardness	E200.7	03/17-18/2015	mg/L	PQL = 0.5 mg/L	94.8	595	4.3	77.8	91.2	227	77.9	147	73.2	31.6	38	18.2	2.6	< 1	< 1	--	--
Hardness	E200.7	09/14-15/2015	mg/L	PQL = 0.5 mg/L	111	616	4.2	79.2	100	300	81.3	127	80.3	39.7	--	17.9	2.5	< 1	< 1	--	--
Hardness	E200.7	09/30/2015	mg/L	PQL = 0.5 mg/L	--	--	--	--	--	--	--	--	--	--	30.4	--	--	--	--	< 1	--
Hardness	E200.7	03/23-24/2016	mg/L	PQL = 0.5 mg/L	96.3	671	4.4	77.7	111	289	81.4	130	84	32.8	32	18.5	2.8	< 1	< 1	--	--
Hardness	E200.7	09/20-21/2016	mg/L	PQL = 0.5 mg/L	73	506	4.4	80.1	112	275	81	114	86.3	33.5	27.3	18.9	2.5	< 1	< 1	--	--
Hardness	E200.7	03/21-22/2017	mg/L	PQL = 0.5 mg/L	51.7	445	4.4	78.8	121	243	79.9	98.3	61.3	28.1	28.2	19.2	2.6	< 1	< 1	--	--
Hardness	E200.7	09/20-21/2017	mg/L	PQL = 0.5 mg/L	47.3	479	3.8	70.3	111	156	68	58.8	65.3	27.2	25.9	17	2.3	< 1	< 1	--	--
Hardness	E200.7	03/29-30/2018	mg/L	PQL = 0.5 mg/L	39.4	281	4	73.3	112	133	209	118	66.3	37.9	27.7	22	2.3	< 1	< 1	--	--
Hardness	E200.7	09/19-20/2018	mg/L	PQL = 0.5 mg/L	41.3	482	3.3	78.6	107	111	83.5	232	67.6	40.5	28.1	20.2	1.7	< 1	< 1	--	--
Hardness	E200.7	03/18-19/2019	mg/L	PQL = 0.5 mg/L	62.9	590	4	76.4	85.4	126	78.8	174	107	35.4	31.2	20.6	2.7	< 1	< 1	--	--
Hardness	E200.7	09/25-26/2019	mg/L	PQL = 0.5 mg/L	70.6	420	4.5	82.1	69.2	186	78.6	168	72.2	45.8	56.1	20.3	3.1	< 1	< 1	--	--
Hardness	E200.7	06/08-09/2020	mg/L	PQL = 0.5 mg/L	61	475	4.6	76.4	85.2	199	74	126	115	36.9	28.5	18.9	2.5	< 1	< 1	--	--
Hardness	E200.7	09/09-10/2020	mg/L	PQL = 0.5 mg/L	52.7	452	5.1	76.3	92.7	195	69.2	130	72.9	49.7	24	19.4	2.8	< 1	< 1	--	--
Hardness	E200.7	03/02-03/2021	mg/L	PQL = 0.5 mg/L	80.4	525	5.4	74.5	113	213	48.6	111	60.8	44.9	35	20.4	2.7	< 1	< 1	--	--
Hardness	E200.7	09/13-14/2021	mg/L	PQL = 0.5 mg/L	92.5	408	5.1	74.9	93.2	251	71.3	135	45.9	50.4	30.4	19.8	2.6	0.8	< 1	--	--
Hardness	E200.7	03/07-08/2022	mg/L	PQL = 0.5 mg/L	129	325	5.2	73	92.7	274	62.1	146	38.5	38.6	28.3	20.6	2.9	< 1	< 1	--	--
Hardness	E200.7	08/23-24/2022	mg/L	PQL = 0.5 mg/L	135	401	4.7	72.6	103	293	44.1	164	57.5	49.1	30.1	21.1	2.4	< 1	< 1	--	--
Hardness	E200.7	03/21-22/2023	mg/L	PQL = 0.5 mg/L	126	662	5.5	73.6	97	283	77.2	122	58.2	46.4	26.6	20.7	2.8	< 0.5	< 0.5	--	--
Hardness	E200.7	09/12-13/2023	mg/L	PQL = 0.5 mg/L	118	365	5.6	73.4	87.4	317	72.1	119	54.5	42.6	25.4	21.8	2.6	< 0.5	< 0.5	--	--
Hardness	E200.7	03/25-26/2024	mg/L	PQL = 0.5 mg/L	155	348	5.1	70.7	86.2	308	60.3	119	47.7	41	25.1	21.4	2.5	< 0.5	< 0.5	--	--
Hardness	E200.7	09/03-04/2024	mg/L	PQL = 0.5 mg/L	227	386	6.4	68.1	93.1	347	71	126	50.6	40.3	21.7	38.7	2.6	< 0.5	< 0.5	--	--
Hardness	E200.7	03/11-12/2025	mg/L	PQL = 0.5 mg/L	246	342	5.5	74.3	82.5	325	66.1	129	40.5	44.4	23.3	39.7	2.6	< 0.5	< 0.5	--	--
Iodomethane	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Iodomethane	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Iodomethane	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Iodomethane	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Iodomethane	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Iodomethane	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Iodomethane	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
Iodomethane	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
Iodomethane	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iodomethane	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Iron	E200.7	03/12-13/2009	mg/L	PQL = 0.005 mg/L	0.26	0.32	0.65	< 0.05	< 0.05	< 0.05	0.06	--	0.26	21.2	< 0.05	3.37	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	06/16-17/2009	mg/L	PQL = 0.005 mg/L	0.08	0.3	0.52	0.04	< 0.05	< 0.05	0.05	0.02	0.03	17.3	0.05	2.67	0.34	< 0.05	< 0.05	--	--
Iron	E200.7	09/16-18/2009	mg/L	PQL = 0.005 mg/L	0.69	1.27	0.57	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05	25.1	0.07	4.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	12/08-09/2009	mg/L	PQL = 0.005 mg/L	0.99	0.22	0.59	--	< 0.05	< 0.05	0.16	0.01	0.01	20.7	0.05	7.17	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	12/08-19/2009	mg/L	PQL = 0.005 mg/L	--	--	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	E200.7	03/29-30/2010	mg/L	PQL = 0.005 mg/L	0.33	0.09	0.68	0.11	0.01	< 0.05	0.26	0.05	0.03	23.4	0.11	4.49	0.03	< 0.05	< 0.05	--	--
Iron	E200.7	06/16-17/2010	mg/L	PQL = 0.005 mg/L	0.14	0.6	0.46	0.07	< 0.05	< 0.05	0.37	0.01	< 0.05	21.2	0.03	1.01	0.03	< 0.05	< 0.05	--	--
Iron	E200.7	09/07-08/2010	mg/L	PQL = 0.005 mg/L	0.08	1.02	0.5	0.02	< 0.05	< 0.05	0.32	0.02	0.03	15.7	0.1	0.02	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	12/07-08/2010	mg/L	PQL = 0.005 mg/L	0.06	0.02	0.53	0.03	< 0.05	< 0.05	0.44	< 0.05	0.11	14.6	0.34	< 0.05	0.2	< 0.05	< 0.05	--	--
Iron	E200.7	03/28-29/2011	mg/L	PQL = 0.005 mg/L	0.07	0.2	0.5	0.05	< 0.05	0.01	0.43	< 0.05	0.02	13.6	0.06	< 0.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/27-28/2011	mg/L	PQL = 0.005 mg/L	0.07	2.11	0.63	0.1	< 0.05	< 0.05	0.4	< 0.05	0.01	12.5	0.1	0.08	0.07	< 0.05	< 0.05	--	--
Iron	E200.7	03/13-14/2012	mg/L	PQL = 0.005 mg/L	0.09	0.73	0.74	0.04	< 0.05	< 0.05	0.56	0.02	0.02	7.39	0.11	0.01	0.02	< 0.05	< 0.05	--	--
Iron	E200.7	09/17-19/2012	mg/L	PQL = 0.005 mg/L	0.09	0.89	0.62	0.07	< 0.05	< 0.05	0.51	0.03	0.02	5.82	0.22	0.03	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/19-20/2013	mg/L	PQL = 0.005 mg/L	0.07	0.42	0.86	0.11	< 0.05	< 0.05	0.56	0.31	0.08	7.01	0.11	< 0.05	0.06	< 0.05	< 0.05	--	--
Iron	E200.7	09/23-24/2013	mg/L	PQL = 0.005 mg/L	0.03	1.55	0.62	0.2	< 0.05	< 0.05	0.56	< 0.05	< 0.05	1.23	0.21	0.04	0.04	< 0.05	< 0.05	--	--
Iron	E200.7	03/10-11/2014	mg/L	PQL = 0.005 mg/L	0.04	0.38	0.58	0.19	< 0.05	< 0.05	0.59	0.01	0.03	0.07	0.08	< 0.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/16-17/2014	mg/L	PQL = 0.005 mg/L	0.04	1.92	0.64	0.36	< 0.05	0.03	0.77	2.42	0.03	0.03	--	< 0.05	0.03	< 0.05	< 0.05	--	--
Iron	E200.7	09/29/2014	mg/L	PQL = 0.005 mg/L	--	--	--	--	--	--	--	--	--	--	2.77	--	--	--	--	--	--
Iron	E200.7	03/17-18/2015	mg/L	PQL = 0.005 mg/L	0.04	1.89	0.6	0.47	< 0.05	< 0.05	0.74	4.5	0.02	0.02	0.38	0.13	0.11	< 0.05	< 0.05	--	--
Iron	E200.7	09/14-15/2015	mg/L	PQL = 0.005 mg/L	0.02	1.36	0.89	0.4	0.01	0.01	0.55	6.92	0.11	0.03	--	0.13	0.03	< 0.05	< 0.05	--	--
Iron	E200.7	09/30/2015	mg/L	PQL = 0.005 mg/L	--	--	--	--	--	--	--	--	--	--	0.08	--	--	--	--	< 0.05	--
Iron	E200.7	03/23-24/2016	mg/L	PQL = 0.005 mg/L	0.01	4.18	0.89	0.34	< 0.05	0.02	0.6	4.71	0.02	0.01	0.07	4.5	0.09	< 0.05	< 0.05	--	--
Iron	E200.7	09/20-21/2016	mg/L	PQL = 0.005 mg/L	0.03	9.73	0.79	0.18	< 0.05	0.01	0.71	3.98	0.02	0.01	0.05	4.27	< 0.05	0.01	< 0.05	--	--
Iron	E200.7	03/21-22/2017	mg/L	PQL = 0.005 mg/L	< 0.05	6.21	1.52	0.49	< 0.05	< 0.05	0.75	1.24	0.02	< 0.05	0.04	0.12	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/20-21/2017	mg/L	PQL = 0.005 mg/L	< 0.05	7.61	0.7	2.35	< 0.05	< 0.05	0.66	0.07	0.04	< 0.05	< 0.05	0.29	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/29-30/2018	mg/L	PQL = 0.005 mg/L	< 0.05	1.22	1.06	0.85	< 0.05	0.02	0.53	0.37	0.04	0.07	0.02	0.41	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/19-20/2018	mg/L	PQL = 0.005 mg/L	< 0.05	3.42	0.76	0.41	0.02	< 0.05	1.01	0.26	0.05	< 0.05	< 0.05	0.97	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/18-19/2019	mg/L	PQL = 0.005 mg/L	< 0.05	2.09	0.81	0.76	0.02	0.04	1.2	0.03	0.07	< 0.05	0.1	1.18	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/25-26/2019	mg/L	PQL = 0.005 mg/L	< 0.05	20.1	0.76	0.42	0.11	< 0.05	0.84	0.1	< 0.05	< 0.05	0.15	< 0.05	< 0.05	0.03	< 0.05	--	--
Iron	E200.7	06/08-09/2020	mg/L	PQL = 0.005 mg/L	< 0.05	17.2	0.73	0.78	< 0.05	< 0.05	0.76	< 0.05	0.04	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/09-10/2020	mg/L	PQL = 0.005 mg/L	< 0.05	16.4	0.73	0.39	< 0.05	< 0.05	0.78	0.02	0.06	< 0.05	< 0.05	0.08	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/02-03/2021	mg/L	PQL = 0.005 mg/L	0.03	0.83	0.85	0.63	< 0.05	< 0.05	0.42	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	09/13-14/2021	mg/L	PQL = 0.005 mg/L	< 0.05	22	1.43	1.09	< 0.05	< 0.05	0.74	0.19	0.02	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/07-08/2022	mg/L	PQL = 0.005 mg/L	< 0.05	3.81	2.11	1.54	< 0.05	< 0.05	0.65	< 0.05	0.04	0.04	< 0.05	0.03	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	08/23-24/2022	mg/L	PQL = 0.005 mg/L	0.09	7.76	1.05	1.12	< 0.05	< 0.05	0.61	0.04	0.04	< 0.05	< 0.05	0.02	< 0.05	< 0.05	< 0.05	--	--
Iron	E200.7	03/21-22/2023	mg/L	PQL = 0.005 mg/L	< 0.02	2.24	4	1.9	< 0.02	< 0.02	0.79	< 0.05	0.1	3.6	<0.02	0.35	< 0.02	< 0.02	< 0.02	--	--
Iron	E200.7	09/12-13/2023	mg/L	PQL = 0.005 mg/L	< 0.02	15.6	1.68	1.1	< 0.02	< 0.02	0.72	0.07	0.05	0.03 J	0.06	0.28	< 0.02	< 0.02	< 0.02	--	--
Iron	E200.7	03/25-26/2024	mg/L	PQL = 0.005 mg/L	< 0.02	2.29	1.58	7.22	< 0.02	< 0.02	0.43	< 0.02	0.06	0.08	0.13	13.2	< 0.02	< 0.02	< 0.02	--	--
Iron	E200.7	09/03-04/2024	mg/L	PQL = 0.005 mg/L	< 0.02	7.77	1.59	1.2	< 0.02	< 0.02	0.76	< 0.05	< 0.02	0.19	<0.02	20.8	< 0.02	< 0.02	< 0.02	--	--
Iron	E200.7	03/11-12/2025	mg/L	PQL = 0.005 mg/L	< 0.02	1.03	2.21	2.87	< 0.02	< 0.02	0.67	0.19	0.04 J	0.05	<0.02	19.7	< 0.02	< 0.02	< 0.02	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Lead	E200.8	03/12-13/2009	ug/L	10	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	5.9	< 2	< 2	--	--
Lead	E200.8	06/16-17/2009	ug/L	10	1	2.5	0.3	0.8	< 2	0.2	< 2	2.6	2.1	< 2	0.8	0.5	6.9	< 2	< 2	--	--
Lead	E200.8	09/16-18/2009	ug/L	10	< 2	4.9	< 2	< 2	< 2	< 2	< 2	2.4	< 2	< 2	< 2	4.6	11.3	< 2	< 2	--	--
Lead	E200.8	12/08-09/2009	ug/L	10	< 2	2.3	< 2	--	< 2	< 2	< 2	2.7	11.9	0.7	0.5	4.2	12.6	< 2	< 2	--	--
Lead	E200.8	12/08-19/2009	ug/L	10	--	--	--	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	E200.8	03/29-30/2010	ug/L	10	< 2	0.3	0.5	1	< 2	< 2	< 2	0.8	30.1	0.7	0.5	1.6	16.3	< 2	< 2	--	--
Lead	E200.8	06/16-17/2010	ug/L	10	< 2	0.6	0.9	0.8	0.4	< 2	< 2	0.2	1.1	0.3	0.4	8.9	13.1	< 2	< 2	--	--
Lead	E200.8	09/07-08/2010	ug/L	10	0.4	2.8	0.4	0.5	1.2	0.7	0.4	0.7	0.9	< 2	0.8	4.1	12.9	< 2	< 2	--	--
Lead	E200.8	12/07-08/2010	ug/L	10	< 2	6	0.2	0.6	0.2	0.3	< 2	4.7	0.4	2.9	0.3	1.9	11.6	< 2	< 2	--	--
Lead	E200.8	03/28-29/2011	ug/L	10	< 2	0.4	< 2	0.5	< 2	1	< 2	0.9	0.3	< 2	< 2	1.2	8.8	< 2	< 2	--	--
Lead	E200.8	09/27-28/2011	ug/L	10	< 2	2.3	0.6	2.4	< 2	1.4	< 2	1.2	0.5	< 2	0.3	0.9	7.3	< 2	< 2	--	--
Lead	E200.8	03/13-14/2012	ug/L	10	< 2	0.5	< 2	0.4	< 2	0.9	< 2	0.9	0.6	0.5	0.5	0.6	7.7	< 2	< 2	--	--
Lead	E200.8	09/17-19/2012	ug/L	10	0.3	< 2	0.9	0.2	< 2	1	< 2	0.5	0.2	0.4	0.3	0.5	10.9	< 2	< 2	--	--
Lead	E200.8	03/19-20/2013	ug/L	10	0.3	0.2	0.5	1	< 2	0.6	< 2	< 2	5.9	3.2	0.3	0.6	11.5	< 2	< 2	--	--
Lead	E200.8	09/23-24/2013	ug/L	10	0.2	0.6	0.9	1.4	< 2	0.9	< 2	0.6	0.3	1.4	0.3	0.6	8	< 2	< 2	--	--
Lead	E200.8	03/10-11/2014	ug/L	10	< 2	< 2	0.6	1.1	< 2	0.8	< 2	1.3	1.2	7.1	0.5	0.6	9.6	< 2	< 2	--	--
Lead	E200.8	09/16-17/2014	ug/L	10	< 2	< 2	0.6	1.3	< 2	1.6	0.2	0.6	2.5	4.3	--	0.4	12.2	< 2	< 2	--	--
Lead	E200.8	09/29/2014	ug/L	10	--	--	--	--	--	--	--	--	--	--	1.5	--	--	--	--	--	--
Lead	E200.8	03/17-18/2015	ug/L	10	0.5	< 2	0.6	10	0.3	1.2	< 2	2.1	33.5	6.8	0.7	0.6	20.1	< 2	< 2	--	--
Lead	E200.8	09/14-15/2015	ug/L	10	< 2	< 2	0.7	2	< 2	1.5	< 2	0.3	0.4	8.8	--	0.3	6.4	< 2	< 2	--	--
Lead	E200.8	09/30/2015	ug/L	10	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	< 2	--
Lead	E200.8	03/23-24/2016	ug/L	10	< 2	< 2	0.5	1	< 2	1.4	< 2	< 2	< 2	3.6	0.2	1.2	6.9	< 2	< 2	--	--
Lead	E200.8	09/20-21/2016	ug/L	10	< 2	< 2	1.2	0.4	< 2	1.1	< 2	32	< 2	5.9	< 2	< 2	9.7	< 2	< 2	--	--
Lead	E200.8	03/21-22/2017	ug/L	10	< 1	0.3	1	0.7	< 1	0.8	< 1	0.2	0.5	1.9	< 1	2.8	8.7	< 1	< 1	--	--
Lead	E200.8	09/20-21/2017	ug/L	10	< 1	0.8	0.5	6.5	< 1	0.5	< 1	0.3	0.8	2.2	0.5	1.2	9	< 1	< 1	--	--
Lead	E200.8	03/29-30/2018	ug/L	10	< 1	< 1	0.7	3.6	< 1	0.3	0.4	1.6	0.4	0.9	0.2	0.6	6.2	< 1	< 1	--	--
Lead	E200.8	09/19-20/2018	ug/L	10	< 1	0.3	0.3	0.8	0.4	0.2	0.2	1	1.5	2.2	0.3	0.4	8.9	< 1	< 1	--	--
Lead	E200.8	03/18-19/2019	ug/L	10	0.2	< 1	< 1	0.7	< 1	0.3	< 1	< 1	0.3	1.9	< 1	0.4	9.1	< 1	< 1	--	--
Lead	E200.8	09/25-26/2019	ug/L	10	< 1	0.3	< 1	2	0.2	0.5	< 1	< 1	0.6	0.8	0.2	0.4	8.8	< 1	< 1	--	--
Lead	E200.8	06/08-09/2020	ug/L	10	0.3	< 1	0.3	0.5	< 1	0.5	< 1	< 1	< 1	1.1	0.2	0.4	6.7	< 1	< 1	--	--
Lead	E200.8	09/09-10/2020	ug/L	10	0.3	0.4	0.4	< 1	< 1	0.6	0.2	< 1	0.2	2.2	0.2	0.4	9	< 1	< 1	--	--
Lead	E200.8	03/02-03/2021	ug/L	10	0.4	< 1	0.3	< 1	< 1	0.6	0.3	< 1	0.2	1.3	0.2	0.3	7.2	< 1	< 1	--	--
Lead	E200.8	09/13-14/2021	ug/L	10	< 1	1.4	1.5	0.4	< 1	1	< 1	0.2	< 1	2	0.4	0.4	7.2	< 1	< 1	--	--
Lead	E200.8	03/07-08/2022	ug/L	10	< 1	0.6	0.9	< 1	< 1	1.2	0.3	0.3	< 1	1.7	1.4	0.3	7.2	< 1	< 1	--	--
Lead	E200.8	08/23-24/2022	ug/L	10	0.4	< 1	0.3	0.2	< 1	1.2	0.3	0.2	< 1	2.5	< 1	0.4	7.6	< 1	< 1	--	--
Lead	E200.8	03/21-22/2023	ug/L	10	< 0.2	< 0.2	2.0	< 1	< 0.2	1.3	0.3 J	< 0.2	0.4 J	6.1	< 1	0.8 J	8.1	< 0.2	< 0.2	--	--
Lead	E200.8	09/12-13/2023	ug/L	10	< 0.2	0.6 J	1.0	< 0.2	< 0.2	1.5	0.2 J	0.4 J	1.1	1.2	0.8 J	0.7 J	7.0	< 0.2	< 0.2	--	--
Lead	E200.8	03/25-26/2024	ug/L	10	< 0.2	< 0.2	8 J	0.5 J	< 0.2	1.4	0.4 J	< 0.2	0.2 J	1.2	0.2 J	18.2	5.9	< 0.2	< 0.2	--	--
Lead	E200.8	09/03-04/2024	ug/L	10	< 0.2	< 0.2	< 1.0	< 0.2	< 0.2	1.4	< 1.0	< 0.2	< 0.2	1.2	< 0.2	0.6 J	8.3	< 0.2	< 0.2	--	--
Lead	E200.8	03/11-12/2025	ug/L	10	0.2 J	< 0.2	0.5 J	0.4 J	< 0.2	1.3	1.1	0.4 J	< 0.2	0.7 J	< 0.2	< 0.2	6.1	< 0.2	< 0.2	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Magnesium	E200.7	03/12-13/2009	mg/L	PQL = 0.004 mg/L	3.14	29.3	0.47	4.89	2.39	0.85	1.98	--	11.9	9.88	2.53	3.44	0.17	< 0.1	< 0.1	--	--
Magnesium	E200.7	06/16-17/2009	mg/L	PQL = 0.004 mg/L	3.17	32.5	0.45	4.05	2.3	< 0.1	2.14	15.9	11	7.91	2.39	3.6	0.14	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/16-18/2009	mg/L	PQL = 0.004 mg/L	4.01	38.1	0.45	4.32	2.22	< 0.1	2.95	15.9	10.5	11	2.48	3.83	0.14	< 0.1	< 0.1	--	--
Magnesium	E200.7	12/08-09/2009	mg/L	PQL = 0.004 mg/L	5.11	32.7	0.45	--	1.99	0.34	3.35	14.3	10.5	11	2.26	4.06	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	12/08-19/2009	mg/L	PQL = 0.004 mg/L	--	--	--	4.21	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	E200.7	03/29-30/2010	mg/L	PQL = 0.004 mg/L	2.77	42.3	0.51	4.16	1.97	0.07	3.84	9.58	18.9	11.7	2.1	4.3	0.23	< 0.1	< 0.1	--	--
Magnesium	E200.7	06/16-17/2010	mg/L	PQL = 0.004 mg/L	2.56	28.5	0.47	4.06	1.75	0.07	3.61	10.6	8.58	9.23	1.76	4	0.24	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/07-08/2010	mg/L	PQL = 0.004 mg/L	2.28	29.4	0.49	3.92	1.7	< 0.1	3.52	9.5	8.68	7.68	1.65	3.5	0.19	< 0.1	< 0.1	--	--
Magnesium	E200.7	12/07-08/2010	mg/L	PQL = 0.004 mg/L	1.88	37.6	0.48	3.69	1.65	< 0.1	3.33	8.51	7.91	7.4	1.74	3.13	0.18	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/28-29/2011	mg/L	PQL = 0.004 mg/L	1.49	37.9	0.45	3.6	1.63	< 0.1	3.31	9.19	9.4	7.01	1.59	2.72	0.17	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/27-28/2011	mg/L	PQL = 0.004 mg/L	1.08	29.5	0.5	3.83	2.03	< 0.1	3.32	11.3	8.14	6.05	1.62	2.79	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/13-14/2012	mg/L	PQL = 0.004 mg/L	0.93	40.1	0.51	4.16	2.37	< 0.1	3.56	15.9	8.48	5.84	1.71	2.96	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/17-19/2012	mg/L	PQL = 0.004 mg/L	0.3	37.4	0.49	3.81	2.28	< 0.1	3.03	13.7	9.08	5.21	1.79	2.43	0.2	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/19-20/2013	mg/L	PQL = 0.004 mg/L	0.2	38.8	0.46	3.87	2.8	< 0.1	3.89	19.9	10.8	5.5	2.02	2.38	0.23	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/23-24/2013	mg/L	PQL = 0.004 mg/L	0.12	46.2	1.16	3.98	3.34	< 0.1	3.62	16.4	8.44	5.22	2.12	2.42	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/10-11/2014	mg/L	PQL = 0.004 mg/L	0.1	30.6	0.48	4.11	3.68	< 0.1	3.72	21.2	10	5.26	2.1	2.33	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/16-17/2014	mg/L	PQL = 0.004 mg/L	0.07	36	0.46	3.88	3.55	< 0.1	3.44	13	10	4.29	--	2.22	0.19	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/29/2014	mg/L	PQL = 0.004 mg/L	--	--	--	--	--	--	--	--	--	--	2.81	--	--	--	--	--	--
Magnesium	E200.7	03/17-18/2015	mg/L	PQL = 0.004 mg/L	0.09	37.7	0.49	4	4.21	< 0.1	3.4	17.7	8.28	4.5	2.11	2.28	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/14-15/2015	mg/L	PQL = 0.004 mg/L	< 0.1	39	0.48	3.99	4.88	< 0.1	3.12	15.7	8.18	6.73	--	2.31	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/30/2015	mg/L	PQL = 0.004 mg/L	--	--	--	--	--	--	--	--	--	--	1.92	--	--	--	--	< 0.1	--
Magnesium	E200.7	03/23-24/2016	mg/L	PQL = 0.004 mg/L	0.08	38.8	0.47	3.76	5.4	< 0.1	3.09	16.2	9.94	4.59	2.11	2.25	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/20-21/2016	mg/L	PQL = 0.004 mg/L	0.17	33.3	0.51	4.15	6.31	< 0.1	3.48	14.1	11.6	4.92	2.54	2.46	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/21-22/2017	mg/L	PQL = 0.004 mg/L	0.6	29.9	0.51	4.02	5.67	< 0.1	3.3	12.1	8.22	4.04	2.72	2.21	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/20-21/2017	mg/L	PQL = 0.004 mg/L	0.21	31.6	0.45	3.68	6.14	< 0.1	2.82	7.46	9.07	3.83	2.41	1.94	0.2	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/29-30/2018	mg/L	PQL = 0.004 mg/L	0.36	18.4	0.48	3.97	6	< 0.1	3.19	15.5	7.89	5.36	2.65	2.39	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/19-20/2018	mg/L	PQL = 0.004 mg/L	0.63	27.5	0.4	3.94	5.29	< 0.1	3.34	27.5	7.47	5.65	2.23	2.19	0.14	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/18-19/2019	mg/L	PQL = 0.004 mg/L	1.3	31.9	0.47	4.02	3.73	< 0.1	3.47	20.5	13.7	5.56	1.8	2.37	0.24	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/25-26/2019	mg/L	PQL = 0.004 mg/L	1.63	23.5	0.51	3.93	2.31	< 0.1	3.26	19.6	9.99	6.98	1.9	2.3	0.22	< 0.1	< 0.1	--	--
Magnesium	E200.7	06/08-09/2020	mg/L	PQL = 0.004 mg/L	1.38	28.6	0.53	3.94	3.96	< 0.1	3.11	15.9	14.8	5.3	1.87	2.12	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/09-10/2020	mg/L	PQL = 0.004 mg/L	1.68	29	0.59	4.03	4.75	< 0.1	2.73	16.5	9.67	7.72	1.95	2.17	0.24	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/02-03/2021	mg/L	PQL = 0.004 mg/L	1.56	26.7	0.61	3.93	5.67	< 0.1	1.24	14.1	7.71	6.57	2.29	2.28	0.23	< 0.1	< 0.1	--	--
Magnesium	E200.7	09/13-14/2021	mg/L	PQL = 0.004 mg/L	0.15	27	0.6	3.95	4.37	< 0.1	2.88	16.8	6.16	7.78	2.41	2.25	0.23	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/07-08/2022	mg/L	PQL = 0.004 mg/L	< 0.1	20.1	0.59	3.76	4.5	< 0.1	2.48	20	4.91	5.66	2.52	2.27	0.25	< 0.1	< 0.1	--	--
Magnesium	E200.7	08/23-24/2022	mg/L	PQL = 0.004 mg/L	0.25	26.5	0.54	3.78	4.91	< 0.1	2.21	24.4	7.8	7.68	2.41	2.35	0.21	< 0.1	< 0.1	--	--
Magnesium	E200.7	03/21-22/2023	mg/L	PQL = 0.004 mg/L	< 0.05	37.7	0.57	3.88	4.62	< 0.05	3.3	17	7.22	7.17	2.42	2.31	0.24	< 0.05	< 0.05	--	--
Magnesium	E200.7	09/12-13/2023	mg/L	PQL = 0.004 mg/L	< 0.05	24.1	0.56	3.85	3.86	< 0.05	2.69	17	6.27	6.53	2.2	2.41	0.23	< 0.05	< 0.05	--	--
Magnesium	E200.7	03/25-26/2024	mg/L	PQL = 0.004 mg/L	0.21	25.6	0.56	3.66	3.63	< 0.05	1.53	16.7	4.49	6.43	2.22	2.4	0.24	< 0.05	< 0.05	--	--
Magnesium	E200.7	09/03-04/2024	mg/L	PQL = 0.004 mg/L	< 0.05	24.1	0.59	3.5	3.42	< 0.05	2.75	17	5.49	6.28	1.79	3.11	0.23	< 0.05	< 0.05	--	--
Magnesium	E200.7	03/11-12/2025	mg/L	PQL = 0.004 mg/L	< 0.05	25.6	0.53	3.89	2.87	< 0.05	2.25	17.5	4.63	7	1.96	3.2	0.24	< 0.05	< 0.05	--	--
Manganese	E200.7	03/12-13/2009	mg/L	0.043 (PQL = 0.01 mg/L)	0.080	3.03	0.051	0.023	0.024	< 0.01	0.026	--	0.686	0.482	0.046	0.272	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	06/16-17/2009	mg/L	0.043 (PQL = 0.01 mg/L)	0.054	2.81	0.048	0.051	0.025	< 0.01	0.032	1.08	0.737	0.33	0.047	0.264	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	09/16-18/2009	mg/L	0.043 (PQL = 0.01 mg/L)	0.112	3.16	0.055	0.076	0.024	< 0.01	0.044	1	0.419	0.584	0.048	0.286	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	12/08-09/2009	mg/L	0.043 (PQL = 0.01 mg/L)	0.202	2.87	0.051	--	0.02	< 0.01	0.083	0.979	1.27	0.582	0.043	0.311	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	12/08-19/2009	mg/L	0.043 (PQL = 0.01 mg/L)	--	--	--	0.062	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	E200.7	03/29-30/2010	mg/L	0.043 (PQL = 0.01 mg/L)	0.034	6.38	0.058	0.030	0.021	< 0.01	0.101	0.475	0.163	0.579	0.04	0.315	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	06/16-17/2010	mg/L	0.043 (PQL = 0.01 mg/L)	0.021	4.26	0.053	0.014	0.019	< 0.01	0.11	0.503	0.093	0.485	0.035	0.274	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	09/07-08/2010	mg/L	0.043 (PQL = 0.01 mg/L)	0.012	4.32	0.051	0.005	0.019	< 0.01	0.117	0.49	0.499	0.407	0.034	0.258	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	12/07-08/2010	mg/L	0.043 (PQL = 0.01 mg/L)	0.012	0.809	0.05	0.010	0.021	< 0.01	0.121	0.513	0.112	0.382	0.044	0.238	0.006	0.002	< 0.01	--	--
Manganese	E200.7	03/28-29/2011	mg/L	0.043 (PQL = 0.01 mg/L)	0.009	1.15	0.054	0.007	0.017	< 0.01	0.131	0.615	0.15	0.4	0.034	0.239	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	09/27-28/2011	mg/L	0.043 (PQL = 0.01 mg/L)	0.007	4.18	0.056	0.020	0.022	< 0.01	0.124	0.640	0.05	0.308	0.033	0.235	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	03/13-14/2012	mg/L	0.043 (PQL = 0.01 mg/L)	0.007	1.68	0.055	0.008	0.032	< 0.01	0.155	0.656	0.112	0.294	0.035	0.237	0.005	< 0.01	< 0.01	--	--
Manganese	E200.7	09/17-19/2012	mg/L	0.043 (PQL = 0.01 mg/L)	0.003	3.28	0.052	0.007	0.031	< 0.01	0.122	0.64	0.037	0.299	0.041	0.204	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	03/19-20/2013	mg/L	0.043 (PQL = 0.01 mg/L)	0.006	0.949	0.05	0.018	0.035	< 0.01	0.163	0.744	0.028	0.293	0.040	0.196	0.005	< 0.01	< 0.01	--	--
Manganese	E200.7	09/23-24/2013	mg/L	0.043 (PQL = 0.01 mg/L)	0.004	4.19	0.068	0.018	0.039	< 0.01	0.125	0.834	0.047	0.256	0.053	0.197	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	03/10-11/2014	mg/L	0.043 (PQL = 0.01 mg/L)	0.003	0.774	0.051	0.016	0.041	< 0.01	0.148	3.79	0.151	0.261	0.044	0.154	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	09/16-17/2014	mg/L	0.043 (PQL = 0.01 mg/L)	0.003	3.32	0.052	0.031	0.031	< 0.01	0.155	2.52	0.658	0.214	--	0.089	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	09/29/2014	mg/L	0.043 (PQL = 0.01 mg/L)	--	--	--	--	--	--	--	--	--	--	0.116	--	--	--	--	--	--
Manganese	E200.7	03/17-18/2015	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	1.51	0.052	0.124	0.038	< 0.01	0.123	1.75	0.902	0.231	0.056	0.187	0.003	< 0.01	0.007	--	--
Manganese	E200.7	09/14-15/2015	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	2.09	0.051	0.055	0.049	< 0.01	0.108	1.12	0.585	0.382	--	0.229	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	09/30/2015	mg/L	0.043 (PQL = 0.01 mg/L)	--	--	--	--	--	--	--	--	--	--	0.052	--	--	--	--	< 0.01	--
Manganese	E200.7	03/23-24/2016	mg/L	0.043 (PQL = 0.01 mg/L)	0.003	4.71	0.054	0.036	0.058	< 0.01	0.116	1.05	0.119	0.243	0.048	0.262	0.005	0.003	< 0.01	--	--
Manganese	E200.7	09/20-21/2016	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	5.54	0.052	0.027	0.052	< 0.01	0.143	0.738	0.848	0.243	0.050	0.240	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	03/21-22/2017	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	1.84	0.055	0.073	0.053	< 0.01	0.130	0.588	0.028	0.200	0.057	0.217	0.003	< 0.01	< 0.01	--	--
Manganese	E200.7	09/20-21/2017	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	3.54	0.050	0.338	0.061	< 0.01	0.106	0.110	0.089	0.190	0.053	0.148	0.004	< 0.01	< 0.01	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Manganese	E200.7	03/29-30/2018	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	0.911	0.055	0.129	0.050	< 0.01	0.145	0.098	0.099	0.293	0.058	0.178	0.004	< 0.01	< 0.01	--	--
Manganese	E200.7	09/19-20/2018	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	5.03	0.029	0.121	0.048	< 0.01	0.093	0.032	0.187	0.288	0.036	0.137	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	03/18-19/2019	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	26.2	0.050	0.186	0.038	< 0.01	0.127	< 0.01	0.061	0.286	0.045	0.115	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	09/25-26/2019	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	12.2	0.060	0.103	0.026	< 0.01	0.102	0.155	0.432	0.332	0.063	0.063	0.006	< 0.01	< 0.01	--	--
Manganese	E200.7	06/08-09/2020	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	3.63	0.058	0.473	0.035	< 0.01	0.096	0.168	0.015	0.240	0.043	0.084	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	09/09-10/2020	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	4.76	0.067	0.079	0.042	< 0.01	0.046	0.383	0.301	0.383	0.045	0.108	0.005	< 0.01	< 0.01	--	--
Manganese	E200.7	03/02-03/2021	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	0.208	0.068	0.171	0.058	< 0.01	0.022	0.120	0.203	0.305	0.064	0.111	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	09/13-14/2021	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	3.13	0.067	0.536	0.036	< 0.01	0.044	0.229	0.043	0.380	0.070	0.100	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	03/07-08/2022	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	1.25	0.065	0.438	0.036	< 0.01	0.032	0.132	0.018	0.255	0.069	0.107	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	08/23-24/2022	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.01	2.06	0.058	0.433	0.051	< 0.01	0.024	0.549	0.018	0.392	0.055	0.109	< 0.01	< 0.01	< 0.01	--	--
Manganese	E200.7	03/21-22/2023	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.005	0.802	0.061	0.518	0.054	< 0.005	0.105	0.078	0.090	0.344	0.062	0.120	< 0.005	< 0.005	< 0.005	--	--
Manganese	E200.7	09/12-13/2023	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.005	2.66	0.060	0.413	0.028	< 0.005	0.053	0.152	0.011	0.301	0.052	0.127	< 0.005	< 0.005	< 0.005	--	--
Manganese	E200.7	03/25-26/2024	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.005	0.452	0.061	1.900	0.036	< 0.005	0.027	0.02	0.437	0.307	0.057	0.275	< 0.005	< 0.005	< 0.005	--	--
Manganese	E200.7	09/03-04/2024	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.005	1.28	0.056	0.293	0.033	< 0.005	0.083	0.069	0.300	0.291	0.044	0.639	< 0.005	< 0.005	< 0.005	--	--
Manganese	E200.7	03/11-12/2025	mg/L	0.043 (PQL = 0.01 mg/L)	< 0.005	0.432	0.050	1.03	0.025	< 0.005	0.062	0.181	0.031	0.315	0.047	0.637	< 0.005	< 0.005	< 0.005	--	--
Mercury	SW7470	03/12-13/2009	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	06/16-17/2009	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	0.0001	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/16-18/2009	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	12/08-09/2009	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	--	0.0003	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	0.0007	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	12/08-19/2009	mg/L	0.002	--	--	--	< 0.0002	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7470	03/29-30/2010	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0005	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	06/16-17/2010	mg/L	0.002	< 0.0002	0.0001	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0005	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/07-08/2010	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	12/07-08/2010	mg/L	0.002	< 0.0002	0.0003	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/28-29/2011	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/27-28/2011	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/13-14/2012	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/17-19/2012	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0001	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/19-20/2013	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/23-24/2013	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/10-11/2014	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/16-17/2014	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/29/2014	mg/L	0.002	--	--	--	--	--	--	--	--	--	--	0.0007	--	--	--	--	--	--
Mercury	SW7470	03/17-18/2015	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0005	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/14-15/2015	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0004	--	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/30/2015	mg/L	0.002	--	--	--	--	--	--	--	--	--	--	< 0.0002	--	--	--	--	< 0.0002	--
Mercury	SW7470	03/23-24/2016	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0026	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/20-21/2016	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.001	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/21-22/2017	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0004	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/20-21/2017	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/29-30/2018	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0003	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/19-20/2018	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/18-19/2019	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0006	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0007	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/25-26/2019	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0008	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0008	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	06/08-09/2020	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0005	0.0001	0.0001	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/09-10/2020	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/02-03/2021	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	09/13-14/2021	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/07-08/2022	mg/L	0.002	0.0001	< 0.0002	< 0.0002	< 0.0002	0.0003	< 0.0002	< 0.0002	< 0.0002	0.0001	0.0003	0.0002	0.0001	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	08/23-24/2022	mg/L	0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--
Mercury	SW7470	03/21-22/2023	mg/L	0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	<0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	--	--
Mercury	SW7470	09/12-13/2023	mg/L	0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0004	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001 J	0.0007	< 0.0001	< 0.0001	< 0.0001	< 0.0001	--	--
Mercury	SW7470	03/25-26/2024	mg/L	0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0007	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	--	--
Mercury	SW7470	09/03-04/2024	mg/L	0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0004	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	--	--
Mercury	SW7470	03/11-12/2025	mg/L	0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001 J	< 0.0001	< 0.0001	< 0.0001	< 0.0001	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Methyl tert-Butyl Ether	SW8260	03/12-13/2009	ug/L	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 1	3.8	< 2	< 2	< 2	< 2	< 2	--	--
Methyl tert-Butyl Ether	SW8260	06/16-17/2009	ug/L	20	< 2	< 2	< 2	< 2	0.7	< 2	< 2	< 2	0.7	3.7	< 2	0.9	< 2	< 2	< 2	--	--
Methyl tert-Butyl Ether	SW8260	09/16-18/2009	ug/L	20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	3.7	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	12/08-09/2009	ug/L	20	< 2	< 2	< 2	--	0.8	< 2	< 2	< 2	0.5	2.1	< 2	0.8	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	12/08-19/2009	ug/L	20	--	--	--	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-Butyl Ether	SW8260	03/29-30/2010	ug/L	20	< 2	< 2	< 2	< 2	0.8	< 2	< 2	< 2	1.6	1.7	< 2	0.7	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	06/16-17/2010	ug/L	20	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	2.3	1.2	< 2	0.6	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/07-08/2010	ug/L	20	< 2	< 2	< 2	< 2	1.3	< 2	< 2	< 2	1.6	0.9	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	12/07-08/2010	ug/L	20	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	1.2	1.2	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	03/28-29/2011	ug/L	20	< 2	< 2	< 2	< 2	1.4	< 2	< 2	< 2	0.8	0.8	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/27-28/2011	ug/L	20	< 2	< 2	< 2	< 2	2.1	< 2	< 2	< 2	1.4	0.6	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	03/13-14/2012	ug/L	20	< 2	< 2	< 2	< 2	2.3	< 2	< 2	< 2	1.2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/17-19/2012	ug/L	20	< 2	< 2	< 2	< 2	2.3	< 2	< 2	< 2	< 2	0.6	0.8	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	03/19-20/2013	ug/L	20	< 2	< 2	< 2	< 2	1.6	< 2	< 2	< 2	< 2	1.8	1.5	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/23-24/2013	ug/L	20	< 2	< 2	< 2	< 2	1.3	< 2	< 2	< 2	0.9	0.6	2.1	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	03/10-11/2014	ug/L	20	< 2	< 2	< 2	< 2	1	< 2	< 2	< 2	< 2	1	2.3	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/16-17/2014	ug/L	20	< 2	< 2	< 2	< 2	0.8	< 2	< 2	< 2	0.5	< 2	--	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/29/2014	ug/L	20	--	--	--	--	--	--	--	--	--	--	2.1	--	--	--	--	--	--
Methyl tert-Butyl Ether	SW8260	03/17-18/2015	ug/L	20	< 2	< 2	< 2	< 2	0.5	< 2	< 2	< 2	< 2	0.8	2.2	< 2	< 2	< 2	< 2	--	< 2
Methyl tert-Butyl Ether	SW8260	09/14-15/2015	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Methyl tert-Butyl Ether	SW8260	09/30/2015	ug/L	20	--	--	--	--	--	--	--	--	--	--	3.2	--	--	--	--	< 1	--
Methyl tert-Butyl Ether	SW8260	03/23-24/2016	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	3.5	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/20-21/2016	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.9	4.3	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/21-22/2017	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	5.3	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/20-21/2017	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	6.6	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/29-30/2018	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.3	6.1	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/19-20/2018	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.2	5	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/18-19/2019	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/25-26/2019	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.7	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	06/08-09/2020	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	3.1	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/09-10/2020	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/02-03/2021	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	3.5	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	09/13-14/2021	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.7	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/07-08/2022	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.9	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	08/23-24/2022	ug/L	20	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.7	< 1	< 1	< 1	< 1	--	< 1
Methyl tert-Butyl Ether	SW8260	03/21-23/2023	ug/L	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methyl tert-Butyl Ether	SW8260	09/12-13/2023	ug/L	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.9	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methyl tert-Butyl Ether	SW8260	03/25-26/2024	ug/L	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.9	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methyl tert-Butyl Ether	SW8260	09/03-04/2024	ug/L	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methyl tert-Butyl Ether	SW8260	03/11-12/2025	ug/L	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.6	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methylene chloride	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Methylene chloride	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.8	< 1	< 1	< 1	< 1	< 1	--	--
Methylene chloride	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Methylene chloride	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Methylene chloride	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Methylene chloride	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Methylene chloride	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Methylene chloride	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methylene chloride	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methylene chloride	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methylene chloride	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Methylene chloride	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Nickel	E200.7	03/12-13/2009	ug/L	PQL = 11 ug/L	< 10	< 10	24	< 10	< 10	< 10	< 10	--	21	< 10	27	15	< 10	< 10	< 10	--	--
Nickel	E200.7	06/16-17/2009	ug/L	PQL = 11 ug/L	6	12	24	8	10	< 10	8	20	27	10	27	14	5	< 10	< 10	--	--
Nickel	E200.7	09/16-18/2009	ug/L	PQL = 11 ug/L	< 10	10	24	< 10	< 10	< 10	< 10	17	16	< 10	22	11	< 10	< 10	< 10	--	--
Nickel	E200.7	12/08-09/2009	ug/L	PQL = 11 ug/L	7	9	24	--	9	< 10	8	16	23	5	25	16	< 10	< 10	< 10	--	--
Nickel	E200.7	12/08-19/2009	ug/L	PQL = 11 ug/L	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	E200.7	03/29-30/2010	ug/L	PQL = 11 ug/L	< 10	11	22	< 10	7	< 10	< 10	< 10	8	< 10	20	13	6	< 10	< 10	--	--
Nickel	E200.7	06/16-17/2010	ug/L	PQL = 11 ug/L	< 10	10	23	< 10	7	< 10	< 10	16	10	< 10	19	12	< 10	< 10	< 10	--	--
Nickel	E200.7	09/07-08/2010	ug/L	PQL = 11 ug/L	< 10	12	24	< 10	6	< 10	< 10	13	13	< 10	18	15	< 10	< 10	< 10	--	--
Nickel	E200.7	12/07-08/2010	ug/L	PQL = 11 ug/L	< 10	9	23	7	8	< 10	7	11	8	< 10	19	16	< 10	< 10	< 10	--	--
Nickel	E200.7	03/28-29/2011	ug/L	PQL = 11 ug/L	< 10	8	23	< 10	6	< 10	< 10	13	5	< 10	17	15	< 10	< 10	< 10	--	--
Nickel	E200.7	09/27-28/2011	ug/L	PQL = 11 ug/L	< 10	10	24	< 10	7	< 10	< 10	14	5	< 10	16	14	< 10	< 10	< 10	--	--
Nickel	E200.7	03/13-14/2012	ug/L	PQL = 11 ug/L	< 10	7	24	< 10	8	< 10	< 10	18	< 10	< 10	17	14	< 10	< 10	5	--	--
Nickel	E200.7	09/17-19/2012	ug/L	PQL = 11 ug/L	6	11	26	5	10	< 10	6	17	< 10	5	20	13	< 10	< 10	< 10	--	--
Nickel	E200.7	03/19-20/2013	ug/L	PQL = 11 ug/L	< 10	< 10	23	< 10	8	< 10	< 10	24	< 10	33	19	11	< 10	< 10	< 10	--	--
Nickel	E200.7	09/23-24/2013	ug/L	PQL = 11 ug/L	< 10	10	24	< 10	9	< 10	< 10	16	7	32	20	11	< 10	< 10	< 10	--	--
Nickel	E200.7	03/10-11/2014	ug/L	PQL = 11 ug/L	< 10	< 10	23	< 10	12	< 10	< 10	8	21	41	21	12	< 10	< 10	< 10	--	--
Nickel	E200.7	09/16-17/2014	ug/L	PQL = 11 ug/L	< 10	8	33	< 10	11	< 10	< 10	< 10	14	13	--	11	< 10	< 10	< 10	--	--
Nickel	E200.7	09/29/2014	ug/L	PQL = 11 ug/L	--	--	--	--	--	--	--	--	--	--	29	--	--	--	--	--	--
Nickel	E200.7	03/17-18/2015	ug/L	PQL = 11 ug/L	< 10	< 10	21	5	11	< 10	< 10	< 10	< 10	15	18	12	< 10	< 10	< 10	--	--
Nickel	E200.7	09/14-15/2015	ug/L	PQL = 11 ug/L	< 10	6	26	< 10	16	< 10	< 10	< 10	6	18	--	16	< 10	< 10	< 10	--	--
Nickel	E200.7	09/30/2015	ug/L	PQL = 11 ug/L	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	< 10	--
Nickel	E200.7	03/23-24/2016	ug/L	PQL = 11 ug/L	< 10	8	23	< 10	16	< 10	6	< 10	< 10	15	22	16	< 10	< 10	< 10	--	--
Nickel	E200.7	09/20-21/2016	ug/L	PQL = 11 ug/L	< 10	5	26	< 10	18	< 10	< 10	< 10	14	16	25	19	< 10	< 10	< 10	--	--
Nickel	E200.7	03/21-22/2017	ug/L	PQL = 11 ug/L	< 10	8	29	< 10	15	< 10	6	< 10	5	13	25	23	< 10	< 10	< 10	--	--
Nickel	E200.7	09/20-21/2017	ug/L	PQL = 11 ug/L	< 10	< 10	19	11	14	< 10	< 10	< 10	17	12	20	24	< 10	< 10	< 10	--	--
Nickel	E200.7	03/29-30/2018	ug/L	PQL = 11 ug/L	< 10	< 10	24	9	15	< 10	7	< 10	12	18	26	30	< 10	< 10	< 10	--	--
Nickel	E200.7	09/19-20/2018	ug/L	PQL = 11 ug/L	< 10	< 10	20	7	16	< 10	< 10	< 10	19	21	19	27	< 10	< 10	< 10	--	--
Nickel	E200.7	03/18-19/2019	ug/L	PQL = 11 ug/L	< 10	< 10	19	< 10	7	< 10	< 10	< 10	6	13	13	24	< 10	< 10	< 10	--	--
Nickel	E200.7	09/25-26/2019	ug/L	PQL = 11 ug/L	< 10	9	26	7	9	< 10	9	< 10	13	20	21	27	< 10	< 10	< 10	--	--
Nickel	E200.7	06/08-09/2020	ug/L	PQL = 11 ug/L	< 10	< 10	26	8	8	< 10	< 10	< 10	< 10	15	16	30	< 10	< 10	< 10	--	--
Nickel	E200.7	09/09-10/2020	ug/L	PQL = 11 ug/L	< 10	6	30	< 10	11	< 10	< 10	< 10	< 10	15	18	33	< 10	< 10	< 10	--	--
Nickel	E200.7	03/02-03/2021	ug/L	PQL = 11 ug/L	< 10	< 10	27	< 10	12	< 10	< 10	< 10	< 10	17	22	30	< 10	< 10	< 10	--	--
Nickel	E200.7	09/13-14/2021	ug/L	PQL = 11 ug/L	< 10	6	29	8	11	< 10	< 10	< 10	< 10	13	24	32	< 10	< 10	< 10	--	--
Nickel	E200.7	03/07-08/2022	ug/L	PQL = 11 ug/L	< 10	< 10	28	8	11	< 10	< 10	< 10	< 10	14	26	34	< 10	< 10	< 10	--	--
Nickel	E200.7	08/23-24/2022	ug/L	PQL = 11 ug/L	< 10	< 10	27	7	13	< 10	< 10	11	< 10	14	22	35	< 10	< 10	< 10	--	--
Nickel	E200.7	03/21-22/2023	ug/L	PQL = 11 ug/L	< 5	< 5	26	< 10	0.012	< 5	< 5	< 5	0.007 J	12	22	0.037	< 5	< 5	< 5	--	--
Nickel	E200.7	09/12-13/2023	ug/L	PQL = 11 ug/L	< 5	< 5	27	7 J	9 J	< 5	< 5	< 5	< 5	10	19	37	< 5	< 5	< 5	--	--
Nickel	E200.7	03/25-26/2024	ug/L	PQL = 11 ug/L	< 5	< 5	27	37	10	< 5	< 5	< 5	< 5	9.7	21	42	< 5	< 5	6 J	--	--
Nickel	E200.7	09/03-04/2024	ug/L	PQL = 11 ug/L	< 5	< 5	25	< 10	9 J	< 5	< 5	< 5	6 J	< 10	17	17	< 5	< 5	< 5	--	--
Nickel	E200.7	03/11-12/2025	ug/L	PQL = 11 ug/L	< 5	< 5	25	18	8 J	< 5	< 5	< 5	< 5	8 J	16	23	< 5	< 5	< 5	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Nitrogen, Nitrate-Nitrite	E353.2	03/12-13/2009	mg/L	10	< 0.06	0.7	< 0.06	< 0.06	1.6	0.24	< 0.06	--	1.3	< 0.06	0.54	< 0.06	< 0.06	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	06/16-17/2009	mg/L	10	0.28	0.16	< 0.06	< 0.06	1.8	0.38	< 0.06	4.2	1.5	< 0.06	0.62	< 0.06	0.06	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/16-18/2009	mg/L	10	< 0.06	< 0.06	< 0.06	< 0.06	1.9	0.38	< 0.06	2.7	4.2	0.28	< 0.06	0.6	0.09	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	12/08-09/2009	mg/L	10	< 0.06	0.32	0.21	--	2.5	0.47	< 0.06	2.9	1.9	0.77	0.6	< 0.06	0.1	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	12/08-19/2009	mg/L	10	--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/29-30/2010	mg/L	10	< 0.06	0.82	< 0.06	< 0.06	2.3	0.34	< 0.06	2.3	4.7	< 0.06	0.4	< 0.06	0.16	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	06/16-17/2010	mg/L	10	0.51	0.09	< 0.06	0.43	2.2	0.38	< 0.06	1.8	5.8	< 0.06	0.36	< 0.06	0.14	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/07-08/2010	mg/L	10	0.02	0.12	< 0.06	0.05	2.2	0.40	< 0.06	2.0	5.2	< 0.06	0.34	0.55	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	12/07-08/2010	mg/L	10	< 0.06	0.82	< 0.06	0.02	2.1	0.37	< 0.06	1.5	2.8	< 0.06	0.29	0.5	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/28-29/2011	mg/L	10	< 0.06	0.46	< 0.06	< 0.06	2.2	0.38	< 0.06	2.2	2.9	< 0.06	0.32	0.41	0.1	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/27-28/2011	mg/L	10	0.03	0.11	0.02	< 0.06	2.03	0.33	0.02	2.07	4.5	0.05	0.23	0.38	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/13-14/2012	mg/L	10	< 0.06	0.57	< 0.06	0.03	1.82	0.33	< 0.06	2.5	5.46	< 0.06	0.28	0.35	0.16	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/17-19/2012	mg/L	10	0.06	0.21	< 0.06	< 0.06	1.66	0.27	0.03	2.8	3.26	< 0.06	0.32	0.34	0.1	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/19-20/2013	mg/L	10	0.03	0.51	0.04	0.06	1.34	0.32	0.02	0.72	2.23	0.21	0.42	0.35	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/23-24/2013	mg/L	10	< 0.06	0.21	< 0.06	0.06	1.29	0.24	< 0.06	4.03	3.04	0.14	0.35	0.16	0.11	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/10-11/2014	mg/L	10	< 0.06	0.37	< 0.06	< 0.06	1.22	0.23	< 0.06	3.95	1.65	1.56	0.47	0.35	0.05	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/16-17/2014	mg/L	10	0.04	0.06	< 0.06	< 0.06	1.38	0.27	< 0.06	1.51	4.9	0.83	--	0.29	0.13	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/29/2014	mg/L	10	--	--	--	--	--	--	--	--	--	--	0.33	--	--	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/17-18/2015	mg/L	10	0.04	0.29	< 0.06	0.04	1.26	0.26	< 0.06	2.56	2.98	1.92	0.4	0.15	0.14	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/14-15/2015	mg/L	10	0.03	0.23	< 0.06	< 0.06	1.19	0.26	< 0.06	0.27	3.3	4.44	--	0.06	0.11	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/30/2015	mg/L	10	--	--	--	--	--	--	--	--	--	--	0.43	--	--	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/23-24/2016	mg/L	10	0.06	0.05	< 0.06	0.05	1.24	0.29	< 0.06	0.68	3.11	2.32	0.54	< 0.06	0.1	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/20-21/2016	mg/L	10	0.05	< 0.06	< 0.06	< 0.06	1.32	0.24	< 0.06	0.43	1.44	2.27	0.56	< 0.06	0.14	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/21-22/2017	mg/L	10	0.11	0.2	< 0.06	0.24	1.23	0.22	0.02	0.94	0.57	2.66	0.62	0.22	0.13	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/20-21/2017	mg/L	10	0.13	< 0.06	< 0.06	0.04	1.16	0.17	< 0.06	5.82	1.25	2.48	0.57	0.72	0.18	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/29-30/2018	mg/L	10	0.14	0.21	< 0.06	< 0.3	1.46	0.19	0.1	9.15	0.53	2.41	0.59	0.62	0.11	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/19-20/2018	mg/L	10	0.08	0.02	< 0.06	0.05	1.55	0.27	< 0.06	4.62	1.08	2.46	0.45	0.81	0.18	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/18-19/2019	mg/L	10	0.18	< 0.06	< 0.06	0.03	1.43	0.28	< 0.06	3.15	3.87	3.83	0.26	0.76	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/25-26/2019	mg/L	10	0.1	0.05	< 0.06	0.02	1.49	0.25	< 0.06	2.74	2.62	4.33	0.04	0.8	0.19	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	06/08-09/2020	mg/L	10	0.06	0.06	< 0.06	0.14	1.6	0.29	< 0.06	2.8	2.1	4.14	0.38	1.07	0.13	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/09-10/2020	mg/L	10	0.04	0.03	< 0.06	0.02	1.72	0.26	0.05	2.53	0.96	4.04	0.3	1.09	0.17	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/02-03/2021	mg/L	10	0.21	0.17	< 0.06	< 0.06	1.68	0.26	0.15	2.49	0.93	2.17	0.25	0.91	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/13-14/2021	mg/L	10	0.2	0.06	0.09	0.03	1.88	0.29	0.03	2.95	2.24	5.56	0.29	1.1	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/07-08/2022	mg/L	10	0.24	0.02	< 0.06	< 0.06	1.93	0.29	0.05	4.19	1.58	2.08	0.37	1.05	0.12	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	08/23-24/2022	mg/L	10	0.17	0.12	0.09	0.09	1.94	0.37	0.2	6.34	2.28	5.39	0.62	1.09	0.27	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/21-22/2023	mg/L	10	0.18	0.06	< 0.02	<0.02	1.75	0.34	0.02 J	3.01	0.61	4.45	0.32	1.03	0.11	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/12-13/2023	mg/L	10	0.23	0.04 J	0.02 J	0.03 J	2.02	0.32	0.07	3.81	2.03	4.33	0.35	1.07	0.15	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/25-26/2024	mg/L	10	0.22	0.28	< 0.02	< 0.02	1.79	0.32	0.16	3.20	0.56	4.39	0.29	1.31	0.10	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	09/03-04/2024	mg/L	10	0.27	0.10	< 0.02	< 0.06	1.68	0.32	< 0.06	2.04	1.78	4.54	0.25	< 0.02	0.17	--	--	--	--
Nitrogen, Nitrate-Nitrite	E353.2	03/11-12/2025	mg/L	10	0.29	0.43	< 0.02	0.1	1.6	0.32	0.04 J	2.42	1.26	4.49	0.22	< 0.02	0.20	--	--	--	--
pH	M4500H+B-201	03/12-13/2009	SU	<6, >9	6.36	6.86	5.1	7.69	6.15	7.56	8.71	--	5.21	5.77	5.16	5.81	6.08	--	--	--	--
pH	M4500H+B-201	06/16-17/2009	SU	<6, >9	5.91	6.49	5.13	7.05	6.22	11.1	8.9	4.31	5.14	5.64	5.24	6.11	6.27	--	--	--	--
pH	M4500H+B-201	09/16-18/2009	SU	<6, >9	6.22	6.63	5.06	7.8	6.18	11	8.86	4	4.92	5.78	5.31	5.83	6.05	--	--	--	--
pH	M4500H+B-201	12/08-09/2009	SU	<6, >9	7.93	6.73	5.06	--	6.44	8.26	7.91	4.22	5.22	5.64	5.44	5.98	5.84	--	--	--	--
pH	M4500H+B-201	12/08-19/2009	SU	<6, >9	--	--	--	7.98	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	M4500H+B-201	03/29-30/2010	SU	<6, >9	9.52	6.74	5.08	7.37	6.29	11	7.61	4.75	6.07	5.85	5.94	5.81	6.07	--	--	--	--
pH	M4500H+B-201	06/16-17/2010	SU	<6, >9	8.94	6.86	5.19	7.73	6.29	11	7.63	5.3	5.58	5.89	5.86	5.95	5.83	--	--	--	--
pH	M4500H+B-201	09/07-08/2010	SU	<6, >9	9.09	7.27	5.04	7.59	6.2	11	7.6	4.97	5.5	5.68	5.47	5.89	6.31	--	--	--	--
pH	M4500H+B-201	12/07-08/2010	SU	<6, >9	9.57	7.28	4.97	7.58	6.24	11.4	7.58	4.35	5.29	5.68	5.61	5.74	5.89	--	--	--	--
pH	M4500H+B-201	03/28-29/2011	SU	<6, >9	9.42	7.23	5.31	7.56	6.24	11.1	7.54	4.63	5.45	5.73	5.65	5.83	6.29	--	--	--	--
pH	M4500H+B-201	09/27-28/2011	SU	<6, >9	9.3	6.65	4.95	8.07	6.67	11.6	7.53	4.4	5.49	5.76	5.83	5.43	5.71	--	--	--	--
pH	M4500H+B-201	03/13-14/2012	SU	<6, >9	9.03	7.51	5.66	7.77	6.81	10.7	7.63	4.62	6.45	6.25	6.47	6.23	6.27	--	--	--	--
pH	M4500H+B-201	09/17-19/2012	SU	<6, >9	10.5	8.04	5.52	8.01	7.06	11.4	7.96	3.66	5.98	6.32	6.05	6.07	6.14	--	--	--	--
pH	M4500H+B-201	03/19-20/2013	SU	<6, >9	11.1	7.07	5.18	7.8	6.49	11.5	7.61	7.14	5.74	5.56	5.1	5.56	5.5	--	--	--	--
pH	M4500H+B-201	09/23-24/2013	SU	<6, >9	11.4	7.2	5.31	7.87	6.58	11.8	8.06	6.31	5.61	5.87	5.98	5.95	5.99	--	--	--	--
pH	M4500H+B-201	03/10-11/2014	SU	<6, >9	11.1	7.27	5.33	7.7	6.32	11.4	7.69	7.21	5.72	5.37	5.78	5.54	6.03	--	--	--	--
pH	M4500H+B-201	09/16-17/2014	SU	<6, >9	10.6	7.4	5.62	8.06	6.78	11.4	7.86	6.79	6.09	5.9	--	6.09	6.3	--	--	--	--
pH	M4500H+B-201	09/29/2014	SU	<6, >9	--	--	--	--	--	--	--	--	--	--	5.9	--	--	--	--	--	--
pH	M4500H+B-201	03/17-18/2015	SU	<6, >9	10.7	7.24	5.27	7.62	6.23	11.7	7.68	5.6	5.56	5.25	5.77	5.63	5.95	--	--	--	--
pH	M4500H+B-201	09/14-15/2015	SU	<6, >9	10.8	7.22	5.22	7.79	6.49	11.7	8.82	6.55	5.85	5.38	--	5.94	5.87	--	--	--	--
pH	M4500H+B-201	09/30/2015	SU	<6, >9	--	--	--	--	--	--	--	--	--	--	5.68	--	--	--	--	--	--
pH	M4500H+B-201	03/23-24/2016	SU	<6, >9	10.7	7.14	5.08	7.81	6.43	11.7	8.26	6.49	5.86	5.3	5.68	5.9	5.95	--	--	--	--
pH	M4500H+B-201	09/20-21/2016	SU	<6, >9	10.2	7	5.34	7.82	6.3	11.6	7.87	6.39	5.56	5.22	5.42	6	5.9	--	--	--	--
pH	M4500H+B-201	03/21-22/2017	SU	<6, >9	8.57	7.18	5.27	7.64	6.26	11.6	7.74	6.2	5.65	5.1	5.19	5.6	5.9	--	--	--	--
pH	M4500H+B-201	09/20-21/2017	SU	<6, >9	8.68	6.96	5.21	6.73	6.34	11.5	7.88	6.81	5.53	5.3	5.38	5.39	5.88	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
pH	M4500H+B-201	03/29-30/2018	SU	<6, >9	7.48	7.62	5.07	7.45	6.44	11.3	6.87	6.85	5.75	5.22	5.7	5.82	6.28	--	--	--	--
pH	M4500H+B-201	09/19-20/2018	SU	<6, >9	7.71	6.93	5.19	7.7	6.59	11.1	7.72	5.89	5.46	5.3	5.53	5.74	5.93	--	--	--	--
pH	M4500H+B-201	03/18-19/2019	SU	<6, >9	7.55	6.99	5.19	7.61	6.45	11.3	7.41	7.38	5.81	5.05	5.71	5.49	5.87	--	--	--	--
pH	M4500H+B-201	09/25-26/2019	SU	<6, >9	7.57	7.29	5.68	7.86	6.45	11.3	7.6	6.62	5.68	5.41	6.55	5.69	6.14	--	--	--	--
pH	M4500H+B-201	06/08-09/2020	SU	<6, >9	8.77	7.18	5.06	7.7	6.21	11.7	7.76	6.16	5.92	5.07	5.63	5.13	5.77	--	--	--	--
pH	M4500H+B-201	09/09-10/2020	SU	<6, >9	7.8	6.9	4.6	7.6	6.3	12	9	6.6	5.87	5.2	5.4	5.2	5.8	--	--	--	--
pH	M4500H+B-201	03/02-03/2021	SU	<6, >9	8.17	7.81	5.85	8.19	7.15	11.6	10	6.73	6.31	5.62	6.42	5.86	6.47	--	--	--	--
pH	M4500H+B-201	09/13-14/2021	SU	<6, >9	10.2	7.56	5.51	8.1	7.03	11.2	8.54	6.76	6.36	5.63	6.21	5.82	6.51	--	--	--	--
pH	M4500H+B-201	03/07-08/2022	SU	<6, >9	11.3	7.12	5.13	7.79	6.44	11.8	8.89	5.84	5.73	5.18	5.33	5.37	6.01	--	--	--	--
pH	M4500H+B-201	08/23-24/2022	SU	<6, >9	10.4	7.36	5.74	7.94	6.71	11.2	9.26	5.84	6.28	5.49	5.97	5.63	6.07	--	--	--	--
pH	M4500H+B-201	03/21-22/2023	SU	<6, >9	10	6.89	5.05	7.65	6.3	11.8	8.19	6.22	6.26	5.02	5.29	5.92	5.83	--	--	--	--
pH	M4500H+B-201	09/12-13/2023	SU	<6, >9	11.2	7.23	5.53	7.58	6.31	11.7	9.02	5.29	6.31	5.54	5.41	5.66	5.43	--	--	--	--
pH	M4500H+B-201	03/25-26/2024	SU	<6, >9	11.4	7.65	5.28	7.91	6.76	11.9	10.1	6.01	5.81	5.30	5.65	5.65	6.16	--	--	--	--
pH	M4500H+B-201	09/03-04/2024	SU	<6, >9	11.7	7.16	5.39	7.71	6.31	12	8.49	6.51	5.43	5.47	5.75	6.32	6.00	--	--	--	--
pH	M4500H+B-201	03/11-12/2025	SU	<6, >9	11.7	7.97	5.2	7.65	6.49	11.8	8.61	6.58	5.74	5.11	6.03	6.3	6.40	--	--	--	--
pH, field measured	FIELD	03/13-14/2012	SU	<6, >9	11.44	7.04	5.25	7.76	6.14	9.81	8.06	5.15	5.69	5.51	5.74	5.28	5.42	--	--	--	--
pH, field measured	FIELD	09/17-19/2012	SU	<6, >9	11.51	6.97	4.89	7.6	6.13	11.98	7.89	4.41	5.47	5.49	5.17	5.69	5.34	--	--	--	--
pH, field measured	FIELD	03/19-20/2013	SU	<6, >9	12.02	7.03	4.89	7.6	6.14	12.01	7.53	7.18	5.34	5.36	4.81	5.51	5.65	--	--	--	--
pH, field measured	FIELD	09/23-24/2013	SU	<6, >9	11.57	6.81	4.82	7.35	6.03	12.06	7.69	6.04	5.17	5.21	5.21	5.33	5.35	--	--	--	--
pH, field measured	FIELD	03/10-11/2014	SU	<6, >9	12.03	7.09	4.96	7.41	5.92	11.98	7.64	7.23	5.11	4.99	5.14	5.17	5.61	--	--	--	--
pH, field measured	FIELD	09/16-17/2014	SU	<6, >9	11.64	6.52	5.05	7.66	6.67	11.92	7.6	5.89	5.18	5.18	--	5.27	5.32	--	--	--	--
pH, field measured	FIELD	09/29/2014	SU	<6, >9	--	--	--	--	--	--	--	--	--	--	6.06	--	--	--	--	--	--
pH, field measured	FIELD	03/17-18/2015	SU	<6, >9	11.46	7.31	4.75	7.61	6.17	12.22	7.67	5.37	5.24	5.59	5.76	5.55	5.59	--	--	--	--
pH, field measured	FIELD	09/14-15/2015	SU	<6, >9	11.73	7.04	4.77	7.09	6.17	12.41	8.83	6.34	5.71	4.98	--	5.47	4.98	--	--	--	--
pH, field measured	FIELD	09/30/2015	SU	<6, >9	--	--	--	--	--	--	--	--	--	--	5.44	--	--	--	--	--	--
pH, field measured	FIELD	03/23-24/2016	SU	<6, >9	11.1	7.31	4.37	6.81	6.26	12.21	8.33	6.34	5.11	5.24	5.31	5.15	4.77	--	--	--	--
pH, field measured	FIELD	09/20-21/2016	SU	<6, >9	11.03	6.56	4.53	6.52	5.55	12.18	7.96	5.74	5.51	4.61	4.76	5.22	5.12	--	--	--	--
pH, field measured	FIELD	03/21-22/2017	SU	<6, >9	8.3	6.86	4.8	7.17	5.79	12.07	7.68	5.62	5.28	4.71	3.77	5.07	5.18	--	--	--	--
pH, field measured	FIELD	09/20-21/2017	SU	<6, >9	7.52	6.71	4.1	5.55	5.11	9.19	7.1	6.1	4.96	4.86	4.25	5.2	4.71	--	--	--	--
pH, field measured	FIELD	03/29-30/2018	SU	<6, >9	7.41	6.81	4.82	6.85	5.87	11.91	5.82	6.94	5.15	4.69	4.89	5	4.50	--	--	--	--
pH, field measured	FIELD	09/19-20/2018	SU	<6, >9	7.4	6.44	4.67	7.05	5.78	11.31	7.03	6.87	4.82	4.53	4.94	5.13	4.72	--	--	--	--
pH, field measured	FIELD	03/18-19/2019	SU	<6, >9	7.09	6.5	4.84	7.18	5.79	11.33	6.93	6.98	5.51	4.52	5.09	4.95	4.82	--	--	--	--
pH, field measured	FIELD	09/25-26/2019	SU	<6, >9	7.01	6.7	4.66	6.99	5.89	11.99	7.12	5.93	4.86	4.52	5.38	4.75	4.62	--	--	--	--
pH, field measured	FIELD	06/08-09/2020	SU	<6, >9	9.04	6.79	4.36	9.3	5.85	11.81	7.48	5.7	5.51	5.51	5.03	4.75	4.38	--	--	--	--
pH, field measured	FIELD	09/09-10/2020	SU	<6, >9	7.28	6.44	4.4	6.74	5.74	12.63	9.26	5.76	5.33	4.95	4.96	4.65	4.44	--	--	--	--
pH, field measured	FIELD	03/02-03/2021	SU	<6, >9	7.00	6.45	4.7	7.23	5.9	12.12	11.85	5.56	5.24	4.38	4.77	4.37	5.18	--	--	--	--
pH, field measured	FIELD	09/13-14/2021	SU	<6, >9	11.14	6.39	4.74	7.1	5.66	11.59	8.88	5.65	5.18	4.4	4.8	4.11	5.11	--	--	--	--
pH, field measured	FIELD	03/07-08/2022	SU	<6, >9	10.97	6.49	4.76	7.22	5.75	11.76	8.98	5.38	5.19	4.57	4.8	4.58	5.34	--	--	--	--
pH, field measured	FIELD	08/23-24/2022	SU	<6, >9	11.07	6.28	4.62	7.08	5.62	11.59	10.03	5.09	5.25	4.52	4.83	4.36	5.07	--	--	--	--
pH, field measured	FIELD	03/21-22/2023	SU	<6, >9	11.98	6.91	5	7.56	6.15	12.44	8.03	6.56	5.4	4.87	5.18	5.2	5.65	--	--	--	--
pH, field measured	FIELD	09/12-13/2023	SU	<6, >9	11.27	6.08	4.26	6.65	5.26	11.75	9.1	6.23	5.03	4.09	4.91	4.3	4.66	--	--	--	--
pH, field measured	FIELD	03/25-26/2024	SU	<6, >9	13.06	7.35	5	7.8	6.61	13.36	12.51	6.82	5.74	5.04	5.27	--	5.88	--	--	--	--
pH, field measured	FIELD	09/03-04/2024	SU	<6, >9	12.46	6.53	4.33	7.29	5.64	12.61	9.51	6.05	5.42	4.29	4.08	6.19	4.65	--	--	--	--
pH, field measured	FIELD	03/11-12/2025	SU	<6, >9	11.63	6.22	3.96	7.58	6.29	7.58	9.23	6.36	4.58	4.89	4.19	5.64	4.62	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Potassium	E200.7	03/12-13/2009	mg/L	PQL = 0.39 mg/L	5.4	2.5	< 0.5	2.8	1.7	5.3	10.6	--	2.7	3.4	1.3	4.5	3	< 0.5	< 0.5	--	--
Potassium	E200.7	06/16-17/2009	mg/L	PQL = 0.39 mg/L	5.02	2.31	0.33	2.41	1.54	5.12	10.7	8.01	2.11	2.75	1.15	4.3	2.92	< 0.5	< 0.5	--	--
Potassium	E200.7	09/16-18/2009	mg/L	PQL = 0.39 mg/L	5.4	3.2	0.6	3	1.8	6.1	11.7	7.8	2.8	3.9	1.3	4.5	3.1	< 0.5	< 0.5	--	--
Potassium	E200.7	12/08-09/2009	mg/L	PQL = 0.39 mg/L	5.2	2.7	0.3	--	1.6	5.2	7.1	7.3	2.6	4.2	1.2	5.2	1.6	< 0.5	< 0.5	--	--
Potassium	E200.7	12/08-19/2009	mg/L	PQL = 0.39 mg/L	--	--	--	2.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	E200.7	03/29-30/2010	mg/L	PQL = 0.39 mg/L	4.81	2.74	0.61	2.74	1.6	5.55	5.74	5.09	3.38	4.28	2.01	5.3	3.08	< 0.5	< 0.5	--	--
Potassium	E200.7	06/16-17/2010	mg/L	PQL = 0.39 mg/L	3.97	2.17	0.32	2.61	1.25	5.24	4.38	4.12	2.99	3.34	1.04	5.03	1.82	< 0.5	< 0.5	--	--
Potassium	E200.7	09/07-08/2010	mg/L	PQL = 0.39 mg/L	4.08	2.36	0.44	2.77	1.44	5.22	4.69	4.36	2.96	3.22	1.07	5.07	2.34	< 0.5	< 0.5	--	--
Potassium	E200.7	12/07-08/2010	mg/L	PQL = 0.39 mg/L	3.78	2.24	0.42	2.53	1.45	4.84	4.09	4.61	2.76	3.01	1.17	4.36	2.62	< 0.5	< 0.5	--	--
Potassium	E200.7	03/28-29/2011	mg/L	PQL = 0.39 mg/L	3.79	2.16	0.52	2.84	1.48	4.75	4.49	5.06	3.06	3.13	1.2	4.15	2.21	< 0.5	< 0.5	--	--
Potassium	E200.7	09/27-28/2011	mg/L	PQL = 0.39 mg/L	3.4	2.4	0.5	2.6	1.5	4.2	4.9	4.9	3.2	2.8	1	3.9	1.8	< 0.5	< 0.5	--	--
Potassium	E200.7	03/13-14/2012	mg/L	PQL = 0.39 mg/L	3.6	2.2	0.6	2.8	1.8	4	4.7	5.6	3.5	2.9	1.3	4.2	1.6	< 0.5	< 0.5	--	--
Potassium	E200.7	09/17-19/2012	mg/L	PQL = 0.39 mg/L	3.2	2.6	0.4	2.9	1.5	3.7	5.4	5.3	3.3	2.9	1	3.7	2.1	< 0.5	< 0.5	--	--
Potassium	E200.7	03/19-20/2013	mg/L	PQL = 0.39 mg/L	3.25	2.03	0.4	2.65	1.73	3.35	3.98	4.88	2.71	2.49	1.18	3.66	0.88	< 0.5	< 0.5	--	--
Potassium	E200.7	09/23-24/2013	mg/L	PQL = 0.39 mg/L	2.9	2.5	0.5	2.6	1.8	3.1	3.8	6.9	2.2	2.4	1.2	3.5	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	03/10-11/2014	mg/L	PQL = 0.39 mg/L	3.1	2	0.4	2.7	2	2.7	3.9	20.6	2	2.1	1.2	3.4	2	< 0.5	< 0.5	--	--
Potassium	E200.7	09/16-17/2014	mg/L	PQL = 0.39 mg/L	3.38	2.75	0.51	2.89	2.17	3.34	3.96	14.6	3.04	3.01	--	3.8	2.04	< 0.5	< 0.5	--	--
Potassium	E200.7	09/29/2014	mg/L	PQL = 0.39 mg/L	--	--	--	--	--	--	--	--	--	--	1.44	--	--	--	--	--	--
Potassium	E200.7	03/17-18/2015	mg/L	PQL = 0.39 mg/L	3.28	2.58	0.58	2.82	2.45	3.14	3.76	15.3	2.51	2.25	1.39	3.44	2.22	< 0.5	< 0.5	--	--
Potassium	E200.7	09/14-15/2015	mg/L	PQL = 0.39 mg/L	2.69	2.39	0.52	2.51	2.09	3.16	4.09	16.8	2.7	2.26	--	2.79	1.31	< 0.5	< 0.5	--	--
Potassium	E200.7	09/30/2015	mg/L	PQL = 0.39 mg/L	--	--	--	--	--	--	--	--	--	--	1.24	--	--	--	--	< 0.5	--
Potassium	E200.7	03/23-24/2016	mg/L	PQL = 0.39 mg/L	3.43	2.6	0.48	2.78	2.66	3.02	4.26	21.9	2.68	2	1.3	3.38	2.18	< 0.5	< 0.5	--	--
Potassium	E200.7	09/20-21/2016	mg/L	PQL = 0.39 mg/L	3.28	2.68	0.41	2.62	2.64	2.75	3.56	15.3	2.1	1.84	1.18	3.03	1.74	< 0.5	< 0.5	--	--
Potassium	E200.7	03/21-22/2017	mg/L	PQL = 0.39 mg/L	3.16	1.82	0.26	2.28	2.38	2.27	3.39	13	2.19	1.49	0.79	2.01	1.3	< 0.5	< 0.5	--	--
Potassium	E200.7	09/20-21/2017	mg/L	PQL = 0.39 mg/L	3.06	2.29	0.47	2.74	2.8	2.24	3.41	7.72	2.43	1.52	1.26	1.85	1.55	< 0.5	< 0.5	--	--
Potassium	E200.7	03/29-30/2018	mg/L	PQL = 0.39 mg/L	3.83	1.76	0.58	2.98	2.75	2.2	9.95	13	1.65	1.88	1.52	2.59	1.65	< 0.5	< 0.5	--	--
Potassium	E200.7	09/19-20/2018	mg/L	PQL = 0.39 mg/L	2.93	2.12	< 0.5	3.26	2.78	2.55	2.28	22.8	2.3	2.2	1.28	2.37	1.37	< 0.5	< 0.5	--	--
Potassium	E200.7	03/18-19/2019	mg/L	PQL = 0.39 mg/L	3.48	2.46	0.44	2.66	2.11	2.45	2.92	21.1	2.22	2.13	1.11	2.31	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	09/25-26/2019	mg/L	PQL = 0.39 mg/L	3.78	2.45	0.46	2.9	1.82	2.18	3.54	20.6	1.7	2.83	1.3	2.59	1.71	< 0.5	< 0.5	--	--
Potassium	E200.7	06/08-09/2020	mg/L	PQL = 0.39 mg/L	3.7	2.4	0.5	2.7	2.3	2	3.7	16.1	2.8	2	1.2	1.9	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	09/09-10/2020	mg/L	PQL = 0.39 mg/L	3.9	2.6	0.6	2.8	2.7	2.2	5.2	16.5	2.1	2.6	1.3	1.8	1.6	< 0.5	< 0.5	--	--
Potassium	E200.7	03/02-03/2021	mg/L	PQL = 0.39 mg/L	3.8	2.8	0.6	2.7	2.9	2.3	9.1	15.1	2.2	2.1	1.3	2	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	09/13-14/2021	mg/L	PQL = 0.39 mg/L	3.8	2.5	0.5	2.7	2.5	2.2	4.6	16.8	1.8	2.8	1.3	1.8	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	03/07-08/2022	mg/L	PQL = 0.39 mg/L	3.46	1.71	0.48	2.52	2.32	2.02	4.94	13	2.03	2.22	1.32	1.78	1.32	< 0.5	< 0.5	--	--
Potassium	E200.7	08/23-24/2022	mg/L	PQL = 0.39 mg/L	3.58	2.18	0.49	2.53	2.46	2.11	5.99	13.2	2.28	2.66	1.23	1.93	1.4	< 0.5	< 0.5	--	--
Potassium	E200.7	03/21-22/2023	mg/L	PQL = 0.39 mg/L	3.43	2.24	<0.5	2.56	2.37	2.02	3.68	12.3	1.97	2.66	1.24	1.79	1.33	< 0.2	< 0.2	--	--
Potassium	E200.7	09/12-13/2023	mg/L	PQL = 0.39 mg/L	3.64	1.95	0.42 J	2.55	2.12	1.97	4.93	14	2.62	2.45	1.16	1.74	1.29	< 0.2	< 0.2	--	--
Potassium	E200.7	03/25-26/2024	mg/L	PQL = 0.39 mg/L	3.24	2.11	0.47 J	2.42	2.12	1.90	6.89	14.5	2.86	2.52	1.22	1.78	1.11	< 0.2	< 0.2	--	--
Potassium	E200.7	09/03-04/2024	mg/L	PQL = 0.39 mg/L	3.79	2.18	<0.5	2.52	2.15	2.16	4.02	13	2.86	2.74	1.11	2.87	1.39	< 0.2	< 0.2	--	--
Potassium	E200.7	03/11-12/2025	mg/L	PQL = 0.39 mg/L	3.55	2.08	0.5 J	2.64	2.01	2.14	3.1	16.6	3.44	2.83	1.08	2.87	1.12	< 0.2	< 0.2	--	--
Selenium	E200.7	03/12-13/2009	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	06/16-17/2009	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	09/16-18/2009	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	12/08-09/2009	ug/L	50	< 50	< 50	< 50	--	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	12/08-19/2009	ug/L	50	--	--	--	< 50	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	E200.7	03/29-30/2010	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	06/16-17/2010	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	09/07-08/2010	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	12/07-08/2010	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	03/28-29/2011	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	09/27-28/2011	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	03/13-14/2012	ug/L	50	< 50	< 50	10	< 50	10	10	< 50	10	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	09/17-19/2012	ug/L	50	10	< 50	< 50	< 50	10	10	< 50	10	< 50	< 50	10	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	03/19-20/2013	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	09/23-24/2013	ug/L	50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	--	--
Selenium	E200.7	03/10-11/2014	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/16-17/2014	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/29/2014	ug/L	50	--	--	--	--	--	--	--	--	--	--	< 20	--	--	--	--	--	--
Selenium	E200.7	03/17-18/2015	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/14-15/2015	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/30/2015	ug/L	50	--	--	--	--	--	--	--	--	--	--	< 20	--	--	--	--	< 20	--
Selenium	E200.7	03/23-24/2016	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/20-21/2016	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	03/21-22/2017	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/20-21/2017	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Selenium	E200.7	03/29-30/2018	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/19-20/2018	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	03/18-19/2019	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	10	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/25-26/2019	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	06/08-09/2020	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/09-10/2020	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	03/02-03/2021	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	09/13-14/2021	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	03/07-08/2022	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	08/23-24/2022	ug/L	50	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	--	--
Selenium	E200.7	03/21-22/2023	ug/L	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Selenium	E200.7	09/12-13/2023	ug/L	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Selenium	E200.7	03/25-26/2024	ug/L	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Selenium	E200.7	09/03-04/2024	ug/L	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Selenium	E200.7	03/11-12/2025	ug/L	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	03/12-13/2009	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	06/16-17/2009	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	09/16-18/2009	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	12/08-09/2009	ug/L	9.4	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	12/08-19/2009	ug/L	9.4	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	E200.7	03/29-30/2010	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	06/16-17/2010	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	09/07-08/2010	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	12/07-08/2010	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	03/28-29/2011	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	09/27-28/2011	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	03/13-14/2012	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	09/17-19/2012	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	03/19-20/2013	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	09/23-24/2013	ug/L	9.4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Silver	E200.7	03/10-11/2014	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	2	< 5	< 5	< 5	2	< 5	< 5	< 5	--	--
Silver	E200.7	09/16-17/2014	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/29/2014	ug/L	9.4	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
Silver	E200.7	03/17-18/2015	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/14-15/2015	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/30/2015	ug/L	9.4	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
Silver	E200.7	03/23-24/2016	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/20-21/2016	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/21-22/2017	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/20-21/2017	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/29-30/2018	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/19-20/2018	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/18-19/2019	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/25-26/2019	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	06/08-09/2020	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/09-10/2020	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/02-03/2021	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	09/13-14/2021	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/07-08/2022	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	08/23-24/2022	ug/L	9.4	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Silver	E200.7	03/21-22/2023	ug/L	9.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Silver	E200.7	09/12-13/2023	ug/L	9.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Silver	E200.7	03/25-26/2024	ug/L	9.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Silver	E200.7	09/03-04/2024	ug/L	9.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Silver	E200.7	03/11-12/2025	ug/L	9.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Sodium	E200.7	03/12-13/2009	mg/L	PQL = 0.2 mg/L	15.5	25.2	1.8	17.6	7.7	27.6	13.5	--	24.8	18.9	9.8	13.6	5.4	< 0.2	< 0.2	--	--
Sodium	E200.7	06/16-17/2009	mg/L	PQL = 0.2 mg/L	14.6	28.5	1.7	15.9	6.81	20	13.9	101	31.6	18.9	9.33	12.3	5.32	0.14	0.1	--	--
Sodium	E200.7	09/16-18/2009	mg/L	PQL = 0.2 mg/L	15.9	28.4	2	18.5	7.1	22.6	15.8	108	61	20.5	8.9	10.9	5.9	0.4	0.4	--	--
Sodium	E200.7	12/08-09/2009	mg/L	PQL = 0.2 mg/L	15.6	43.1	1.9	--	6.7	23.1	14.9	105	31.4	19.1	9.5	13	5.1	0.17	0.28	--	--
Sodium	E200.7	12/08-19/2009	mg/L	PQL = 0.2 mg/L	--	--	--	18.3	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	E200.7	03/29-30/2010	mg/L	PQL = 0.2 mg/L	16	56.1	2.29	18.9	6.7	22.5	15.2	95.9	62.1	17.6	10.5	14.1	6.99	0.24	0.28	--	--
Sodium	E200.7	06/16-17/2010	mg/L	PQL = 0.2 mg/L	13.6	22.1	1.77	17.4	5.59	21.2	13.2	90.6	50.3	14.2	7.68	12.1	6.01	0.26	0.14	--	--
Sodium	E200.7	09/07-08/2010	mg/L	PQL = 0.2 mg/L	13.4	19.9	1.89	17.3	5.83	20.1	13.6	85.9	59.2	12.9	7.19	12.3	5.32	0.21	0.25	--	--
Sodium	E200.7	12/07-08/2010	mg/L	PQL = 0.2 mg/L	12.3	32.5	1.75	16	5.51	18.7	12.7	76.4	38.9	12.3	6.97	11.5	5.26	0.12	0.19	--	--
Sodium	E200.7	03/28-29/2011	mg/L	PQL = 0.2 mg/L	12.7	47.5	2.06	17.3	5.86	20.4	13.6	81	42.9	12.1	7.6	11.8	5.86	0.26	0.25	--	--
Sodium	E200.7	09/27-28/2011	mg/L	PQL = 0.2 mg/L	12.3	27	2.1	17	6.3	19	14.1	91.8	42.4	11.3	6.9	12.2	5	0.2	0.2	--	--
Sodium	E200.7	03/13-14/2012	mg/L	PQL = 0.2 mg/L	12.6	38.1	2.2	18.8	7.3	20	14.7	106	35.6	11.4	7.6	13.2	6.4	0.2	0.2	--	--
Sodium	E200.7	09/17-19/2012	mg/L	PQL = 0.2 mg/L	11.8	26.7	2.1	18.1	7.3	18.3	14.3	111	45.6	10.1	7.4	12.5	5.5	0.4	0.3	--	--
Sodium	E200.7	03/19-20/2013	mg/L	PQL = 0.2 mg/L	12.2	41.2	1.99	17.4	8.43	16.9	14.3	84.2	39.5	16.5	8.9	12.5	5.22	0.43	0.36	--	--
Sodium	E200.7	09/23-24/2013	mg/L	PQL = 0.2 mg/L	11.9	29.7	2.1	17.9	10.2	16.3	13.8	107	33.7	11.8	8.6	13	5.5	< 0.2	0.2	--	--
Sodium	E200.7	03/10-11/2014	mg/L	PQL = 0.2 mg/L	12.2	44.4	1.7	18.5	11.1	16	14.4	28.3	20.4	19.3	9.2	13.1	5.4	< 0.2	< 0.2	--	--
Sodium	E200.7	09/16-17/2014	mg/L	PQL = 0.2 mg/L	11.8	28.1	2.01	17.8	11.7	15.6	14.5	28.6	38.8	10.8	--	12.3	5.04	< 0.2	0.65	--	--
Sodium	E200.7	09/29/2014	mg/L	PQL = 0.2 mg/L	--	--	--	--	--	--	--	--	--	--	9.05	--	--	--	--	--	--
Sodium	E200.7	03/17-18/2015	mg/L	PQL = 0.2 mg/L	13.2	39.4	2.08	18.6	13.9	14.5	13.9	35.4	33.3	16.4	9.69	13.5	5.77	0.27	0.23	--	--
Sodium	E200.7	09/14-15/2015	mg/L	PQL = 0.2 mg/L	13.5	33	2.01	18.7	15.7	15.7	13.6	23.3	25.6	12.3	--	13.7	5.77	0.18	0.18	--	--
Sodium	E200.7	09/30/2015	mg/L	PQL = 0.2 mg/L	--	--	--	--	--	--	--	--	--	--	9.48	--	--	--	--	0.24	--
Sodium	E200.7	03/23-24/2016	mg/L	PQL = 0.2 mg/L	14.5	37.5	2.04	18.9	19	15.6	14.4	23.7	34.8	21	10.8	14.2	5.3	0.15	0.13	--	--
Sodium	E200.7	09/20-21/2016	mg/L	PQL = 0.2 mg/L	13.8	28.3	1.92	18.8	21	16.4	14.6	41.9	49.7	20.4	11.7	14.1	5.97	0.3	0.32	--	--
Sodium	E200.7	03/21-22/2017	mg/L	PQL = 0.2 mg/L	13	38.5	1.9	18.3	22.7	16.3	14.1	51.8	42.9	16.2	13.3	13.3	6.38	0.13	0.1	--	--
Sodium	E200.7	09/20-21/2017	mg/L	PQL = 0.2 mg/L	12.5	25.5	1.83	16.9	22.8	15.4	12.7	31.8	43	14.8	12.2	11.8	5.62	0.16	0.2	--	--
Sodium	E200.7	03/29-30/2018	mg/L	PQL = 0.2 mg/L	12.7	29	1.77	17.2	24.3	17	14.1	30.8	10.6	20.1	12.6	12.7	5.89	0.12	0.13	--	--
Sodium	E200.7	09/19-20/2018	mg/L	PQL = 0.2 mg/L	11.3	25.3	1.63	18.6	20.6	16.6	12.3	53.8	25.3	23.2	10.8	12.5	5.14	< 0.2	0.31	--	--
Sodium	E200.7	03/18-19/2019	mg/L	PQL = 0.2 mg/L	14	35.6	1.91	18.5	14.7	17.3	14.5	82.6	36.7	11.4	9.18	14.1	6.03	0.12	0.13	--	--
Sodium	E200.7	09/25-26/2019	mg/L	PQL = 0.2 mg/L	14	15.9	2.21	19.5	10	17.9	14.3	81.1	69.1	13.6	8.44	15.1	6.04	0.2	0.16	--	--
Sodium	E200.7	06/08-09/2020	mg/L	PQL = 0.2 mg/L	11.8	24.1	2	17	14.9	15.1	12	60.3	52.8	19.4	8.6	12.2	5.3	0.2	0.2	--	--
Sodium	E200.7	09/09-10/2020	mg/L	PQL = 0.2 mg/L	12.2	19.8	2.2	16.6	17.9	15.7	12.3	54.1	34.8	21.3	8.3	12.2	5.4	< 0.2	< 0.2	--	--
Sodium	E200.7	03/02-03/2021	mg/L	PQL = 0.2 mg/L	12.8	36.8	2.2	16.3	22.6	15.6	12.7	79.2	37.4	25.6	9	12.5	5.6	0.2	0.1	--	--
Sodium	E200.7	09/13-14/2021	mg/L	PQL = 0.2 mg/L	12.6	17.2	2.2	16.8	19.9	15.1	12.7	90.5	45.3	17.6	9.8	12.4	5.4	0.29	0.25	--	--
Sodium	E200.7	03/07-08/2022	mg/L	PQL = 0.2 mg/L	12	22	2.28	17.3	22.7	15.2	12.6	121	35.2	26.6	11.9	13.7	6.09	0.16	0.23	--	--
Sodium	E200.7	08/23-24/2022	mg/L	PQL = 0.2 mg/L	12.2	17.2	2.07	16.7	22.7	15.1	12.6	130	71.2	15.7	11.7	13.6	5.6	0.14	0.16	--	--
Sodium	E200.7	03/21-22/2023	mg/L	PQL = 0.2 mg/L	12.2	30.1	2.12	17.7	21.5	14.3	13.6	139	24.9	18.3	11.3	13.6	6.19	< 0.2	<0.1	--	--
Sodium	E200.7	09/12-13/2023	mg/L	PQL = 0.2 mg/L	12.3	13.8	2.28	17.2	18.6	14.9	13.7	138	38	16.7	9.89	14.4	5.72	0.15 J	0.18 J	--	--
Sodium	E200.7	03/25-26/2024	mg/L	PQL = 0.2 mg/L	11.4	29.8	2.07	16.7	17.9	14.1	12.8	131	9.88	16.7	10.7	14.9	6.59	0.15 J	0.20	--	--
Sodium	E200.7	09/03-04/2024	mg/L	PQL = 0.2 mg/L	12.7	19.4	2.06	17.2	15.6	15.7	13.4	162	18.1	13	8.76	12.8	5.62	< 0.2	0.15 J	--	--
Sodium	E200.7	03/11-12/2025	mg/L	PQL = 0.2 mg/L	12.3	33.2	2.06	18.3	13.9	16	10.4	153	29.4	15.2	8.65	13	6.51	0.15 J	0.1 J7	--	--
Styrene	SW8260	03/12-13/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Styrene	SW8260	06/16-17/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Styrene	SW8260	09/16-18/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	12/08-09/2009	ug/L	100	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	12/08-19/2009	ug/L	100	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	SW8260	03/29-30/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	06/16-17/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	12/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/28-29/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/27-28/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/13-14/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/17-19/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/19-20/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/23-24/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/10-11/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/16-17/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/29/2014	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Styrene	SW8260	03/17-18/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/14-15/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Styrene	SW8260	09/30/2015	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Styrene	SW8260	03/23-24/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/20-21/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/21-22/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/20-21/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Styrene	SW8260	03/29-30/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/19-20/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/18-19/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/25-26/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	06/08-09/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/09-10/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/02-03/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	09/13-14/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/07-08/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	08/23-24/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Styrene	SW8260	03/21-23/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Styrene	SW8260	09/12-13/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Styrene	SW8260	03/25-26/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Styrene	SW8260	09/03-04/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Styrene	SW8260	03/11-12/2025	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Sulfate	E300	03/12-13/2009	mg/L	PQL = 0.38 mg/L	2.6	222	3.2	5.4	< 2	2.4	3.8	--	79.3	28.4	6.3	6.6	2.6	--	--	--	--
Sulfate	E300	06/16-17/2009	mg/L	PQL = 0.38 mg/L	2.4	221	2.7	5.7	< 2	1.3	3.1	4	80.5	27.5	5.3	7.1	2.1	--	--	--	--
Sulfate	E300	09/16-18/2009	mg/L	PQL = 0.38 mg/L	2.5	236	3.1	6.5	< 2	< 2	3.5	6.3	54.9	41.9	5.6	9.4	3.4	--	--	--	--
Sulfate	E300	12/08-09/2009	mg/L	PQL = 0.38 mg/L	1.8	302	3.3	--	< 2	1.9	3.3	3.7	78.4	38.9	< 2	8	1.5	--	--	--	--
Sulfate	E300	12/08-19/2009	mg/L	PQL = 0.38 mg/L	--	--	--	5.7	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	E300	03/29-30/2010	mg/L	PQL = 0.38 mg/L	2.1	248	3	5.9	1.6	1.4	3.6	6	49.4	40.9	5.1	1.7	2.5	--	--	--	--
Sulfate	E300	06/16-17/2010	mg/L	PQL = 0.38 mg/L	3.6	131	2.2	5	< 2	1.1	2.9	4	29.2	39.8	2.7	7	2.2	--	--	--	--
Sulfate	E300	09/07-08/2010	mg/L	PQL = 0.38 mg/L	2.1	138	2.5	5.2	< 2	1.2	3.4	4.2	49.7	37.7	3.6	9	2.1	--	--	--	--
Sulfate	E300	12/07-08/2010	mg/L	PQL = 0.38 mg/L	2.1	189	2.6	5.4	< 2	1.2	3.7	3.9	59.3	37.8	3.5	8.9	2	--	--	--	--
Sulfate	E300	03/28-29/2011	mg/L	PQL = 0.38 mg/L	2.2	155	2.5	5.3	< 2	1.4	3.9	3.3	63.1	37.8	4.9	10.3	2.9	--	--	--	--
Sulfate	E300	09/27-28/2011	mg/L	PQL = 0.38 mg/L	2.5	111	3.4	5.3	< 2	2	3.9	3.9	71.9	33.7	3.8	8.7	1.9	--	--	--	--
Sulfate	E300	03/13-14/2012	mg/L	PQL = 0.38 mg/L	2.7	88	2.8	5.7	< 2	2.2	4.1	7.2	37.6	34.5	4.1	9.8	2.4	--	--	--	--
Sulfate	E300	09/17-19/2012	mg/L	PQL = 0.38 mg/L	2.4	99	2.6	5.3	< 2	2.2	4.1	6.4	44.2	27.2	3.9	8.5	2.1	--	--	--	--
Sulfate	E300	03/19-20/2013	mg/L	PQL = 0.38 mg/L	2.8	63.7	3.4	5.5	< 2	2.5	4.4	6.7	49.5	19.4	4.1	8.7	1.4	--	--	--	--
Sulfate	E300	09/23-24/2013	mg/L	PQL = 0.38 mg/L	3.3	82	3.6	6.8	0.7	3.2	5.2	5.3	44.8	29.4	5.4	10.9	2.6	--	--	--	--
Sulfate	E300	03/10-11/2014	mg/L	PQL = 0.38 mg/L	3	58.6	3.3	6.3	0.6	3.1	4.8	5.1	61.4	12.2	5	9.9	2.4	--	--	--	--
Sulfate	E300	09/16-17/2014	mg/L	PQL = 0.38 mg/L	3.2	69.9	3.5	6.5	0.8	2.8	5.3	10	47.2	27.4	--	10.8	2.8	--	--	--	--
Sulfate	E300	09/29/2014	mg/L	PQL = 0.38 mg/L	--	--	--	--	--	--	--	--	--	--	4.7	--	--	--	--	--	--
Sulfate	E300	03/17-18/2015	mg/L	PQL = 0.38 mg/L	2.9	45	3.4	6.3	0.9	2.8	4.7	9.5	54.2	13.7	5.8	10.4	2.4	--	--	--	--
Sulfate	E300	09/14-15/2015	mg/L	PQL = 0.38 mg/L	3.1	55.4	3.8	6.9	1.2	3.2	5.1	11.6	52.2	29	--	10.8	2.5	--	--	--	--
Sulfate	E300	09/30/2015	mg/L	PQL = 0.38 mg/L	--	--	--	--	--	--	--	--	--	--	6.3	--	--	--	--	--	--
Sulfate	E300	03/23-24/2016	mg/L	PQL = 0.38 mg/L	2.9	51.6	3.4	8.1	1.4	12.9	5	14.7	48.6	9.1	7.2	10.1	2.2	--	--	--	--
Sulfate	E300	09/20-21/2016	mg/L	PQL = 0.38 mg/L	3	38.5	3.8	6	1.6	3.1	4.8	17.2	56.9	7.4	7.3	8.5	2.5	--	--	--	--
Sulfate	E300	03/21-22/2017	mg/L	PQL = 0.38 mg/L	2.6	36.6	3	5.9	2	3.6	4.6	15.2	58	6.4	10	8.2	2.8	--	--	--	--
Sulfate	E300	09/20-21/2017	mg/L	PQL = 0.38 mg/L	2.9	43	3.2	6.5	2.7	3.7	4.8	15.1	57.8	5.2	10.2	8.8	3.2	--	--	--	--
Sulfate	E300	03/29-30/2018	mg/L	PQL = 0.38 mg/L	2.9	38.1	3.4	6.6	2.6	4.4	4.9	12.8	57.1	5.6	10.3	9.2	4.1	--	--	--	--
Sulfate	E300	09/19-20/2018	mg/L	PQL = 0.38 mg/L	2.8	48.5	3.4	6.5	2.1	4.3	4.9	10.5	68.9	5.7	9.4	9.2	2.7	--	--	--	--
Sulfate	E300	03/18-19/2019	mg/L	PQL = 0.38 mg/L	2.7	52.5	3.4	6.5	1.4	4.2	5.2	32.4	46.2	25.8	7.7	9.8	2.5	--	--	--	--
Sulfate	E300	09/25-26/2019	mg/L	PQL = 0.38 mg/L	3.1	27.9	3.5	6.6	0.8	4.8	5.5	22.9	54	28.3	8.8	10	2.6	--	--	--	--
Sulfate	E300	06/08-09/2020	mg/L	PQL = 0.38 mg/L	2.6	37.6	3.4	6.9	0.7	4.4	5.1	23.2	54	11	10.1	9.5	2.6	--	--	--	--
Sulfate	E300	09/09-10/2020	mg/L	PQL = 0.38 mg/L	2.1	30.7	3.3	6.5	1.4	5.9	5.1	19.2	59.6	19.2	10.2	8.9	2.5	--	--	--	--
Sulfate	E300	03/02-03/2021	mg/L	PQL = 0.38 mg/L	2.4	44.8	3.4	7.3	1.1	4.2	5.3	20.9	51.8	8.2	9.7	9.1	2.5	--	--	--	--
Sulfate	E300	09/13-14/2021	mg/L	PQL = 0.38 mg/L	2.4	21.2	3.2	6.6	2.6	4.1	5.1	26.6	44.4	26.5	10.1	9	2.5	--	--	--	--
Sulfate	E300	03/07-08/2022	mg/L	PQL = 0.38 mg/L	2.6	38.1	2.9	6.4	1.6	3.7	5.5	25.9	44.8	11.4	12	8.5	2	--	--	--	--
Sulfate	E300	08/23-24/2022	mg/L	PQL = 0.38 mg/L	2.9	25.2	4	7.4	2.2	4.4	5.6	17.9	49.2	25.8	14	10	2.6	--	--	--	--
Sulfate	E300	03/21-22/2023	mg/L	PQL = 0.38 mg/L	2.7	35.3	3.3	6.2	< 2	4.1	4.8	21.9	47.3	23.8	11.3	8.9	2.2	--	--	--	--
Sulfate	E300	09/12-13/2023	mg/L	PQL = 0.38 mg/L	2.7	22.2	3.3	6.9	1.7 J	4.9	5.4	20	41.2	24	15.2	8.6	2.3	--	--	--	--
Sulfate	E300	03/25-26/2024	mg/L	PQL = 0.38 mg/L	2.7	28.9	3.4	6.4	1.5 J	4.3	4.9	19.8	49.9	23.1	11.6	9.5	5.7	--	--	--	--
Sulfate	E300	09/03-04/2024	mg/L	PQL = 0.38 mg/L	2.6	30.6	3.2	6.2	1.5 J	3.9	4.8	22.1	38.7	24.8	11.1	6.5	< 2	--	--	--	--
Sulfate	E300	03/11-12/2025	mg/L	PQL = 0.38 mg/L	2.9	47.8	3.3	6.7	1.5 J	31.1	5.3	21.5	39.9	23.9	12.8	6.8	2 J	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Temperature, field measured	FIELD	03/13-14/2012	deg c	--	13.2	11.8	12.8	12.8	15	12.4	11.1	13.5	12.4	12.6	12.4	14.7	13.7	--	--	--	--
Temperature, field measured	FIELD	09/17-19/2012	deg c	--	16.4	17.8	14.5	16.9	16.1	14.4	21.1	14.9	14.8	14.3	13.4	16.7	13.9	--	--	--	--
Temperature, field measured	FIELD	03/19-20/2013	deg c	--	13.5	9.1	13.1	11.9	15.4	12.8	16.3	13.1	11.4	12.6	13.1	13.2	12.8	--	--	--	--
Temperature, field measured	FIELD	09/23-24/2013	deg c	--	13.6	14.8	13.6	13.9	14.8	14	21	14.1	13	14.5	13.1	15.2	14	--	--	--	--
Temperature, field measured	FIELD	03/10-11/2014	deg c	--	12.6	8.7	12	13.8	14.5	11.8	18.6	12	11.9	12	12.1	13.7	13.2	--	--	--	--
Temperature, field measured	FIELD	09/16-17/2014	deg c	--	13.8	17.3	13.5	14	15.7	14.2	19.6	16.5	13.9	12.6	--	13.6	13.8	--	--	--	--
Temperature, field measured	FIELD	09/29/2014	deg c	--	--	--	--	--	--	--	--	--	--	--	16.3	--	--	--	--	--	--
Temperature, field measured	FIELD	03/17-18/2015	deg c	--	11.1	8	8.6	12.9	15.3	10.1	17.7	13.3	9.7	13.5	13.3	10.9	14.5	--	--	--	--
Temperature, field measured	FIELD	09/14-15/2015	deg c	--	13.7	15.7	13.2	18.3	15.3	14.8	20	15.3	13.6	12.1	--	14.6	12.8	--	--	--	--
Temperature, field measured	FIELD	09/30/2015	deg c	--	--	--	--	--	--	--	--	--	--	--	15.5	--	--	--	--	--	--
Temperature, field measured	FIELD	03/23-24/2016	deg c	--	13.8	9.2	13.6	13.7	15.2	12.3	20.2	13.4	12.9	12.2	13.2	14.1	14.1	--	--	--	--
Temperature, field measured	FIELD	09/20-21/2016	deg c	--	16	17	15.7	15.5	16.6	13.8	19.6	16.3	15	14.1	15.3	16.5	14.8	--	--	--	--
Temperature, field measured	FIELD	03/21-22/2017	deg c	--	13.1	8.6	11.1	13.5	14.2	13.6	17.8	14.1	12.4	11.8	13.7	13.5	11.6	--	--	--	--
Temperature, field measured	FIELD	09/20-21/2017	deg c	--	16.5	16.3	16	16.6	18.7	16.6	21.7	17.3	14.7	14	16.4	15.1	14.7	--	--	--	--
Temperature, field measured	FIELD	03/29-30/2018	deg c	--	13.7	10.7	14.6	14.3	15.6	14.1	18.5	14.2	13	13.1	13.4	13.6	13.2	--	--	--	--
Temperature, field measured	FIELD	09/19-20/2018	deg c	--	15.9	21.8	17.2	15.3	16.5	14.1	21.1	16.9	17	13.9	16.8	16.2	14.9	--	--	--	--
Temperature, field measured	FIELD	03/18-19/2019	deg c	--	13	10.9	12.8	12.6	14.1	11.8	17.5	11.4	12	13	13.1	13.3	9.7	--	--	--	--
Temperature, field measured	FIELD	09/25-26/2019	deg c	--	15.8	19.8	18.6	14.5	17.6	16.5	21	15	15.5	13	15.6	15.6	14.5	--	--	--	--
Temperature, field measured	FIELD	06/08-09/2020	deg c	--	14.8	14.9	16.4	14.8	15.1	15.4	22.9	15.6	13.1	14.2	15.3	14.6	14	--	--	--	--
Temperature, field measured	FIELD	09/09-10/2020	deg c	--	15.7	20.2	16.6	17	19.3	17.03	22	17	16.9	15.7	16.6	16.4	16.3	--	--	--	--
Temperature, field measured	FIELD	03/02-03/2021	deg c	--	10.5	11.1	12.2	12.6	13.2	12.6	15.1	13.2	12	12.8	12.5	12.4	13.9	--	--	--	--
Temperature, field measured	FIELD	09/13-14/2021	deg c	--	13	17.5	15.3	12.5	13.4	16.4	22.4	16.3	15.8	10.9	14.1	15.6	17.7	--	--	--	--
Temperature, field measured	FIELD	03/07-08/2022	deg c	--	15.2	12.9	13.9	16.2	17.2	15	16.5	15.9	14.5	13.2	16	15.2	15.3	--	--	--	--
Temperature, field measured	FIELD	08/23-24/2022	deg c	--	15.6	20.1	17.2	16.4	18.3	16	22	16.1	15.7	15	16.3	16.1	16.5	--	--	--	--
Temperature, field measured	FIELD	03/21-22/2023	deg c	--	14.3	9.7	14.2	14.3	15.8	14.8	19.2	14.1	13.4	13.6	14.3	19.1	14.6	--	--	--	--
Temperature, field measured	FIELD	09/12-13/2023	deg c	--	18	21.06	19.3	21.58	19.47	17.35	22.6	20.4	16.55	13.93	19	17.03	16.6	--	--	--	--
Temperature, field measured	FIELD	03/25-26/2024	deg c	--	13.57	12.08	13.72	13.78	14.83	12.11	18.01	13.63	11.79	13.57	13.93	--	14.86	--	--	--	--
Temperature, field measured	FIELD	09/03-04/2024	deg c	--	17.94	20.85	18.31	18	17.98	16.46	23.68	19.6	17.97	16.17	17.38	17.6	16.62	--	--	--	--
Temperature, field measured	FIELD	03/11-12/2025	deg c	--	13.85	13.06	14.16	14.64	16.3	14.57	20.94	13.73	13.92	13.85	13.07	15.1	14.9	--	--	--	--
Tetrachloroethylene (PCE)	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Tetrachloroethylene (PCE)	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	--
Tetrachloroethylene (PCE)	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethylene (PCE)	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Tetrachloroethylene (PCE)	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Tetrachloroethylene (PCE)	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Tetrachloroethylene (PCE)	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Tetrachloroethylene (PCE)	SW8260	03/21-22/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Tetrachloroethylene (PCE)	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Tetrachloroethylene (PCE)	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Tetrachloroethylene (PCE)	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Tetrachloroethylene (PCE)	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Thallium	E200.8	03/12-13/2009	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	06/16-17/2009	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/16-18/2009	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.3	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	12/08-09/2009	ug/L	2	< 0.2	< 0.2	< 0.2	--	< 0.2	< 0.2	< 0.2	0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	12/08-19/2009	ug/L	2	--	--	--	< 0.2	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	E200.8	03/29-30/2010	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	06/16-17/2010	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/07-08/2010	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	12/07-08/2010	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/28-29/2011	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/27-28/2011	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/13-14/2012	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/17-19/2012	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/19-20/2013	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/23-24/2013	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/10-11/2014	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/16-17/2014	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	--	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/29/2014	ug/L	2	--	--	--	--	--	--	--	--	--	--	< 0.2	--	--	--	--	--	--
Thallium	E200.8	03/17-18/2015	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/14-15/2015	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/30/2015	ug/L	2	--	--	--	--	--	--	--	--	--	--	< 0.2	--	--	--	--	< 0.2	--
Thallium	E200.8	03/23-24/2016	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/20-21/2016	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/21-22/2017	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/20-21/2017	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/29-30/2018	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/19-20/2018	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/18-19/2019	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/25-26/2019	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	06/08-09/2020	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/09-10/2020	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/02-03/2021	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	09/13-14/2021	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/07-08/2022	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	08/23-24/2022	ug/L	2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	--	--
Thallium	E200.8	03/21-22/2023	ug/L	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--
Thallium	E200.8	09/12-13/2023	ug/L	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1 J	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--
Thallium	E200.8	03/25-26/2024	ug/L	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1 J	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--
Thallium	E200.8	09/03-04/2024	ug/L	2	< 0.1	< 0.1	< 0.1	< 0.1	0.1 J	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--
Thallium	E200.8	03/11-12/2025	ug/L	2	< 0.1	< 0.1	< 0.1	< 0.1	0.1 J	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	--	--
Toluene	SW8260	03/12-13/2009	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Toluene	SW8260	06/16-17/2009	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Toluene	SW8260	09/16-18/2009	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	12/08-09/2009	ug/L	1000	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	12/08-19/2009	ug/L	1000	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	SW8260	03/29-30/2010	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	06/16-17/2010	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/07-08/2010	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	12/07-08/2010	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/28-29/2011	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/27-28/2011	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/13-14/2012	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/17-19/2012	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/19-20/2013	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/23-24/2013	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/10-11/2014	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/16-17/2014	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/29/2014	ug/L	1000	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Toluene	SW8260	03/17-18/2015	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Toluene	SW8260	09/14-15/2015	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Toluene	SW8260	09/30/2015	ug/L	1000	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Toluene	SW8260	03/23-24/2016	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/20-21/2016	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/21-22/2017	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/20-21/2017	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/29-30/2018	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/19-20/2018	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/18-19/2019	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/25-26/2019	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	06/08-09/2020	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/09-10/2020	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/02-03/2021	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	09/13-14/2021	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/07-08/2022	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	08/23-24/2022	ug/L	1000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Toluene	SW8260	03/21-23/2023	ug/L	1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Toluene	SW8260	09/12-13/2023	ug/L	1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Toluene	SW8260	03/25-26/2024	ug/L	1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Toluene	SW8260	09/03-04/2024	ug/L	1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Toluene	SW8260	03/11-12/2025	ug/L	1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Total Dissolved Solids	SM2540C	03/12-13/2009	mg/L	PQL = 10 mg/L	400	626	18	152	120	156	130	--	206	170	76	84	42	--	--	--	--
Total Dissolved Solids	SM2540C	06/16-17/2009	mg/L	PQL = 10 mg/L	410	726	34	148	114	114	122	446	242	152	84	80	24	--	--	--	--
Total Dissolved Solids	SM2540C	09/16-18/2009	mg/L	PQL = 10 mg/L	344	676	26	142	104	90	130	496	274	210	92	100	12	--	--	--	--
Total Dissolved Solids	SM2540C	12/08-09/2009	mg/L	PQL = 10 mg/L	274	822	30	--	110	94	138	394	214	160	90	100	36	--	--	--	--
Total Dissolved Solids	SM2540C	12/08-19/2009	mg/L	PQL = 10 mg/L	--	--	--	170	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dissolved Solids	SM2540C	03/29-30/2010	mg/L	PQL = 10 mg/L	84	978	26	158	84	110	142	360	320	174	90	84	38	--	--	--	--
Total Dissolved Solids	SM2540C	06/16-17/2010	mg/L	PQL = 10 mg/L	80	594	26	158	82	84	138	386	236	158	70	70	34	--	--	--	--
Total Dissolved Solids	SM2540C	09/07-08/2010	mg/L	PQL = 10 mg/L	80	560	20	174	90	94	138	330	260	134	64	76	30	--	--	--	--
Total Dissolved Solids	SM2540C	12/07-08/2010	mg/L	PQL = 10 mg/L	78	722	36	180	96	140	134	296	210	136	78	72	48	--	--	--	--
Total Dissolved Solids	SM2540C	03/28-29/2011	mg/L	PQL = 10 mg/L	70	780	16	172	102	174	146	302	228	132	54	76	38	--	--	--	--
Total Dissolved Solids	SM2540C	09/27-28/2011	mg/L	PQL = 10 mg/L	212	588	34	164	108	278	154	364	220	122	78	86	44	--	--	--	--
Total Dissolved Solids	SM2540C	03/13-14/2012	mg/L	PQL = 10 mg/L	78	700	32	150	122	226	142	384	188	108	76	82	32	--	--	--	--
Total Dissolved Solids	SM2540C	09/17-19/2012	mg/L	PQL = 10 mg/L	98	640	34	162	118	240	144	440	220	92	66	68	32	--	--	--	--
Total Dissolved Solids	SM2540C	03/19-20/2013	mg/L	PQL = 10 mg/L	130	696	20	150	122	188	146	398	206	112	66	68	30	--	--	--	--
Total Dissolved Solids	SM2540C	09/23-24/2013	mg/L	PQL = 10 mg/L	130	666	20	142	148	222	142	446	166	82	74	64	22	--	--	--	--
Total Dissolved Solids	SM2540C	03/10-11/2014	mg/L	PQL = 10 mg/L	124	536	< 10	120	112	194	126	320	148	82	58	36	< 10	--	--	--	--
Total Dissolved Solids	SM2540C	09/16-17/2014	mg/L	PQL = 10 mg/L	158	664	28	144	160	282	154	252	226	84	--	70	40	--	--	--	--
Total Dissolved Solids	SM2540C	09/29/2014	mg/L	PQL = 10 mg/L	--	--	--	--	--	--	--	--	--	--	84	--	--	--	--	--	--
Total Dissolved Solids	SM2540C	03/17-18/2015	mg/L	PQL = 10 mg/L	72	688	< 10	136	156	248	128	280	162	84	78	68	32	--	--	--	--
Total Dissolved Solids	SM2540C	09/14-15/2015	mg/L	PQL = 10 mg/L	118	702	16	126	172	312	138	220	166	94	--	58	22	--	--	--	--
Total Dissolved Solids	SM2540C	09/30/2015	mg/L	PQL = 10 mg/L	--	--	--	--	--	--	--	--	--	--	102	--	--	--	--	--	--
Total Dissolved Solids	SM2540C	03/23-24/2016	mg/L	PQL = 10 mg/L	92	722	20	158	198	370	140	268	224	86	74	86	34	--	--	--	--
Total Dissolved Solids	SM2540C	09/20-21/2016	mg/L	PQL = 10 mg/L	132	626	30	156	232	464	150	292	252	114	90	84	48	--	--	--	--
Total Dissolved Solids	SM2540C	03/21-22/2017	mg/L	PQL = 10 mg/L	116	486	34	152	266	262	140	300	218	104	104	78	56	--	--	--	--
Total Dissolved Solids	SM2540C	09/20-21/2017	mg/L	PQL = 10 mg/L	132	604	26	160	274	222	154	238	266	112	108	84	32	--	--	--	--
Total Dissolved Solids	SM2540C	03/29-30/2018	mg/L	PQL = 10 mg/L	98	374	16	142	228	178	282	272	126	110	80	66	36	--	--	--	--
Total Dissolved Solids	SM2540C	09/19-20/2018	mg/L	PQL = 10 mg/L	98	574	40	130	246	160	140	480	184	130	74	68	26	--	--	--	--
Total Dissolved Solids	SM2540C	03/18-19/2019	mg/L	PQL = 10 mg/L	102	680	22	120	140	162	138	458	212	70	68	76	26	--	--	--	--
Total Dissolved Solids	SM2540C	09/25-26/2019	mg/L	PQL = 10 mg/L	136	482	18	148	126	216	146	450	260	114	100	74	40	--	--	--	--
Total Dissolved Solids	SM2540C	06/08-09/2020	mg/L	PQL = 10 mg/L	116	536	20	134	158	250	132	332	292	96	66	74	36	--	--	--	--
Total Dissolved Solids	SM2540C	09/09-10/2020	mg/L	PQL = 10 mg/L	110	504	42	158	234	266	134	360	206	150	92	82	38	--	--	--	--
Total Dissolved Solids	SM2540C	03/02-03/2021	mg/L	PQL = 10 mg/L	136	592	22	134	174	236	118	358	176	140	82	76	26	--	--	--	--
Total Dissolved Solids	SM2540C	09/13-14/2021	mg/L	PQL = 10 mg/L	148	440	22	124	206	282	128	474	192	120	76	76	28	--	--	--	--
Total Dissolved Solids	SM2540C	03/07-08/2022	mg/L	PQL = 10 mg/L	194	364	18	142	186	302	104	508	142	116	70	50	32	--	--	--	--
Total Dissolved Solids	SM2540C	08/23-24/2022	mg/L	PQL = 10 mg/L	162	452	18	128	212	316	96	572	254	110	66	64	30	--	--	--	--
Total Dissolved Solids	SM2540C	03/21-22/2023	mg/L	PQL = 10 mg/L	168	710	22	102	166	346	160	534	168	110	66	80	34	--	--	--	--
Total Dissolved Solids	SM2540C	09/12-13/2023	mg/L	PQL = 10 mg/L	174	398	30	140	170	364	124	542	184	130	64	68	34	--	--	--	--
Total Dissolved Solids	SM2540C	03/25-26/2024	mg/L	PQL = 10 mg/L	218	398	30	144	172	366	84	574	128	110	76	170	66	--	--	--	--
Total Dissolved Solids	SM2540C	09/03-04/2024	mg/L	PQL = 10 mg/L	242	432	20	122	158	342	124	576	124	90	70	100	38	--	--	--	--
Total Dissolved Solids	SM2540C	03/11-12/2025	mg/L	PQL = 10 mg/L	254	352	12	106	140	308	100	518	130	84	66	58	22	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
trans-1,2-Dichloroethylene	SW8260	03/12-13/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
trans-1,2-Dichloroethylene	SW8260	06/16-17/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
trans-1,2-Dichloroethylene	SW8260	09/16-18/2009	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	12/08-09/2009	ug/L	100	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	12/08-19/2009	ug/L	100	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethylene	SW8260	03/29-30/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	06/16-17/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	12/07-08/2010	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/28-29/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/27-28/2011	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/13-14/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/17-19/2012	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/19-20/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/23-24/2013	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/10-11/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/16-17/2014	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/29/2014	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
trans-1,2-Dichloroethylene	SW8260	03/17-18/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/14-15/2015	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
trans-1,2-Dichloroethylene	SW8260	09/30/2015	ug/L	100	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
trans-1,2-Dichloroethylene	SW8260	03/23-24/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/20-21/2016	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/21-22/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/20-21/2017	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/29-30/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/19-20/2018	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/18-19/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/25-26/2019	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	06/08-09/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/09-10/2020	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/02-03/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	09/13-14/2021	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/07-08/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	08/23-24/2022	ug/L	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,2-Dichloroethylene	SW8260	03/21-23/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,2-Dichloroethylene	SW8260	09/12-13/2023	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,2-Dichloroethylene	SW8260	03/25-26/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,2-Dichloroethylene	SW8260	09/03-04/2024	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,2-Dichloroethylene	SW8260	03/11-12/2025	ug/L	100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,3-Dichloropropene	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
trans-1,3-Dichloropropene	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
trans-1,3-Dichloropropene	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,3-Dichloropropene	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
trans-1,3-Dichloropropene	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
trans-1,3-Dichloropropene	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
trans-1,3-Dichloropropene	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
trans-1,3-Dichloropropene	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,3-Dichloropropene	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,3-Dichloropropene	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,3-Dichloropropene	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,3-Dichloropropene	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,3-Dichloropropene	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
trans-1,4-Dichloro-2-butene	SW8260	03/12-13/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
trans-1,4-Dichloro-2-butene	SW8260	06/16-17/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
trans-1,4-Dichloro-2-butene	SW8260	09/16-18/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	12/08-09/2009	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	12/08-19/2009	ug/L	PQL = 5 ug/L	--	--	--	< 5	--	--	--	--	--	--	--	--	--	--	--	--	--
trans-1,4-Dichloro-2-butene	SW8260	03/29-30/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	06/16-17/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	12/07-08/2010	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	03/28-29/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/27-28/2011	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	03/13-14/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/17-19/2012	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	03/19-20/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/23-24/2013	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	03/10-11/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/16-17/2014	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/29/2014	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
trans-1,4-Dichloro-2-butene	SW8260	03/17-18/2015	ug/L	PQL = 5 ug/L	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	< 5
trans-1,4-Dichloro-2-butene	SW8260	09/14-15/2015	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
trans-1,4-Dichloro-2-butene	SW8260	09/30/2015	ug/L	PQL = 5 ug/L	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	< 2	--
trans-1,4-Dichloro-2-butene	SW8260	03/23-24/2016	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/20-21/2016	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/21-22/2017	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/20-21/2017	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/29-30/2018	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/19-20/2018	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/18-19/2019	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/25-26/2019	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	06/08-09/2020	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/09-10/2020	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/02-03/2021	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	09/13-14/2021	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/07-08/2022	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	08/23-24/2022	ug/L	PQL = 5 ug/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
trans-1,4-Dichloro-2-butene	SW8260	03/21-23/2023	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,4-Dichloro-2-butene	SW8260	09/12-13/2023	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,4-Dichloro-2-butene	SW8260	03/25-26/2024	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,4-Dichloro-2-butene	SW8260	09/03-04/2024	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
trans-1,4-Dichloro-2-butene	SW8260	03/11-12/2025	ug/L	PQL = 5 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Trichloroethylene	SW8260	03/12-13/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	1.7	< 1	< 1	< 1	< 1	< 1	--	--
Trichloroethylene	SW8260	06/16-17/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	--	--
Trichloroethylene	SW8260	09/16-18/2009	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	12/08-09/2009	ug/L	5	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	12/08-19/2009	ug/L	5	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethylene	SW8260	03/29-30/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	06/16-17/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	12/07-08/2010	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/28-29/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/27-28/2011	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/13-14/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/17-19/2012	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/19-20/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/23-24/2013	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/10-11/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/16-17/2014	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/29/2014	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Trichloroethylene	SW8260	03/17-18/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/14-15/2015	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Trichloroethylene	SW8260	09/30/2015	ug/L	5	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Trichloroethylene	SW8260	03/23-24/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/20-21/2016	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/21-22/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/20-21/2017	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/29-30/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/19-20/2018	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/18-19/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/25-26/2019	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	06/08-09/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/09-10/2020	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/02-03/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	09/13-14/2021	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/07-08/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	08/23-24/2022	ug/L	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichloroethylene	SW8260	03/21-23/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichloroethylene	SW8260	09/12-13/2023	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichloroethylene	SW8260	03/25-26/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichloroethylene	SW8260	09/03-04/2024	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	0.7 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichloroethylene	SW8260	03/11-12/2025	ug/L	5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichlorofluoromethane (CFC-11)	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	3.2	< 1	< 1	< 1	< 1	--	--
Trichlorofluoromethane (CFC-11)	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.4	< 1	< 1	< 1	< 1	--	--
Trichlorofluoromethane (CFC-11)	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.5	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	3	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.2	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.2	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.4	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.9	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.8	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.5	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.9	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	0.9	--	--	--	--	--	--
Trichlorofluoromethane (CFC-11)	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Trichlorofluoromethane (CFC-11)	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Trichlorofluoromethane (CFC-11)	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.6	< 1	< 1	< 1	< 1	--	< 1

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Trichlorofluoromethane (CFC-11)	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Trichlorofluoromethane (CFC-11)	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichlorofluoromethane (CFC-11)	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichlorofluoromethane (CFC-11)	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichlorofluoromethane (CFC-11)	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Trichlorofluoromethane (CFC-11)	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Turbidity, field measured	FIELD	03/13-14/2012	NTU	PQL = 0.11 NTU	8.71	1.82	0.76	0.47	0.17	0.5	--	0.71	2.89	3.54	1.23	0.73	1.1	--	--	--	--
Turbidity, field measured	FIELD	09/17-19/2012	NTU	PQL = 0.11 NTU	0.99	2.51	0.96	1.38	0.58	1.08	0.24	1.75	3.83	3.67	1.2	0.7	2.45	--	--	--	--
Turbidity, field measured	FIELD	03/19-20/2013	NTU	PQL = 0.11 NTU	1.39	0.93	1.79	1.5	0.64	0.96	0.22	2.16	6.74	1.71	1.39	0.89	0.63	--	--	--	--
Turbidity, field measured	FIELD	09/23-24/2013	NTU	PQL = 0.11 NTU	0.99	3.07	0.93	2.2	0.7	0.8	0.31	1.28	2.83	2.6	0.07	< 0	0.81	--	--	--	--
Turbidity, field measured	FIELD	03/10-11/2014	NTU	PQL = 0.11 NTU	1.47	0.86	0.61	1.6	0.43	0.6	0.68	0.77	3.63	0.78	0.94	0.22	0.91	--	--	--	--
Turbidity, field measured	FIELD	09/16-17/2014	NTU	PQL = 0.11 NTU	0.74	0.74	0.83	2.89	1.08	0.83	0.12	4.97	2.15	0.63	--	0.99	3.8	--	--	--	--
Turbidity, field measured	FIELD	09/29/2014	NTU	PQL = 0.11 NTU	--	--	--	--	--	--	--	--	--	--	11.88	--	--	--	--	--	--
Turbidity, field measured	FIELD	03/17-18/2015	NTU	PQL = 0.11 NTU	2.83	4.07	0.67	6.23	1.49	2.65	1.38	27.7	2.47	2.82	0.63	2.41	10.58	--	--	--	--
Turbidity, field measured	FIELD	09/14-15/2015	NTU	PQL = 0.11 NTU	1.53	1.94	1.87	2.54	1.49	1.08	1.46	5.47	2.56	1.11	--	0.96	0.91	--	--	--	--
Turbidity, field measured	FIELD	09/30/2015	NTU	PQL = 0.11 NTU	--	--	--	--	--	--	--	--	--	--	9.19	--	--	--	--	--	--
Turbidity, field measured	FIELD	03/23-24/2016	NTU	PQL = 0.11 NTU	0.84	14.73	10.92	7.36	7.22	8.28	2.29	1.71	12.69	6.86	1.68	15.1	10.47	--	--	--	--
Turbidity, field measured	FIELD	09/20-21/2016	NTU	PQL = 0.11 NTU	10.01	7.18	10.85	1.91	1.36	2.32	2.36	2.39	0.79	4.75	1.71	12.63	11.39	--	--	--	--
Turbidity, field measured	FIELD	03/21-22/2017	NTU	PQL = 0.11 NTU	1.04	18.28	22.41	4.47	17.42	1.56	1.45	1.75	19.87	16.84	1.05	17.7	17.15	--	--	--	--
Turbidity, field measured	FIELD	09/20-21/2017	NTU	PQL = 0.11 NTU	0.12	15.18	1.36	16.1	0.1	0.33	0.58	12.82	18.21	13.05	0.35	12.43	16.88	--	--	--	--
Turbidity, field measured	FIELD	03/29-30/2018	NTU	PQL = 0.11 NTU	6.45	0.93	9.08	8.57	7.73	5.32	1.11	5.44	9.23	< 0	5.91	0.15	0.29	--	--	--	--
Turbidity, field measured	FIELD	09/19-20/2018	NTU	PQL = 0.11 NTU	0.04	2.22	0.3	2.06	< 0	< 0	1	0.67	5.15	0.14	0.31	0.15	< 0	--	--	--	--
Turbidity, field measured	FIELD	03/18-19/2019	NTU	PQL = 0.11 NTU	18	13.3	0.48	2.32	0.11	0.03	< 0	< 0	2.21	54	51	18	0.04	--	--	--	--
Turbidity, field measured	FIELD	09/25-26/2019	NTU	PQL = 0.11 NTU	0.3	8.35	0.38	3.59	0.33	0.95	1.1	0.6	1.12	1.7	1.55	4.65	1.27	--	--	--	--
Turbidity, field measured	FIELD	06/08-09/2020	NTU	PQL = 0.11 NTU	0.84	1.83	0.76	3.74	1.5	0.45	1.31	0.44	3.62	1.22	0.79	0.89	0.6	--	--	--	--
Turbidity, field measured	FIELD	09/09-10/2020	NTU	PQL = 0.11 NTU	3.15	8.89	0.58	3.32	3.53	0.75	0.73	4.53	2.76	0.59	3.54	2.76	2.37	--	--	--	--
Turbidity, field measured	FIELD	03/02-03/2021	NTU	PQL = 0.11 NTU	9.1	5.4	5	7.45	1.19	0	1.2	0	0	6.4	1.2	0	8.4	--	--	--	--
Turbidity, field measured	FIELD	09/13-14/2021	NTU	PQL = 0.11 NTU	1.28	9.82	1.08	9.86	0.29	< 0	3.95	2.71	2.02	0.89	0.29	0.03	< 0	--	--	--	--
Turbidity, field measured	FIELD	03/07-08/2022	NTU	PQL = 0.11 NTU	1.49	9.98	3.83	9.79	1.35	2.68	3.72	1.5	3.15	0.86	4.84	3.54	1.4	--	--	--	--
Turbidity, field measured	FIELD	08/23-24/2022	NTU	PQL = 0.11 NTU	5.74	9.49	1.51	9.71	1.43	1.13	4.29	4.17	1.95	1.63	6.33	1.64	3.8	--	--	--	--
Turbidity, field measured	FIELD	03/21-22/2023	NTU	PQL = 0.11 NTU	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--
Turbidity, field measured	FIELD	09/12-13/2023	NTU	PQL = 0.11 NTU	0	8.7	2.4	0.9	0	0	0	0	4.7	0	0	0	0	--	--	--	--
Turbidity, field measured	FIELD	03/25-26/2024	NTU	PQL = 0.11 NTU	0	0	0	24.1	0	0	0	0	0	0	0	0	0	--	--	--	--
Turbidity, field measured	FIELD	09/03-04/2024	NTU	PQL = 0.11 NTU	0	64	0.6	4.1	0	0	0.7	0.4	0	1.2	0.6	3.7	0	--	--	--	--
Turbidity, field measured	FIELD	03/11-12/2025	NTU	PQL = 0.11 NTU	1.1	2.1	4.3	26.1	3.5	2.8	2.4	19.7	18.9	0	0	10.6	0	--	--	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Vanadium	E200.7	03/12-13/2009	ug/L	PQL = 10 ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	06/16-17/2009	ug/L	PQL = 10 ug/L	2	< 10	< 10	< 10	< 10	33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	09/16-18/2009	ug/L	PQL = 10 ug/L	< 10	< 10	< 10	< 10	< 10	36	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	12/08-09/2009	ug/L	PQL = 10 ug/L	< 10	< 10	< 10	--	< 10	16	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	12/08-19/2009	ug/L	PQL = 10 ug/L	--	--	--	< 10	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	E200.7	03/29-30/2010	ug/L	PQL = 10 ug/L	3	< 10	< 10	< 10	< 10	36	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	06/16-17/2010	ug/L	PQL = 10 ug/L	< 10	< 10	< 10	< 10	< 10	33	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	09/07-08/2010	ug/L	PQL = 10 ug/L	3	< 10	< 10	< 10	< 10	32	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	12/07-08/2010	ug/L	PQL = 10 ug/L	3	< 10	< 10	< 10	< 10	31	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	03/28-29/2011	ug/L	PQL = 10 ug/L	3	< 10	< 10	< 10	< 10	30	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	09/27-28/2011	ug/L	PQL = 10 ug/L	4	2	< 10	< 10	< 10	30	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	03/13-14/2012	ug/L	PQL = 10 ug/L	3	< 10	< 10	< 10	< 10	28	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	09/17-19/2012	ug/L	PQL = 10 ug/L	5	< 10	< 10	< 10	< 10	29	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	03/19-20/2013	ug/L	PQL = 10 ug/L	4	< 10	< 10	< 10	< 10	27	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	09/23-24/2013	ug/L	PQL = 10 ug/L	5	< 10	< 10	< 10	< 10	25	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	--	--
Vanadium	E200.7	03/10-11/2014	ug/L	PQL = 10 ug/L	4	< 5	< 5	< 5	< 5	22	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/16-17/2014	ug/L	PQL = 10 ug/L	5	< 5	< 5	< 5	< 5	29	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/29/2014	ug/L	PQL = 10 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	--	--
Vanadium	E200.7	03/17-18/2015	ug/L	PQL = 10 ug/L	7	< 5	< 5	< 5	3	32	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/14-15/2015	ug/L	PQL = 10 ug/L	7	< 5	< 5	< 5	2	27	< 5	< 5	< 5	< 5	--	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/30/2015	ug/L	PQL = 10 ug/L	--	--	--	--	--	--	--	--	--	--	< 5	--	--	--	--	< 5	--
Vanadium	E200.7	03/23-24/2016	ug/L	PQL = 10 ug/L	9	< 5	< 5	< 5	< 5	29	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/20-21/2016	ug/L	PQL = 10 ug/L	7	< 5	< 5	< 5	< 5	26	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/21-22/2017	ug/L	PQL = 10 ug/L	4	< 5	< 5	< 5	< 5	21	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/20-21/2017	ug/L	PQL = 10 ug/L	8	< 5	< 5	< 5	< 5	17	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/29-30/2018	ug/L	PQL = 10 ug/L	7	< 5	< 5	< 5	< 5	17	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/19-20/2018	ug/L	PQL = 10 ug/L	< 5	< 5	< 5	< 5	< 5	16	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/18-19/2019	ug/L	PQL = 10 ug/L	< 5	< 5	< 5	< 5	< 5	12	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/25-26/2019	ug/L	PQL = 10 ug/L	< 5	5	< 5	< 5	< 5	14	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	06/08-09/2020	ug/L	PQL = 10 ug/L	3	< 5	< 5	< 5	< 5	12	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/09-10/2020	ug/L	PQL = 10 ug/L	< 5	< 5	< 5	< 5	< 5	13	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/02-03/2021	ug/L	PQL = 10 ug/L	< 5	< 5	< 5	< 5	< 5	12	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	09/13-14/2021	ug/L	PQL = 10 ug/L	10	2	< 5	< 5	< 5	11	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/07-08/2022	ug/L	PQL = 10 ug/L	9	< 5	< 5	< 5	< 5	10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	08/23-24/2022	ug/L	PQL = 10 ug/L	7	< 5	< 5	< 5	< 5	10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	--	--
Vanadium	E200.7	03/21-22/2023	ug/L	PQL = 10 ug/L	6	< 2	< 2	< 2	< 2	8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Vanadium	E200.7	09/12-13/2023	ug/L	PQL = 10 ug/L	8	< 2	< 2	< 2	< 2	8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Vanadium	E200.7	03/25-26/2024	ug/L	PQL = 10 ug/L	7	< 2	< 2	< 2	< 2	8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Vanadium	E200.7	09/03-04/2024	ug/L	PQL = 10 ug/L	8	< 2	< 2	< 2	2 J	9	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Vanadium	E200.7	03/11-12/2025	ug/L	PQL = 10 ug/L	6	< 2	< 2	< 2	< 2	8	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Vinyl acetate	SW8260	03/12-13/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Vinyl acetate	SW8260	06/16-17/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	--
Vinyl acetate	SW8260	09/16-18/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	12/08-09/2009	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	12/08-19/2009	ug/L	PQL = 1 ug/L	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl acetate	SW8260	03/29-30/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	06/16-17/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	12/07-08/2010	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/28-29/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/27-28/2011	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/13-14/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/17-19/2012	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/19-20/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/23-24/2013	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/10-11/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/16-17/2014	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/29/2014	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Vinyl acetate	SW8260	03/17-18/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/14-15/2015	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Vinyl acetate	SW8260	09/30/2015	ug/L	PQL = 1 ug/L	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Vinyl acetate	SW8260	03/23-24/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/20-21/2016	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/21-22/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/20-21/2017	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/29-30/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/19-20/2018	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/18-19/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/25-26/2019	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	06/08-09/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/09-10/2020	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/02-03/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	09/13-14/2021	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/07-08/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	08/23-24/2022	ug/L	PQL = 1 ug/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl acetate	SW8260	03/21-23/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl acetate	SW8260	09/12-13/2023	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl acetate	SW8260	03/25-26/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl acetate	SW8260	09/03-04/2024	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl acetate	SW8260	03/11-12/2025	ug/L	PQL = 1 ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl chloride	SW8260	03/12-13/2009	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	5.4	< 1	< 1	< 1	< 1	< 1	--	--
Vinyl chloride	SW8260	06/16-17/2009	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.3	< 1	< 1	< 1	< 1	< 1	--	--
Vinyl chloride	SW8260	09/16-18/2009	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.2	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	12/08-09/2009	ug/L	2	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	< 1	3.1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	12/08-19/2009	ug/L	2	--	--	--	< 1	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	SW8260	03/29-30/2010	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	06/16-17/2010	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/07-08/2010	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.8	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	12/07-08/2010	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.4	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/28-29/2011	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/27-28/2011	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/13-14/2012	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/17-19/2012	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/19-20/2013	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.6	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/23-24/2013	ug/L	2	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/10-11/2014	ug/L	2	< 1	< 1	< 1	< 1	0.7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/16-17/2014	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/29/2014	ug/L	2	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	--	--
Vinyl chloride	SW8260	03/17-18/2015	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/14-15/2015	ug/L	2	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	--	< 1	< 1	< 1	< 1	--	--
Vinyl chloride	SW8260	09/30/2015	ug/L	2	--	--	--	--	--	--	--	--	--	--	< 1	--	--	--	--	< 1	--
Vinyl chloride	SW8260	03/23-24/2016	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/20-21/2016	ug/L	2	< 1	< 1	< 1	< 1	0.5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/21-22/2017	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/20-21/2017	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/29-30/2018	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/19-20/2018	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/18-19/2019	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/25-26/2019	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	06/08-09/2020	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/09-10/2020	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/02-03/2021	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	09/13-14/2021	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/07-08/2022	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	08/23-24/2022	ug/L	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Vinyl chloride	SW8260	03/21-23/2023	ug/L	2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl chloride	SW8260	09/12-13/2023	ug/L	2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl chloride	SW8260	03/25-26/2024	ug/L	2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl chloride	SW8260	09/03-04/2024	ug/L	2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Vinyl chloride	SW8260	03/11-12/2025	ug/L	2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Xylenes (total)	SW8260	03/12-13/2009	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Xylenes (total)	SW8260	06/16-17/2009	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	--
Xylenes (total)	SW8260	09/16-18/2009	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	12/08-09/2009	ug/L	10000	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	12/08-19/2009	ug/L	10000	--	--	--	< 2	--	--	--	--	--	--	--	--	--	--	--	--	--
Xylenes (total)	SW8260	03/29-30/2010	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	06/16-17/2010	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/07-08/2010	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	12/07-08/2010	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/28-29/2011	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/27-28/2011	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/13-14/2012	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/17-19/2012	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/19-20/2013	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/23-24/2013	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/10-11/2014	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/16-17/2014	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/29/2014	ug/L	10000	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	--	--
Xylenes (total)	SW8260	03/17-18/2015	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/14-15/2015	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2	< 2	< 2	< 2	--	--
Xylenes (total)	SW8260	09/30/2015	ug/L	10000	--	--	--	--	--	--	--	--	--	--	< 2	--	--	--	--	< 2	--
Xylenes (total)	SW8260	03/23-24/2016	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/20-21/2016	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/21-22/2017	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/20-21/2017	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/29-30/2018	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/19-20/2018	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/18-19/2019	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/25-26/2019	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	06/08-09/2020	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/09-10/2020	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/02-03/2021	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	09/13-14/2021	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/07-08/2022	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	08/23-24/2022	ug/L	10000	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	--	< 2
Xylenes (total)	SW8260	03/21-23/2023	ug/L	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Xylenes (total)	SW8260	09/12-13/2023	ug/L	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Xylenes (total)	SW8260	03/25-26/2024	ug/L	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Xylenes (total)	SW8260	09/03-04/2024	ug/L	10000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	< 0.5
Xylenes (total)	SW8260	03/11-12/2025	ug/L	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	--	< 1
Zinc	E200.7	03/12-13/2009	ug/L	600	< 10	< 10	36	< 10	14	< 10	< 10	--	32	< 10	34	< 10	10	< 10	< 10	--	--
Zinc	E200.7	06/16-17/2009	ug/L	600	< 10	13	46	< 10	7	< 10	< 10	49	65	6	34	< 10	15	< 10	< 10	--	--
Zinc	E200.7	09/16-18/2009	ug/L	600	< 10	< 10	35	< 10	< 10	< 10	< 10	45	36	< 10	27	18	12	< 10	< 10	--	--
Zinc	E200.7	12/08-09/2009	ug/L	600	< 10	14	34	--	6	< 10	< 10	29	52	7	29	67	8	< 10	< 10	--	--
Zinc	E200.7	12/08-19/2009	ug/L	600	--	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	E200.7	03/29-30/2010	ug/L	600	< 10	23	35	7	6	< 10	< 10	7	16	8	26	10	17	< 10	< 10	--	--
Zinc	E200.7	06/16-17/2010	ug/L	600	< 10	11	37	7	5	5	< 10	32	18	7	24	53	9	< 10	< 10	--	--
Zinc	E200.7	09/07-08/2010	ug/L	600	< 10	5	33	< 10	< 10	< 10	< 10	24	23	4	20	34	8	< 10	< 10	--	--
Zinc	E200.7	12/07-08/2010	ug/L	600	< 10	< 10	33	< 10	4	< 10	< 10	24	15	10	21	24	13	< 10	< 10	--	--
Zinc	E200.7	03/28-29/2011	ug/L	600	< 10	< 10	31	< 10	< 10	< 10	< 10	39	15	< 10	20	15	12	< 10	< 10	--	--
Zinc	E200.7	09/27-28/2011	ug/L	600	< 10	10	39	22	6	< 10	< 10	38	16	6	22	25	10	< 10	6	--	--
Zinc	E200.7	03/13-14/2012	ug/L	600	< 10	< 10	34	< 10	4	< 10	< 10	43	8	8	19	17	4	< 10	< 10	--	--
Zinc	E200.7	09/17-19/2012	ug/L	600	8	4	45	< 10	9	< 10	< 10	26	11	9	22	26	9	< 10	4	--	--
Zinc	E200.7	03/19-20/2013	ug/L	600	< 10	4	34	< 10	7	< 10	< 10	12	13	22	25	16	5	< 10	< 10	--	--
Zinc	E200.7	09/23-24/2013	ug/L	600	< 10	8	37	< 10	6	< 10	< 10	26	15	41	25	15	4	< 10	< 10	--	--
Zinc	E200.7	03/10-11/2014	ug/L	600	< 10	4	39	< 10	11	< 10	< 10	15	48	38	30	20	11	< 10	4	--	--
Zinc	E200.7	09/16-17/2014	ug/L	600	< 10	5	37	< 10	8	< 10	< 10	15	34	20	--	16	10	< 10	< 10	--	--
Zinc	E200.7	09/29/2014	ug/L	600	--	--	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--
Zinc	E200.7	03/17-18/2015	ug/L	600	< 10	< 10	33	12	10	< 10	< 10	9	16	17	22	19	8	< 10	< 10	--	--
Zinc	E200.7	09/14-15/2015	ug/L	600	< 10	< 10	35	< 10	9	< 10	< 10	13	16	32	--	18	< 10	< 10	< 10	--	--
Zinc	E200.7	09/30/2015	ug/L	600	--	--	--	--	--	--	--	--	--	--	24	--	--	--	--	< 10	--
Zinc	E200.7	03/23-24/2016	ug/L	600	< 10	< 10	36	< 10	12	< 10	< 10	< 10	7	13	27	22	8	< 10	< 10	--	--
Zinc	E200.7	09/20-21/2016	ug/L	600	5	< 10	67	< 10	15	< 10	< 10	< 10	39	16	32	6	12	< 10	< 10	--	--
Zinc	E200.7	03/21-22/2017	ug/L	600	< 10	< 10	38	< 10	14	< 10	< 10	< 10	12	14	31	53	6	< 10	< 10	--	--
Zinc	E200.7	09/20-21/2017	ug/L	600	< 10	< 10	33	19	13	< 10	< 10	< 10	32	12	29	37	7	< 10	< 10	--	--

TABLE 3

SUMMARY OF GROUNDWATER CONSTITUENTS

Oak Avenue Rubble Landfill, Joppa, Maryland -- Groundwater Discharge Permit No. 2020-GWD-2445

Parameter	Method	Sample Date	Unit	MCL or MD Groundwater Standard or PQL*	MW-1	MW-10	MW-11	MW-12	MW-13	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Field Blank	Field Blank 2	Field Blank 3	Trip Blank
Zinc	E200.7	03/29-30/2018	ug/L	600	< 10	< 10	33	8	14	< 10	5	18	27	14	30	41	5	< 10	< 10	--	--
Zinc	E200.7	09/19-20/2018	ug/L	600	< 10	< 10	34	5	25	< 10	< 10	4	59	20	26	40	7	6	< 10	--	--
Zinc	E200.7	03/18-19/2019	ug/L	600	< 10	< 10	33	5	11	< 10	< 10	< 10	11	20	21	37	5	< 10	< 10	--	--
Zinc	E200.7	09/25-26/2019	ug/L	600	5	6	41	8	11	5	6	4	24	21	22	40	12	4	4	--	--
Zinc	E200.7	06/08-09/2020	ug/L	600	< 10	< 10	42	6	9	< 10	< 10	< 10	< 10	19	25	44	6	< 10	< 10	--	--
Zinc	E200.7	09/09-10/2020	ug/L	600	< 10	5	48	< 10	11	< 10	< 10	< 10	12	26	25	50	19	< 10	< 10	--	--
Zinc	E200.7	03/02-03/2021	ug/L	600	< 10	< 10	49	< 10	12	< 10	< 10	< 10	10	17	30	48	7	< 10	< 10	--	--
Zinc	E200.7	09/13-14/2021	ug/L	600	< 10	11	48	7	12	< 10	< 10	< 10	10	21	32	49	7	< 10	< 10	--	--
Zinc	E200.7	03/07-08/2022	ug/L	600	< 10	7	43	7	10	< 10	< 10	< 10	12	14	32	49	6	< 10	< 10	--	--
Zinc	E200.7	08/23-24/2022	ug/L	600	< 10	< 10	41	5	10	< 10	< 10	12	14	22	28	51	8	< 10	< 10	--	--
Zinc	E200.7	03/21-22/2023	ug/L	600	< 5	< 5	52	< 10	< 10	< 5	< 5	< 5	24	18	28	54	18	< 5	< 5	--	--
Zinc	E200.7	09/12-13/2023	ug/L	600	< 5	6 J	40	6 J	7 J	< 5	< 5	9 J	20	14	32	53	10 J	< 5	< 5	--	--
Zinc	E200.7	03/25-26/2024	ug/L	600	< 5	5 J	42	26	7 J	< 5	< 5	9.5 J	9.6 J	12	26	78	14	< 5	< 5	--	--
Zinc	E200.7	09/03-04/2024	ug/L	600	< 5	< 5	39	< 10	5 J	< 5	< 5	< 5	17	11	21	11	< 10	< 5	< 5	--	--
Zinc	E200.7	03/11-12/2025	ug/L	600	< 5	< 5	41	14	6 J	< 5	< 5	< 5	14	12	23	13	6 J	< 5	< 5	--	--

NOTES

-- - No sample

11.63 Denotes analytical result exceeds MCL or MD Groundwater Standard

mg/L - milligrams per liter

ug/L - micrograms per liter

MCL - [U.S. EPA] Maximum Contaminant Level

MD Groundwater Standard - State of Maryland Department of the Environment Cleanup Standards for Soil and Groundwater, October 2018

PQL - Practical Quantitation Limit specified in site's State of Maryland Groundwater Discharge Permit No. 2020-GWD-2445

* PQL provided for compounds with no MCL or MD Groundwater Standard or where the laboratory detection/reporting limit is higher than the MCL or MD Groundwater Standard

APPENDIX A: LABORATORY REPORT AND FIELD INFORMATION FORMS

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Monday, March 31, 2025

Dallas Mellott
OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
1020 OAK AVENUE
JOPPA, MD 21085

RE: Pappy's 229S Order No.: G2503682

Dear Dallas Mellott:

Geochemical Testing received 6 sample(s) on 3/12/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

Nate R. Bergstresser
Client Support

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *31-Mar-25*

CLIENT: OAK AVENUE RUBBLE FILL - PAPPYS
Project: Pappy's 229S
Lab Order: G2503682

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

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Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-4
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 10:25:00 AM
Lab ID:	G2503682-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	6.36		0		S.U.			03/11/25 10:25 AM
Specific Conductance (Field)	1010		0		µmhos/cm			03/11/25 10:25 AM
Temperature (Field)	13.73		0		deg C			03/11/25 10:25 AM
Turbidity (Field)	19.7		0		NTU			03/11/25 10:25 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	8	J	5.0	10	mg/L CaCO3	1		03/14/25 11:52 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/14/25 11:52 AM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	6.58	H	0		S.U.	1		03/14/25 11:52 AM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	518		10	10	mg/L	1	03/13/25 9:20 AM	03/13/25 9:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	8	J	5.0	10	mg/L CaCO3	1		03/14/25 11:52 AM
INDICATOR ORGANIC PARAMETERS			Analyst:	**AVH**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	10		5.0	10	mg/L	1	03/15/25 6:59 AM	03/15/25 9:56 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	328		0.200	1.00	mg/L	1	03/12/25 12:40 PM	03/12/25 2:12 PM
Sulfate	21.5		0.50	2.0	mg/L	1	03/12/25 12:40 PM	03/12/25 2:12 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/14/25 5:40 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	2.42		0.040	0.10	mg/L as N	2	03/17/25 6:07 PM	03/19/25 1:47 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	2.42		0.040	0.12	mg/L as N	2	03/17/25 6:07 PM	03/19/25 1:47 PM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:06 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:06 PM
Lead	0.0004	J	0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:06 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:06 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-4
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 10:25:00 AM
Lab ID:	G2503682-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:04 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.187		0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Calcium	22.6		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Iron	0.19		0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Magnesium	17.5		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Manganese	0.181		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Potassium	16.6		0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Sodium	153		0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:25 AM
Hardness (SM 2340B)	129		0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:25 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:00 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:00 PM
Surr: 1,1,2,2-Tetrachloroethane	87.0		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 7:00 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-4
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 10:25:00 AM
Lab ID:	G2503682-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:07 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:07 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 8:07 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 8:07 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:07 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 4:55 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:07 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 8:07 AM
Surr: 1,2-Dichloroethane-d4	96.8		0	70-130	%REC	1		03/16/25 8:07 AM
Surr: 4-Bromofluorobenzene	97.4		0	70-130	%REC	1		03/16/25 8:07 AM
Surr: Dibromofluoromethane	91.3		0	70-130	%REC	1		03/16/25 8:07 AM
Surr: Toluene-d8	99.8		0	70-130	%REC	1		03/16/25 8:07 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-12
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 11:55:00 AM
Lab ID:	G2503682-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	7.58		0		S.U.			03/11/25 11:55 AM
Specific Conductance (Field)	187		0		µmhos/cm			03/11/25 11:55 AM
Temperature (Field)	14.64		0		deg C			03/11/25 11:55 AM
Turbidity (Field)	26.1		0		NTU			03/11/25 11:55 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	106		5.0	10	mg/L CaCO3	1		03/14/25 2:09 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/14/25 2:09 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	7.65	H	0		S.U.	1		03/14/25 2:09 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	106		10	10	mg/L	1	03/13/25 9:20 AM	03/13/25 9:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	106		5.0	10	mg/L CaCO3	1		03/14/25 2:09 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**AVH**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/15/25 6:59 AM	03/15/25 9:56 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	1.50		0.200	1.00	mg/L	1	03/12/25 12:51 PM	03/12/25 3:42 PM
Sulfate	6.7		0.50	2.0	mg/L	1	03/12/25 12:51 PM	03/12/25 3:42 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/14/25 5:44 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.10		0.020	0.05	mg/L as N	1	03/17/25 6:07 PM	03/19/25 1:48 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.10		0.020	0.06	mg/L as N	1	03/17/25 6:07 PM	03/19/25 1:48 PM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:11 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:11 PM
Lead	0.0004	J	0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:11 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:11 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-12
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 11:55:00 AM
Lab ID:	G2503682-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:10 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0983		0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Calcium	23.3		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Cobalt	0.024		0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Iron	2.87		0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Magnesium	3.89		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Manganese	1.03		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Nickel	0.018		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Potassium	2.64		0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Sodium	18.3		0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Zinc	0.014		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:28 AM
Hardness (SM 2340B)	74.3		0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:28 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:26 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:26 PM
Surr: 1,1,2,2-Tetrachloroethane	93.7		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 7:26 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-12
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 11:55:00 AM
Lab ID:	G2503682-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:30 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:30 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 8:30 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 8:30 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:30 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 5:18 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:30 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 8:30 AM
Surr: 1,2-Dichloroethane-d4	96.5		0	70-130	%REC	1		03/16/25 8:30 AM
Surr: 4-Bromofluorobenzene	97.7		0	70-130	%REC	1		03/16/25 8:30 AM
Surr: Dibromofluoromethane	91.2		0	70-130	%REC	1		03/16/25 8:30 AM
Surr: Toluene-d8	99.5		0	70-130	%REC	1		03/16/25 8:30 AM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-13
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 1:05:00 PM
Lab ID:	G2503682-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	6.29		0		S.U.			03/11/25 1:05 PM
Specific Conductance (Field)	218		0		µmhos/cm			03/11/25 1:05 PM
Temperature (Field)	16.30		0		deg C			03/11/25 1:05 PM
Turbidity (Field)	3.5		0		NTU			03/11/25 1:05 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	67		5.0	10	mg/L CaCO3	1		03/14/25 2:15 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/14/25 2:15 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	6.49	H	0		S.U.	1		03/14/25 2:15 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	140		10	10	mg/L	1	03/18/25 11:20 AM	03/18/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	67		5.0	10	mg/L CaCO3	1		03/14/25 2:15 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**AVH**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/15/25 6:59 AM	03/15/25 9:56 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	30.3		0.200	1.00	mg/L	1	03/12/25 12:51 PM	03/12/25 4:45 PM
Sulfate	1.5	J	0.50	2.0	mg/L	1	03/12/25 12:51 PM	03/12/25 4:45 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/14/25 5:46 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	1.60		0.020	0.05	mg/L as N	1	03/17/25 6:07 PM	03/19/25 1:49 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	1.60		0.020	0.06	mg/L as N	1	03/17/25 6:07 PM	03/19/25 1:49 PM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:13 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:13 PM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:13 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:13 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-13
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 1:05:00 PM
Lab ID:	G2503682-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.0002		0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:11 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0466		0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Calcium	28.3		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Cobalt	0.003	J	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Magnesium	2.87		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Manganese	0.025		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Nickel	0.008	J	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Potassium	2.01		0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Sodium	13.9		0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Zinc	0.006	J	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:33 AM
Hardness (SM 2340B)	82.5		0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:33 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:52 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 7:52 PM
Surr: 1,1,2,2-Tetrachloroethane	86.7		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 7:52 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-13
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 1:05:00 PM
Lab ID:	G2503682-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:54 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:54 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 8:54 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 8:54 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 8:54 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 5:42 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Trichloromethane	0.7	J	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 8:54 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 8:54 AM
Surr: 1,2-Dichloroethane-d4	96.8		0	70-130	%REC	1		03/16/25 8:54 AM
Surr: 4-Bromofluorobenzene	97.1		0	70-130	%REC	1		03/16/25 8:54 AM
Surr: Dibromofluoromethane	91.1		0	70-130	%REC	1		03/16/25 8:54 AM
Surr: Toluene-d8	99.6		0	70-130	%REC	1		03/16/25 8:54 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-6
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 2:25:00 PM
Lab ID:	G2503682-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	4.89		0		S.U.			03/11/25 2:25 PM
Specific Conductance (Field)	169		0		µmhos/cm			03/11/25 2:25 PM
Temperature (Field)	13.85		0		deg C			03/11/25 2:25 PM
Turbidity (Field)	0.0		0		NTU			03/11/25 2:25 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	5	J	5.0	10	mg/L CaCO3	1		03/14/25 2:20 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/14/25 2:20 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	5.11	H	0		S.U.	1		03/14/25 2:20 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	84		10	10	mg/L	1	03/13/25 9:20 AM	03/13/25 9:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	5	J	5.0	10	mg/L CaCO3	1		03/14/25 2:20 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**AVH**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/15/25 6:59 AM	03/15/25 9:56 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	23.8		0.200	1.00	mg/L	1	03/12/25 12:51 PM	03/12/25 5:03 PM
Sulfate	23.9		0.50	2.0	mg/L	1	03/12/25 12:51 PM	03/12/25 5:03 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/14/25 5:47 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	4.49		0.100	0.25	mg/L as N	5	03/17/25 6:50 PM	03/19/25 2:36 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	4.49		0.100	0.30	mg/L as N	5	03/17/25 6:50 PM	03/19/25 2:36 PM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:15 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:15 PM
Lead	0.0007	J	0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:15 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:15 PM



I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-6
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 2:25:00 PM
Lab ID:	G2503682-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:13 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0793		0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Calcium	6.22		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Cobalt	0.025		0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Copper	0.013		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Iron	0.05		0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Magnesium	7.00		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Manganese	0.315		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Nickel	0.008	J	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Potassium	2.83		0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Sodium	15.2		0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Zinc	0.012		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:35 AM
Hardness (SM 2340B)	44.4		0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:35 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 8:17 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 8:17 PM
Surr: 1,1,2,2-Tetrachloroethane	87.7		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 8:17 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-6
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 2:25:00 PM
Lab ID:	G2503682-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:17 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:17 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 9:17 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 9:17 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:17 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 6:05 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:17 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 9:17 AM
Surr: 1,2-Dichloroethane-d4	96.5		0	70-130	%REC	1		03/16/25 9:17 AM
Surr: 4-Bromofluorobenzene	98.0		0	70-130	%REC	1		03/16/25 9:17 AM
Surr: Dibromofluoromethane	90.7		0	70-130	%REC	1		03/16/25 9:17 AM
Surr: Toluene-d8	99.8		0	70-130	%REC	1		03/16/25 9:17 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-3
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 4:05:00 PM
Lab ID:	G2503682-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	9.23		0		S.U.			03/11/25 4:05 PM
Specific Conductance (Field)	171		0		µmhos/cm			03/11/25 4:05 PM
Temperature (Field)	20.94		0		deg C			03/11/25 4:05 PM
Turbidity (Field)	2.4		0		NTU			03/11/25 4:05 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	94		5.0	10	mg/L CaCO3	1		03/14/25 2:23 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/14/25 2:23 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	8.61	H	0		S.U.	1		03/14/25 2:23 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	100		10	10	mg/L	1	03/13/25 9:20 AM	03/13/25 9:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	98		5.0	10	mg/L CaCO3	1		03/14/25 2:23 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**AVH**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/15/25 6:59 AM	03/15/25 9:56 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	1.46		0.200	1.00	mg/L	1	03/12/25 12:51 PM	03/12/25 5:20 PM
Sulfate	5.3		0.50	2.0	mg/L	1	03/12/25 12:51 PM	03/12/25 5:20 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.04	J	0.040	0.10	mg/L as N	1		03/14/25 5:49 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.04	J	0.020	0.05	mg/L as N	1	03/17/25 6:50 PM	03/19/25 1:56 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.04	J	0.020	0.06	mg/L as N	1	03/17/25 6:50 PM	03/19/25 1:56 PM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:18 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:18 PM
Lead	0.0011		0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:18 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:18 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-3
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 4:05:00 PM
Lab ID:	G2503682-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:15 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.190		0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Calcium	22.8		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Iron	0.67		0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Magnesium	2.25		0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Manganese	0.062		0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Potassium	3.10		0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Sodium	10.4		0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:38 AM
Hardness (SM 2340B)	66.1		0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:38 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 9:34 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 9:34 PM
Surr: 1,1,2,2-Tetrachloroethane	101		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 9:34 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-3
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 4:05:00 PM
Lab ID:	G2503682-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:40 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:40 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 9:40 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 9:40 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 9:40 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 6:28 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 9:40 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 9:40 AM
Surr: 1,2-Dichloroethane-d4	96.6		0	70-130	%REC	1		03/16/25 9:40 AM
Surr: 4-Bromofluorobenzene	97.1		0	70-130	%REC	1		03/16/25 9:40 AM
Surr: Dibromofluoromethane	91.5		0	70-130	%REC	1		03/16/25 9:40 AM
Surr: Toluene-d8	99.6		0	70-130	%REC	1		03/16/25 9:40 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB1
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 3:30:00 PM
Lab ID:	G2503682-006	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:20 PM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:20 PM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/13/25 10:05 AM	03/17/25 12:20 PM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 10:05 AM	03/17/25 12:20 PM
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/13/25 1:45 PM	03/14/25 11:16 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0072	J	0.00500	0.0100	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Calcium	0.07	J	0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Potassium	0.200	U	0.200	0.50	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Sodium	0.15	J	0.100	0.20	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/13/25 10:05 AM	03/14/25 8:41 AM
Hardness (SM 2340B)	0.50	U	0.50	1.0	mg/L CaCO3	1	03/13/25 10:05 AM	03/14/25 8:41 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 10:00 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/13/25 8:16 AM	03/13/25 10:00 PM
Surr: 1,1,2,2-Tetrachloroethane	92.5		0	60-140	%REC	1	03/13/25 8:16 AM	03/13/25 10:00 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB1
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 3:30:00 PM
Lab ID:	G2503682-006	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 10:03 AM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/16/25 10:03 AM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Acetone	5.00	U	5.00	10	µg/L	1		03/16/25 10:03 AM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/16/25 10:03 AM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/16/25 10:03 AM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 6:52 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/16/25 10:03 AM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/16/25 10:03 AM
Surr: 1,2-Dichloroethane-d4	96.3		0	70-130	%REC	1		03/16/25 10:03 AM
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	1		03/16/25 10:03 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB1
Lab Order:	G2503682		
Project:	Pappy's 229S	**Collection Date:**	3/11/2025 3:30:00 PM
Lab ID:	G2503682-006	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/12/2025 11:08:44 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 8260 D**
Surr: Dibromofluoromethane	90.2		0	70-130	%REC	1		03/16/25 10:03 AM
Surr: Toluene-d8	99.4		0	70-130	%REC	1		03/16/25 10:03 AM

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Monday, March 31, 2025

Dallas Mellott
OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
1020 OAK AVENUE
JOPPA, MD 21085

RE: Pappy's 229S Order No.: G2503801

Dear Dallas Mellott:

Geochemical Testing received 10 sample(s) on 3/13/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

Nate R. Bergstresser
Client Support

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I.D. 56-00306PA DEP

Geochemical Testing

Date: *31-Mar-25*

CLIENT: OAK AVENUE RUBBLE FILL - PAPPYS
Project: Pappy's 229S
Lab Order: G2503801

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Submitted COC documentation incomplete with the following deficiencies: corrections made without initials/date.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

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I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-7
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:00:00 AM
Lab ID:	G2503801-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	4.19		0		S.U.			03/12/25 8:00 AM
Specific Conductance (Field)	98		0		µmhos/cm			03/12/25 8:00 AM
Temperature (Field)	13.07		0		deg C			03/12/25 8:00 AM
Turbidity (Field)	0.0		0		NTU			03/12/25 8:00 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	12		5.0	10	mg/L CaCO3	1		03/16/25 4:00 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 4:00 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	6.03	H	0		S.U.	1		03/16/25 4:00 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	66		10	10	mg/L	1	03/19/25 11:20 AM	03/19/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	12		5.0	10	mg/L CaCO3	1		03/16/25 4:00 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	14.6		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 4:55 PM
Sulfate	12.8		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 4:55 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/17/25 2:45 PM
INORGANIC NON-METALS			Analyst:	**EMF**				**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.22		0.020	0.05	mg/L as N	1		03/21/25 11:46 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.22		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:46 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:15 AM	03/18/25 10:55 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:15 AM	03/18/25 10:55 AM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/17/25 7:15 AM	03/18/25 10:55 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:15 AM	03/18/25 10:55 AM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-7
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:00:00 AM
Lab ID:	G2503801-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.0001	J	0.00010	0.0002	mg/L	1	03/17/25 9:00 AM	03/18/25 11:21 AM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0274		0.00500	0.0100	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Calcium	6.11		0.050	0.10	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Cobalt	0.010		0.0020	0.005	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Copper	0.008	J	0.0050	0.010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Magnesium	1.96		0.050	0.10	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Manganese	0.047		0.0050	0.010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Nickel	0.016		0.0050	0.010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Potassium	1.08		0.200	0.50	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Sodium	8.65		0.100	0.20	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Zinc	0.023		0.0050	0.010	mg/L	1	03/17/25 7:15 AM	03/18/25 11:18 AM
Hardness (SM 2340B)	23.3		0.50	1.0	mg/L CaCO3	1	03/17/25 7:15 AM	03/18/25 11:18 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 9:52 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 9:52 PM
Surr: 1,1,2,2-Tetrachloroethane	73.7		0	60-140	%REC	1	03/17/25 9:00 AM	03/18/25 9:52 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-7
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:00:00 AM
Lab ID:	G2503801-001	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:01 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:01 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 12:01 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 12:01 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:01 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Methyl-tert-butyl ether	2.6		0.50	1.0	µg/L	1		03/17/25 12:01 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:01 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:01 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:01 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 12:01 PM
Surr: 4-Bromofluorobenzene	99.9		0	70-130	%REC	1		03/17/25 12:01 PM
Surr: Dibromofluoromethane	115		0	70-130	%REC	1		03/17/25 12:01 PM
Surr: Toluene-d8	99.0		0	70-130	%REC	1		03/17/25 12:01 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-9
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:40:00 AM
Lab ID:	G2503801-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	4.62		0		S.U.			03/12/25 8:40 AM
Specific Conductance (Field)	34		0		µmhos/cm			03/12/25 8:40 AM
Temperature (Field)	14.90		0		deg C			03/12/25 8:40 AM
Turbidity (Field)	0.0		0		NTU			03/12/25 8:40 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	9	J	5.0	10	mg/L CaCO3	1		03/16/25 4:03 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 4:03 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	6.40	H	0		S.U.	1		03/16/25 4:03 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	22		10	10	mg/L	1	03/17/25 11:20 AM	03/17/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	9	J	5.0	10	mg/L CaCO3	1		03/16/25 4:03 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	5.50		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:07 PM
Sulfate	2.0	J	0.500	2.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:07 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/17/25 1:00 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.20		0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:47 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.20		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:47 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:29 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:29 AM
Lead	0.0061		0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:29 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:29 AM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-9
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:40:00 AM
Lab ID:	G2503801-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:12 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.00500	U	0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Calcium	0.64		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Chromium	0.007	J	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Copper	0.039		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Magnesium	0.24		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Potassium	1.12		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Sodium	6.51		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Zinc	0.006	J	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:51 AM
Hardness (SM 2340B)	2.6		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 11:51 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 10:18 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 10:18 PM
Surr: 1,1,2,2-Tetrachloroethane	79.2		0	60-140	%REC	1	03/17/25 9:00 AM	03/18/25 10:18 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-9
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 8:40:00 AM
Lab ID:	G2503801-002	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:24 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:24 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 12:24 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 12:24 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:24 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:24 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:24 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:24 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 12:24 PM
Surr: 4-Bromofluorobenzene	99.7		0	70-130	%REC	1		03/17/25 12:24 PM
Surr: Dibromofluoromethane	114		0	70-130	%REC	1		03/17/25 12:24 PM
Surr: Toluene-d8	98.8		0	70-130	%REC	1		03/17/25 12:24 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-10
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 9:45:00 AM
Lab ID:	G2503801-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	6.22		0		S.U.			03/12/25 9:45 AM
Specific Conductance (Field)	618		0		µmhos/cm			03/12/25 9:45 AM
Temperature (Field)	13.06		0		deg C			03/12/25 9:45 AM
Turbidity (Field)	2.1		0		NTU			03/12/25 9:45 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	337		5.0	10	mg/L CaCO3	1		03/16/25 4:07 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 4:07 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	7.97	H	0		S.U.	1		03/16/25 4:07 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	352		10	10	mg/L	1	03/17/25 11:20 AM	03/17/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	340		5.0	10	mg/L CaCO3	1		03/16/25 4:07 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	17		5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	4.43		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:19 PM
Sulfate	47.8		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 5:19 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.07	J	0.040	0.10	mg/L as N	1		03/17/25 1:02 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.43		0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:48 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.43		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:48 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:31 AM
Arsenic	0.0007	J	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:31 AM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:31 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:31 AM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-10
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 9:45:00 AM
Lab ID:	G2503801-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:23 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0284		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Calcium	95.0		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Iron	1.03		0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Magnesium	25.6		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Manganese	0.432		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Potassium	2.08		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Sodium	33.2		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:54 AM
Hardness (SM 2340B)	342		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 11:54 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 11:34 PM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/18/25 11:34 PM
Surr: 1,1,2,2-Tetrachloroethane	75.0		0	60-140	%REC	1	03/17/25 9:00 AM	03/18/25 11:34 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-10
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 9:45:00 AM
Lab ID:	G2503801-003	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:48 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:48 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 12:48 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 12:48 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 12:48 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:48 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 12:48 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 12:48 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 12:48 PM
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	1		03/17/25 12:48 PM
Surr: Dibromofluoromethane	115		0	70-130	%REC	1		03/17/25 12:48 PM
Surr: Toluene-d8	99.1		0	70-130	%REC	1		03/17/25 12:48 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-11
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:30:00 AM
Lab ID:	G2503801-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	3.96		0		S.U.			03/12/25 10:30 AM
Specific Conductance (Field)	26		0		µmhos/cm			03/12/25 10:30 AM
Temperature (Field)	14.16		0		deg C			03/12/25 10:30 AM
Turbidity (Field)	4.3		0		NTU			03/12/25 10:30 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:47 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:47 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	5.20	H	0		S.U.	1		03/16/25 5:47 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	12		10	10	mg/L	1	03/19/25 11:20 AM	03/19/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:47 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	3.65		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:30 PM
Sulfate	3.3		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 5:30 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/17/25 1:03 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:49 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.020	U	0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:49 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:33 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:33 AM
Lead	0.0005	J	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:33 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:33 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-11
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:30:00 AM
Lab ID:	G2503801-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:25 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0142		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Beryllium	0.0007	J	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Calcium	1.33		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Cobalt	0.012		0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Iron	2.21		0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Magnesium	0.53		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Manganese	0.050		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Nickel	0.025		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Potassium	0.50	J	0.200	0.500	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Sodium	2.06		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Zinc	0.041		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:56 AM
Hardness (SM 2340B)	5.5		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 11:56 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:00 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:00 AM
Surr: 1,1,2,2-Tetrachloroethane	82.0		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 12:00 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-11
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:30:00 AM
Lab ID:	G2503801-004	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:11 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:11 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 1:11 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 1:11 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:11 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:11 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:11 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:11 PM
Surr: 1,2-Dichloroethane-d4	114		0	70-130	%REC	1		03/17/25 1:11 PM
Surr: 4-Bromofluorobenzene	99.9		0	70-130	%REC	1		03/17/25 1:11 PM
Surr: Dibromofluoromethane	113		0	70-130	%REC	1		03/17/25 1:11 PM
Surr: Toluene-d8	98.3		0	70-130	%REC	1		03/17/25 1:11 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-1
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 11:50:00 AM
Lab ID:	G2503801-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	11.63		0		S.U.			03/12/25 11:50 AM
Specific Conductance (Field)	1050		0		µmhos/cm			03/12/25 11:50 AM
Temperature (Field)	13.85		0		deg C			03/12/25 11:50 AM
Turbidity (Field)	1.1		0		NTU			03/12/25 11:50 AM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:50 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:50 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	11.7	H	0		S.U.	1		03/16/25 5:50 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	254		10	10	mg/L	1	03/19/25 11:20 AM	03/19/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	231		5.0	10	mg/L CaCO3	1		03/16/25 5:50 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	28.1		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:42 PM
Sulfate	2.9		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 5:42 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.06	J	0.040	0.10	mg/L as N	1		03/17/25 1:05 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.27		0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:50 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.29		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:50 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:36 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:36 AM
Lead	0.0002	J	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:36 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:36 AM



I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-1
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 11:50:00 AM
Lab ID:	G2503801-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:26 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0924		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Calcium	98.6		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Chromium	0.006	J	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Iron	0.020	U	0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Potassium	3.55		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Sodium	12.3		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Vanadium	0.006		0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 11:59 AM
Hardness (SM 2340B)	246		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 11:59 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:25 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:25 AM
Surr: 1,1,2,2-Tetrachloroethane	75.3		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 12:25 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-1
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 11:50:00 AM
Lab ID:	G2503801-005	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:35 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:35 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 1:35 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 1:35 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:35 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:35 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:35 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:35 PM
Surr: 1,2-Dichloroethane-d4	114		0	70-130	%REC	1		03/17/25 1:35 PM
Surr: 4-Bromofluorobenzene	99.2		0	70-130	%REC	1		03/17/25 1:35 PM
Surr: Dibromofluoromethane	114		0	70-130	%REC	1		03/17/25 1:35 PM
Surr: Toluene-d8	99.0		0	70-130	%REC	1		03/17/25 1:35 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 2:10:00 PM
Lab ID:	G2503801-006	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	11.78		0		S.U.			03/12/25 2:10 PM
Specific Conductance (Field)	1510		0		µmhos/cm			03/12/25 2:10 PM
Temperature (Field)	14.57		0		deg C			03/12/25 2:10 PM
Turbidity (Field)	2.8		0		NTU			03/12/25 2:10 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:57 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 5:57 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	11.8	H	0		S.U.	1		03/16/25 5:57 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	308		10	10	mg/L	1	03/19/25 11:20 AM	03/19/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	316		5.0	10	mg/L CaCO3	1		03/16/25 5:57 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	15.2		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 5:54 PM
Sulfate	31.1		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 5:54 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.05	J	0.040	0.10	mg/L as N	1		03/17/25 1:06 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.29		0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:51 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.32		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:51 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:38 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:38 AM
Lead	0.0013		0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:38 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:38 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 2:10:00 PM
Lab ID:	G2503801-006	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:28 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.190		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Calcium	130		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Iron	0.020	U	0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Potassium	2.14		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Sodium	16.0		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Vanadium	0.008		0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:01 PM
Hardness (SM 2340B)	325		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 12:01 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:51 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 12:51 AM
Surr: 1,1,2,2-Tetrachloroethane	80.4		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 12:51 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 2:10:00 PM
Lab ID:	G2503801-006	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:58 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:58 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 1:58 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 1:58 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 1:58 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:58 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 1:58 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 1:58 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 1:58 PM
Surr: 4-Bromofluorobenzene	99.3		0	70-130	%REC	1		03/17/25 1:58 PM
Surr: Dibromofluoromethane	113		0	70-130	%REC	1		03/17/25 1:58 PM
Surr: Toluene-d8	99.0		0	70-130	%REC	1		03/17/25 1:58 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-5
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 1:15:00 PM
Lab ID:	G2503801-007	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	4.58		0		S.U.			03/12/25 1:15 PM
Specific Conductance (Field)	223		0		µmhos/cm			03/12/25 1:15 PM
Temperature (Field)	13.92		0		deg C			03/12/25 1:15 PM
Turbidity (Field)	18.9		0		NTU			03/12/25 1:15 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	17		5.0	10	mg/L CaCO3	1		03/16/25 6:06 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 6:06 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	5.74	H	0		S.U.	1		03/16/25 6:06 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	130		10	10	mg/L	1	03/17/25 11:20 AM	03/17/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	17		5.0	10	mg/L CaCO3	1		03/16/25 6:06 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5.0	U	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	32.1		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 7:06 PM
Sulfate	39.9		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 7:06 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.040	U	0.040	0.10	mg/L as N	1		03/17/25 1:11 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	1.26		0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:53 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	1.26		0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:53 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:50 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:50 AM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:50 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:50 AM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-5
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 1:15:00 PM
Lab ID:	G2503801-007	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:30 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0516		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Calcium	8.58		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Iron	0.04	J	0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Magnesium	4.63		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Manganese	0.031		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Potassium	3.44		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Sodium	29.4		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Zinc	0.014		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 12:55 PM
Hardness (SM 2340B)	40.5		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 12:55 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 1:16 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 1:16 AM
Surr: 1,1,2,2-Tetrachloroethane	74.4		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 1:16 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-5
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 1:15:00 PM
Lab ID:	G2503801-007	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:22 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:22 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 2:22 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 2:22 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:22 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 2:22 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:22 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 2:22 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 2:22 PM
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	1		03/17/25 2:22 PM
Surr: Dibromofluoromethane	112		0	70-130	%REC	1		03/17/25 2:22 PM
Surr: Toluene-d8	99.1		0	70-130	%REC	1		03/17/25 2:22 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-8
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 3:15:00 PM
Lab ID:	G2503801-008	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	5.64		0		S.U.			03/12/25 3:15 PM
Specific Conductance (Field)	187		0		µmhos/cm			03/12/25 3:15 PM
Temperature (Field)	15.10		0		deg C			03/12/25 3:15 PM
Turbidity (Field)	10.6		0		NTU			03/12/25 3:15 PM
INORGANIC NON METALS			Analyst:	**GMG**				**SM 4500-CO2D**
Bicarbonate	45		5.0	10	mg/L CaCO3	1		03/16/25 6:09 PM
INORGANIC NON-METALS			Analyst:	**GMG**				**SM 4500-CO2 D**
Carbonate	5.0	U	5.0	10	mg/L CaCO3	1		03/16/25 6:09 PM
PH BY SM 4500 H+B			Analyst:	**GMG**				**SM 4500-H+ B-11**
Lab pH	6.30	H	0		S.U.	1		03/16/25 6:09 PM
INORGANIC NON-METALS			Analyst:	**LAP**			**SM 2540 C-15**	**SM 2540 C-15**
Total dissolved solids	58		10	10	mg/L	1	03/19/25 11:20 AM	03/19/25 11:28 AM
INORGANIC NON-METALS			Analyst:	**GMG**				**ASTM D1067-16**
Alkalinity to pH 4.5	45		5.0	10	mg/L CaCO3	1		03/16/25 6:09 PM
INDICATOR ORGANIC PARAMETERS			Analyst:	**KCS**			**Hach 8000**	**HACH 8000**
Chemical Oxygen Demand	5	J	5.0	10	mg/L	1	03/18/25 3:02 PM	03/19/25 11:05 AM
INORGANIC NON-METALS			Analyst:	**ACB**			**EPA 300.0 Rev 2.**	**EPA 300.0 REV 2.1**
Chloride	18.0		0.200	1.00	mg/L	1	03/13/25 1:14 PM	03/13/25 7:42 PM
Sulfate	6.8		0.50	2.0	mg/L	1	03/13/25 1:14 PM	03/13/25 7:42 PM
INORGANIC NON-METALS			Analyst:	**DMM**				**EPA 350.1 REV 2.0**
Ammonia Nitrogen	0.19		0.040	0.10	mg/L as N	1		03/17/25 1:20 PM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate Nitrogen	0.020	U	0.020	0.05	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:54 AM
INORGANIC NON-METALS			Analyst:	**EMF**			**EPA 353.2 Rev 2.**	**EPA 353.2 REV 2.0**
Nitrate - Nitrite	0.020	U	0.020	0.06	mg/L as N	1	03/19/25 5:30 PM	03/21/25 11:54 AM
INORGANIC METALS			Analyst:	**RLR**			**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:52 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:52 AM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:52 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:52 AM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-8
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 3:15:00 PM
Lab ID:	G2503801-008	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:31 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0498		0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Calcium	10.6		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Cobalt	0.015		0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Iron	19.7		0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Magnesium	3.20		0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Manganese	0.637		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Nickel	0.023		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Potassium	2.87		0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Sodium	13.0		0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Zinc	0.013		0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:01 PM
Hardness (SM 2340B)	39.7		0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 1:01 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 1:42 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 1:42 AM
Surr: 1,1,2,2-Tetrachloroethane	75.3		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 1:42 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	MW-8
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 3:15:00 PM
Lab ID:	G2503801-008	**Sampled By:**	TetraTech
Matrix:	GROUNDWATER	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:45 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:45 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 2:45 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 2:45 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 2:45 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 2:45 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 2:45 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 2:45 PM
Surr: 1,2-Dichloroethane-d4	115		0	70-130	%REC	1		03/17/25 2:45 PM
Surr: 4-Bromofluorobenzene	99.1		0	70-130	%REC	1		03/17/25 2:45 PM
Surr: Dibromofluoromethane	113		0	70-130	%REC	1		03/17/25 2:45 PM
Surr: Toluene-d8	98.7		0	70-130	%REC	1		03/17/25 2:45 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:40:00 AM
Lab ID:	G2503801-009	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
INORGANIC METALS			Analyst: **RLR**				**EPA 200.2 Rev 2.**	**EPA 200.8 REV 5.4**
Antimony	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:55 AM
Arsenic	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:55 AM
Lead	0.00020	U	0.00020	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 9:55 AM
Thallium	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 7:45 AM	03/18/25 9:55 AM
INORGANIC METALS			Analyst: **LMH**				**EPA 7470A**	**EPA 7470A**
Mercury	0.00010	U	0.00010	0.0002	mg/L	1	03/17/25 11:30 AM	03/18/25 12:33 PM
INORGANIC METALS			Analyst: **TMS**				**EPA 200.2 Rev 2.**	**EPA 200.7 REV 4.4**
Barium	0.0056	J	0.00500	0.0100	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Beryllium	0.00050	U	0.00050	0.0010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Cadmium	0.0010	U	0.0010	0.002	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Calcium	0.05	J	0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Chromium	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Cobalt	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Copper	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Iron	0.020	U	0.020	0.05	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Magnesium	0.050	U	0.050	0.10	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Manganese	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Nickel	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Potassium	0.200	U	0.200	0.50	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Selenium	0.010	U	0.010	0.02	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Silver	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Sodium	0.17	J	0.100	0.20	mg/L	1	03/17/25 7:45 AM	03/19/25 7:23 PM
Vanadium	0.0020	U	0.0020	0.005	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Zinc	0.0050	U	0.0050	0.010	mg/L	1	03/17/25 7:45 AM	03/18/25 1:11 PM
Hardness (SM 2340B)	0.50	U	0.50	1.0	mg/L CaCO3	1	03/17/25 7:45 AM	03/18/25 1:11 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 2:07 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 2:07 AM
Surr: 1,1,2,2-Tetrachloroethane	77.4		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 2:07 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:40:00 AM
Lab ID:	G2503801-009	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:09 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:09 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 3:09 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 3:09 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:09 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 3:09 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:09 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 3:09 PM
Surr: 1,2-Dichloroethane-d4	114		0	70-130	%REC	1		03/17/25 3:09 PM
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	1		03/17/25 3:09 PM

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Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	FB2
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/12/2025 10:40:00 AM
Lab ID:	G2503801-009	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
Surr: Dibromofluoromethane	112		0	70-130	%REC	1		03/17/25 3:09 PM
Surr: Toluene-d8	98.8		0	70-130	%REC	1		03/17/25 3:09 PM

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	T Blank
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/13/2025 11:11:00 AM
Lab ID:	G2503801-010	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **NPT**				**EPA 8011**	**EPA 8011**
1,2-Dibromo-3-chloropropane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 2:32 AM
1,2-Dibromoethane	0.010	U	0.010	0.04	µg/L	1	03/17/25 9:00 AM	03/19/25 2:32 AM
Surr: 1,1,2,2-Tetrachloroethane	77.1		0	60-140	%REC	1	03/17/25 9:00 AM	03/19/25 2:32 AM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
1,1,1,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,1,1-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,1,2,2-Tetrachloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,1,2-Trichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,1-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,1-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,2,3-Trichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,2-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,2-Dichloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,2-Dichloropropane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
1,4-Dichlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
2-Butanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:32 PM
2-Hexanone	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:32 PM
4-Methyl-2-Pentanone	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Acetone	5.00	U	5.00	10	µg/L	1		03/17/25 3:32 PM
Acrylonitrile	2.00	UP4	2.00	5.0	µg/L	1		03/17/25 3:32 PM
Benzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Bromochloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Bromodichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Bromoform	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Bromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Carbon Disulfide	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Carbon Tetrachloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Chlorobenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Chlorodibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Chloroethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Chloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
cis-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
cis-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Dibromomethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Ethylbenzene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Iodomethane	1.00	U	1.00	5.0	µg/L	1		03/17/25 3:32 PM
Methylene Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Methyl-tert-butyl ether	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Styrene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Tetrachloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM

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I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *31-Mar-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	T Blank
Lab Order:	G2503801		
Project:	Pappy's 229S	**Collection Date:**	3/13/2025 11:11:00 AM
Lab ID:	G2503801-010	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	3/13/2025 11:12:36 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MTM**					**EPA 8260 D**
Toluene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
trans-1,2-Dichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
trans-1,3-Dichloropropene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
trans-1,4-Dichloro-2-butene	1.00	U	1.00	2.0	µg/L	1		03/17/25 3:32 PM
Trichloroethene	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Trichlorofluoromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Trichloromethane	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Vinyl Acetate	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Vinyl Chloride	0.50	U	0.50	1.0	µg/L	1		03/17/25 3:32 PM
Total Xylene	1.00	U	1.00	2.0	µg/L	1		03/17/25 3:32 PM
Surr: 1,2-Dichloroethane-d4	113		0	70-130	%REC	1		03/17/25 3:32 PM
Surr: 4-Bromofluorobenzene	99.4		0	70-130	%REC	1		03/17/25 3:32 PM
Surr: Dibromofluoromethane	111		0	70-130	%REC	1		03/17/25 3:32 PM
Surr: Toluene-d8	99.6		0	70-130	%REC	1		03/17/25 3:32 PM

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GEOCHEMICAL TESTING
Environmental and Energy Analysis

Quality Assurance Project Report
Prepared for
OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
3/28/2025

David M. Glessner
Quality Assurance Coordinator

Client: OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
WorkOrder: G2503801
Project: Pappys 229S

Analytical QC Summary Report

Explanatory Notes

1. Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.
2. Matrix Spike and MS Duplicates are sample specific controls and are not used to evaluate the analytical batch.
3. Laboratory duplicate. If one or both of the values is less than 5 times the PQL, the allowed difference is +/- the PQL.
4. "R" indicates a relative percent difference (RPD) was above the acceptance limit between duplicate QC samples or sample specific duplicates.

SampleID: G2503791-001ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393123

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	257	mg/L CaCO3	10						254	1.2%	20		

SampleID: G2503796-001ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393237

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	273	mg/L CaCO3	10						270	1.1%	20		

SampleID: G2503798-005ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393289

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	211	mg/L CaCO3	10						210	0.5%	20		

SampleID: G2503651-001ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393340

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	70	mg/L CaCO3	10						70		20		

SampleID: G2503806-005ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393395

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	313	mg/L CaCO3	10						309	1.3%	20		

SampleID: G2503829-003ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393432

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	248	mg/L CaCO3	10						246	0.8%	20		

SampleID: G2503840-001ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393475

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	399	mg/L CaCO3	10						394	1.3%	20		

SampleID: G2503840-007ADUP **SampType:** DUP **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393512

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	368	mg/L CaCO3	10						364	1.1%	20		

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393092

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	48	mg/L CaCO3	10	47.5		101.1%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393224

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	48	mg/L CaCO3	10	47.5		101.1%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393280

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	48	mg/L CaCO3	10	47.5		101.1%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393330

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	47	mg/L CaCO3	10	47.5		98.9%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393383

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	48	mg/L CaCO3	10	47.5		101.1%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393424

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	46	mg/L CaCO3	10	47.5		96.8%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393466

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	47	mg/L CaCO3	10	47.5		98.9%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393497

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	46	mg/L CaCO3	10	47.5		96.8%	85	115					

SampleID: ALK LCS **SampType:** LCS **TestNo:** ASTM D1067-16 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393547

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Alkalinity to pH 4.5	47	mg/L CaCO3	10	47.5		98.9%	85	115					

SampleID: G2503772-008BDUP **SampType:** DUP **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267927 **Analysis Date:** 3/18/2025 **SeqNo:** 8396636

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	0.0524	mg/L	0.01						0.0539	2.8%	20		
Beryllium	< 0.001	mg/L	0.001								20		
Cadmium	< 0.002	mg/L	0.002								20		
Calcium	2.46	mg/L	0.1						2.55	3.6%	20		
Chromium	< 0.01	mg/L	0.01								20		
Cobalt	< 0.005	mg/L	0.005								20		
Copper	< 0.01	mg/L	0.01								20		
Iron	< 0.05	mg/L	0.05								20		
Magnesium	0.89	mg/L	0.1						0.93	4.5%	20		
Manganese	0.0494	mg/L	0.01						0.0507	2.6%	20		
Nickel	< 0.01	mg/L	0.01								20		
Potassium	0.509	mg/L	0.5						0.525	3.0%	20		
Selenium	< 0.02	mg/L	0.02								20		
Silver	< 0.005	mg/L	0.005								20		
Sodium	0.427	mg/L	0.2						0.442	3.4%	20		
Vanadium	< 0.005	mg/L	0.005								20		
Zinc	0.0286	mg/L	0.01						0.0292	2.1%	20		
Hardness (SM 2340B)	9.81	mg/L CaCO3	1						10.2		20		

SampleID: G2503798-004FDUP **SampType:** DUP **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396671

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	0.035	mg/L	0.01						0.0347	0.9%	20		
Beryllium	< 0.001	mg/L	0.001								20		
Cadmium	< 0.002	mg/L	0.002								20		
Calcium	240	mg/L	0.1						238	0.8%	20		
Chromium	< 0.01	mg/L	0.01								20		
Cobalt	< 0.005	mg/L	0.005								20		

Copper	< 0.01	mg/L	0.01								20		
Iron	< 0.05	mg/L	0.05						0.0278		20		
Magnesium	50	mg/L	0.1						49.6	0.8%	20		
Manganese	0.0883	mg/L	0.01						0.0672	27.1%	20	R	
Nickel	< 0.01	mg/L	0.01								20		
Potassium	35.6	mg/L	0.5						35.7	0.5%	20		
Selenium	< 0.02	mg/L	0.02								20		
Silver	< 0.005	mg/L	0.005								20		
Sodium	93.7	mg/L	0.2						94	0.4%	20		
Vanadium	< 0.005	mg/L	0.005								20		
Zinc	< 0.01	mg/L	0.01								20		
Hardness (SM 2340B)	804	mg/L CaCO3	1						798		20		

SampleID: LCS1-267927 **SampType:** LCS1 **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020

BatchID: 267927 **Analysis Date:** 3/18/2025 **SeqNo:** 8396634

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.02	mg/L	0.01	1		101.8%	85	115					
Beryllium	0.197	mg/L	0.001	0.2		98.4%	85	115					
Cadmium	0.423	mg/L	0.002	0.4		105.7%	85	115					
Calcium	10	mg/L	0.1	10		100.3%	85	115					
Chromium	0.995	mg/L	0.01	1		99.5%	85	115					
Cobalt	0.41	mg/L	0.005	0.4		102.4%	85	115					
Copper	0.991	mg/L	0.01	1		99.1%	85	115					
Iron	9.95	mg/L	0.05	10		99.5%	85	115					
Magnesium	2.03	mg/L	0.1	2		101.4%	85	115					
Manganese	1	mg/L	0.01	1		100.0%	85	115					
Nickel	0.992	mg/L	0.01	1		99.2%	85	115					
Potassium	10.1	mg/L	0.5	10		101.3%	85	115					
Selenium	1.15	mg/L	0.02	1		114.8%	85	115					
Silver	0.0104	mg/L	0.005	0.01		104.0%	85	115					
Sodium	10.3	mg/L	0.2	10		102.7%	85	115					
Vanadium	0.388	mg/L	0.005	0.4		97.0%	85	115					
Zinc	1.02	mg/L	0.01	1		102.5%	85	115					

Hardness (SM 2340B)	33.4	mg/L CaCO3	1										

SampleID: LCS1-267934 **SampType:** LCS1 **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396680

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.01	mg/L	0.01	1		101.0%	85	115					
Beryllium	0.197	mg/L	0.001	0.2		98.7%	85	115					
Cadmium	0.423	mg/L	0.002	0.4		105.8%	85	115					
Calcium	9.97	mg/L	0.1	10		99.7%	85	115					
Chromium	0.988	mg/L	0.01	1		98.8%	85	115					
Cobalt	0.41	mg/L	0.005	0.4		102.5%	85	115					
Copper	0.978	mg/L	0.01	1		97.8%	85	115					
Iron	9.96	mg/L	0.05	10		99.6%	85	115					
Magnesium	2.03	mg/L	0.1	2		101.4%	85	115					
Manganese	0.997	mg/L	0.01	1		99.7%	85	115					
Nickel	0.993	mg/L	0.01	1		99.3%	85	115					
Potassium	10.2	mg/L	0.5	10		101.9%	85	115					
Selenium	1.14	mg/L	0.02	1		113.9%	85	115					
Silver	0.0103	mg/L	0.005	0.01		103.0%	85	115					
Vanadium	0.389	mg/L	0.005	0.4		97.2%	85	115					
Zinc	1.02	mg/L	0.01	1		102.5%	85	115					
Hardness (SM 2340B)	33.2	mg/L CaCO3	1										

SampleID: LCS1-267934 **SampType:** LCS1 **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318065
BatchID: 267934 **Analysis Date:** 3/19/2025 **SeqNo:** 8400220

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Sodium	10.1	mg/L	0.2	10		100.8%	85	115					

SampleID: G2503772-008BMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267927 **Analysis Date:** 3/18/2025 **SeqNo:** 8396637

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.04	mg/L	0.01	1	0.0539	98.8%	75	125					
Beryllium	0.192	mg/L	0.001	0.2		96.0%	75	125					
Cadmium	0.411	mg/L	0.002	0.4		102.9%	75	125					
Calcium	12.3	mg/L	0.1	10	2.55	97.1%	75	125					
Chromium	0.965	mg/L	0.01	1		96.5%	75	125					
Cobalt	0.4	mg/L	0.005	0.4		100.0%	75	125					
Copper	0.962	mg/L	0.01	1		96.2%	75	125					
Iron	9.71	mg/L	0.05	10		97.1%	75	125					
Magnesium	2.89	mg/L	0.1	2	0.93	97.8%	75	125					
Manganese	1.02	mg/L	0.01	1	0.0507	97.2%	75	125					
Nickel	0.971	mg/L	0.01	1		97.1%	75	125					
Potassium	10.4	mg/L	0.5	10	0.525	99.2%	75	125					
Selenium	1.1	mg/L	0.02	1		109.5%	75	125					
Silver	0.0105	mg/L	0.005	0.01		105.0%	75	125					
Sodium	10.4	mg/L	0.2	10	0.442	99.7%	75	125					
Vanadium	0.378	mg/L	0.005	0.4		94.4%	75	125					
Zinc	1.02	mg/L	0.01	1	0.0292	99.4%	75	125					
Hardness (SM 2340B)	42.5	mg/L CaCO3	1		10.2								

SampleID: G2503796-003FMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020

BatchID: 267927 **Analysis Date:** 3/18/2025 **SeqNo:** 8396657

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.09	mg/L	0.01	1	0.0796	100.8%	75	125					
Beryllium	0.196	mg/L	0.001	0.2		98.2%	75	125					
Cadmium	0.413	mg/L	0.002	0.4		103.3%	75	125					
Calcium	114	mg/L	0.1	10	105	98.4%	75	125					
Chromium	0.993	mg/L	0.01	1		99.3%	75	125					
Cobalt	0.388	mg/L	0.005	0.4		97.1%	75	125					
Copper	0.982	mg/L	0.01	1		98.2%	75	125					
Iron	11.1	mg/L	0.05	10	1.29	98.3%	75	125					
Magnesium	29.7	mg/L	0.1	2	27.7	100.3%	75	125					
Manganese	1.9	mg/L	0.01	1	0.944	95.3%	75	125					

Nickel	0.942	mg/L	0.01	1		94.2%	75	125					
Potassium	12	mg/L	0.5	10	1.76	102.5%	75	125					
Selenium	1.13	mg/L	0.02	1		113.0%	75	125					
Silver	0.0107	mg/L	0.005	0.01		107.0%	75	125					
Sodium	15	mg/L	0.2	10	4.69	102.8%	75	125					
Vanadium	0.398	mg/L	0.005	0.4		99.4%	75	125					
Zinc	0.99	mg/L	0.01	1		99.0%	75	125					
Hardness (SM 2340B)	408	mg/L CaCO3	1		375								

SampleID: G2503798-004FMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020

BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396672

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.02	mg/L	0.01	1	0.0347	98.9%	75	125					
Beryllium	0.198	mg/L	0.001	0.2		98.8%	75	125					
Cadmium	0.4	mg/L	0.002	0.4		100.1%	75	125					
Calcium	246	mg/L	0.1	10	238	78.6%	75	125					
Chromium	0.974	mg/L	0.01	1		97.4%	75	125					
Cobalt	0.383	mg/L	0.005	0.4		95.8%	75	125					
Copper	0.984	mg/L	0.01	1		98.4%	75	125					
Iron	9.67	mg/L	0.05	10	0.0278	96.4%	75	125					
Magnesium	51.3	mg/L	0.1	2	49.6	84.3%	75	125					
Manganese	1.05	mg/L	0.01	1	0.0672	98.3%	75	125					
Nickel	0.921	mg/L	0.01	1		92.1%	75	125					
Potassium	45.6	mg/L	0.5	10	35.7	98.7%	75	125					
Selenium	1.1	mg/L	0.02	1		109.7%	75	125					
Silver	0.0106	mg/L	0.005	0.01		106.0%	75	125					
Sodium	103	mg/L	0.2	10	94	93.5%	75	125					
Vanadium	0.397	mg/L	0.005	0.4		99.2%	75	125					
Zinc	0.962	mg/L	0.01	1		96.2%	75	125					
Hardness (SM 2340B)	825	mg/L CaCO3	1		798								

SampleID: G2503801-007EMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396687

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1.05	mg/L	0.01	1	0.0516	99.8%	75	125					
Beryllium	0.197	mg/L	0.001	0.2		98.6%	75	125					
Cadmium	0.415	mg/L	0.002	0.4		103.7%	75	125					
Calcium	18.5	mg/L	0.1	10	8.58	98.9%	75	125					
Chromium	0.974	mg/L	0.01	1		97.4%	75	125					
Cobalt	0.407	mg/L	0.005	0.4		101.7%	75	125					
Copper	0.971	mg/L	0.01	1		97.1%	75	125					
Iron	9.95	mg/L	0.05	10	0.0444	99.1%	75	125					
Magnesium	6.72	mg/L	0.1	2	4.63	104.2%	75	125					
Manganese	1.01	mg/L	0.01	1	0.0309	97.9%	75	125					
Nickel	0.981	mg/L	0.01	1		98.1%	75	125					
Potassium	13.6	mg/L	0.5	10	3.44	101.4%	75	125					
Selenium	1.12	mg/L	0.02	1		111.8%	75	125					
Silver	0.01	mg/L	0.005	0.01		100.0%	75	125					
Sodium	40	mg/L	0.2	10	29.4	105.9%	75	125					
Vanadium	0.389	mg/L	0.005	0.4		97.2%	75	125					
Zinc	1.03	mg/L	0.01	1	0.0141	102.1%	75	125					
Hardness (SM 2340B)	73.8	mg/L CaCO3	1		40.5								

SampleID: PB-267927 **SampType:** PB **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267927 **Analysis Date:** 3/18/2025 **SeqNo:** 8396633

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	< 0.01	mg/L	0.01										
Beryllium	< 0.001	mg/L	0.001										
Cadmium	< 0.002	mg/L	0.002										
Calcium	< 0.1	mg/L	0.1										
Chromium	< 0.01	mg/L	0.01										
Cobalt	< 0.005	mg/L	0.005										

Copper	< 0.01	mg/L	0.01										
Iron	< 0.05	mg/L	0.05										
Magnesium	< 0.1	mg/L	0.1										
Manganese	< 0.01	mg/L	0.01										
Nickel	< 0.01	mg/L	0.01										
Potassium	< 0.5	mg/L	0.5										
Selenium	< 0.02	mg/L	0.02										
Silver	< 0.005	mg/L	0.005										
Sodium	< 0.2	mg/L	0.2										
Vanadium	< 0.005	mg/L	0.005										
Zinc	< 0.01	mg/L	0.01										
Hardness (SM 2340B)	< 1	mg/L CaCO3	1										

SampleID: PB-267934 **SampType:** PB **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020

BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396679

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	< 0.01	mg/L	0.01										
Beryllium	< 0.001	mg/L	0.001										
Cadmium	< 0.002	mg/L	0.002										
Calcium	< 0.1	mg/L	0.1										
Chromium	< 0.01	mg/L	0.01										
Cobalt	< 0.005	mg/L	0.005										
Copper	< 0.01	mg/L	0.01										
Iron	< 0.05	mg/L	0.05										
Magnesium	< 0.1	mg/L	0.1										
Manganese	< 0.01	mg/L	0.01										
Nickel	< 0.01	mg/L	0.01										
Potassium	< 0.5	mg/L	0.5										
Selenium	< 0.02	mg/L	0.02										
Silver	< 0.005	mg/L	0.005										
Vanadium	< 0.005	mg/L	0.005										
Zinc	< 0.01	mg/L	0.01										
Hardness (SM 2340B)	< 1	mg/L CaCO3	1										

SampleID: PB-267934 **SampType:** PB **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318065
BatchID: 267934 **Analysis Date:** 3/19/2025 **SeqNo:** 8400219

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Sodium	< 0.2	mg/L	0.2										

SampleID: G2503798-004FDUP **SampType:** DUP **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396926

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	35	µg/L	10						34.7	0.9%	20		
Beryllium	< 1	µg/L	1								20		
Cadmium	< 2	µg/L	2								20		
Calcium	240000	µg/L	100						238000	0.8%	20		
Chromium	< 10	µg/L	10								20		
Cobalt	< 5	µg/L	5								20		
Copper	< 10	µg/L	10								20		
Iron	< 50	µg/L	50						27.8		20		
Magnesium	50000	µg/L	100						49600	0.8%	20		
Nickel	< 10	µg/L	10								20		
Potassium	35600	µg/L	500						35700	0.5%	20		
Selenium	< 20	µg/L	20								20		
Silver	< 5	µg/L	5								20		
Sodium	93700	µg/L	200						94000	0.4%	20		
Vanadium	< 5	µg/L	5								20		
Zinc	< 10	µg/L	10								20		
Hardness (SM 2340B)	804000	µg/L	1000						798000		20		

SampleID: G2503798-004FDUP **SampType:** DUP **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318369
BatchID: 267934 **Analysis Date:** 3/25/2025 **SeqNo:** 8408297

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Manganese	39.2	µg/L	10						38.5	1.8%	20		

SampleID: G2503798-004FMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318020
BatchID: 267934 **Analysis Date:** 3/18/2025 **SeqNo:** 8396927

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Barium	1020	µg/L	10	1000	34.7	98.9%	75	125					
Beryllium	198	µg/L	1	200		98.8%	75	125					
Cadmium	400	µg/L	2	400		100.1%	75	125					
Calcium	246000	µg/L	100	10000	238000	78.6%	75	125					
Chromium	974	µg/L	10	1000		97.4%	75	125					
Cobalt	383	µg/L	5	400		95.8%	75	125					
Copper	984	µg/L	10	1000		98.4%	75	125					
Iron	9670	µg/L	50	10000	27.8	96.4%	75	125					
Magnesium	51300	µg/L	100	2000	49600	84.3%	75	125					
Nickel	921	µg/L	10	1000		92.1%	75	125					
Potassium	45600	µg/L	500	10000	35700	98.7%	75	125					
Selenium	1100	µg/L	20	1000		109.7%	75	125					
Silver	10.6	µg/L	5	10		106.0%	75	125					
Sodium	103000	µg/L	200	10000	94000	93.5%	75	125					
Vanadium	397	µg/L	5	400		99.2%	75	125					
Zinc	962	µg/L	10	1000		96.2%	75	125					
Hardness (SM 2340B)	825000	µg/L	1000		798000								

SampleID: G2503798-004FMS **SampType:** MS **TestNo:** EPA 200.7 Rev 4.4 **Prep Date:** 3/17/2025 **RunNo:** 318369
BatchID: 267934 **Analysis Date:** 3/25/2025 **SeqNo:** 8408298

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Manganese	1020	µg/L	10	1000	38.5	98.4%	75	125					

SampleID: G2503801-006EMS **SampType:** MS **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318016
BatchID: 267936 **Analysis Date:** 3/18/2025 **SeqNo:** 8396574

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	0.006335	mg/L	0.001	0.006		105.6%	75	125					
Arsenic	0.00977	mg/L	0.001	0.01		97.7%	75	125					

Lead	0.00612	mg/L	0.001	0.005	0.001252	97.4%	75	125					
Thallium	0.001968	mg/L	0.0002	0.002		98.4%	75	125					

SampleID: G2503796-002FMS **SampType:** MS **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318053
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8399681

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	0.006181	mg/L	0.001	0.006		103.0%	75	125					
Arsenic	0.01094	mg/L	0.001	0.01	0.001153	97.9%	75	125					
Lead	0.004965	mg/L	0.001	0.005		99.3%	75	125					
Thallium	0.001948	mg/L	0.0002	0.002		97.4%	75	125					

SampleID: G2503801-001EMS **SampType:** MS **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318053
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8399694

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	0.006099	mg/L	0.001	0.006		101.7%	75	125					
Arsenic	0.01013	mg/L	0.001	0.01		101.3%	75	125					
Lead	0.004984	mg/L	0.001	0.005		99.7%	75	125					
Thallium	0.002	mg/L	0.0002	0.002		100.0%	75	125					

SampleID: G2503798-004FDUP **SampType:** DUP **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318016
BatchID: 267936 **Analysis Date:** 3/18/2025 **SeqNo:** 8396562

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	< 1	µg/L	1								20		
Arsenic	< 1	µg/L	1								20		
Lead	< 1	µg/L	1								20		
Thallium	< 0.2	µg/L	0.2								20		

SampleID: G2503772-008BDUP **SampType:** DUP **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318053
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8399671

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	< 1	µg/L	1								20		

Arsenic	< 1	µg/L	1								20		
Lead	< 1	µg/L	1								20		
Thallium	< 0.2	µg/L	0.2								20		

SampleID: LCS2-267929 **SampType:** LCS2 **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318053
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8399668

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	6.23	µg/L	1	6		103.9%	85	115					
Arsenic	9.73	µg/L	1	10		97.3%	85	115					
Lead	4.82	µg/L	1	5		96.4%	85	115					
Thallium	1.91	µg/L	0.2	2		95.4%	85	115					

SampleID: G2503819-004BMS **SampType:** MS **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318016
BatchID: 267936 **Analysis Date:** 3/18/2025 **SeqNo:** 8396582

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	6.4	µg/L	1	6		106.7%	75	125					
Arsenic	9.9	µg/L	1	10		99.0%	75	125					
Lead	4.91	µg/L	1	5		98.2%	75	125					
Thallium	1.95	µg/L	0.2	2		97.6%	75	125					

SampleID: PB-267929 **SampType:** PB **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318016
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8396524

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	< 1	µg/L	1										
Arsenic	< 1	µg/L	1										
Lead	< 1	µg/L	1										
Thallium	< 0.2	µg/L	0.2										

SampleID: PB-267936 **SampType:** PB **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318016
BatchID: 267936 **Analysis Date:** 3/18/2025 **SeqNo:** 8396554

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	< 1	µg/L	1										
Arsenic	< 1	µg/L	1										
Lead	< 1	µg/L	1										
Thallium	< 0.2	µg/L	0.2										

SampleID: PB-267929 **SampType:** PB **TestNo:** EPA 200.8 Rev 5.4 **Prep Date:** 3/17/2025 **RunNo:** 318053
BatchID: 267929 **Analysis Date:** 3/18/2025 **SeqNo:** 8399666

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Antimony	< 1	µg/L	1										
Arsenic	< 1	µg/L	1										
Lead	< 1	µg/L	1										
Thallium	< 0.2	µg/L	0.2										

SampleID: G2503796-003CDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388731

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05								20		

SampleID: G2503799-003BDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388757

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05								20		

SampleID: G2503801-007DDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388789

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05								20		

SampleID: G2503364-001BDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388807

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05								20	H	

SampleID: LFB-267767 **SampType:** LFB **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388711

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	4.83	mg/L as N	0.05	5		96.6%	90	110					

SampleID: LFB2-267767 **SampType:** LFB2 **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388714

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	0.486	mg/L as N	0.05	0.5		97.2%	90	110					

SampleID: G2503796-003CLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388732

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	2.25	mg/L as N	0.05	2.5		89.9%	80	120					

SampleID: G2503799-003BLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388759

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	2.25	mg/L as N	0.05	2.5		90.0%	80	120					

SampleID: G2503801-007DLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388791

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	2.24	mg/L as N	0.05	2.5		89.8%	80	120					

SampleID: G2503364-001BLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388808

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	1.98	mg/L as N	0.05	2.5		79.2%	80	120				S H	

SampleID: LRB-267767 **SampType:** LRB **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388716

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05										

SampleID: CB-267767 **SampType:** MBLK **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388708

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	< 0.05	mg/L as N	0.05										

SampleID: QCS-267767 **SampType:** QCS **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388726

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrite Nitrogen	3.89	mg/L as N	0.05	4		97.1%	90	110					

SampleID: G2503796-003CDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388583

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	9.86	mg/L	1						9.88	0.2%	20		
Sulfate	138	mg/L	2						138	0.2%	20		

SampleID: G2503799-003BDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388606

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	19.4	mg/L	1						19.4	0.1%	20		
Sulfate	64.9	mg/L	2						65	0.2%	20		

SampleID: G2503801-007DDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388639

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	32.1	mg/L	1						32.1	0.0%	20		
Sulfate	39.9	mg/L	2						39.9	0.0%	20		

SampleID: G2503364-001BDUP **SampType:** DUP **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388665

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	277	mg/L	1						277	0.0%	20		
Sulfate	526	mg/L	2						526	0.0%	20		

SampleID: HRQC-267767 **SampType:** HRQC **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388580

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	265	mg/L	1	250		106.1%	90	110					
Sulfate	273	mg/L	2	250		109.2%	90	110					

SampleID: HRQC 1000-267767 **SampType:** HRQC 1000 **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388581

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	1100	mg/L	10	1000		109.8%	90	110					
Sulfate	1100	mg/L	20	1000		109.6%	90	110					

SampleID: LFB-267767 **SampType:** LFB **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388571

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	48.8	mg/L	1	50		97.7%	90	110					
Sulfate	48.2	mg/L	2	50		96.5%	90	110					

SampleID: LFB2-267767 **SampType:** LFB2 **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388577

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	4.74	mg/L	1	5		94.8%	90	110					
Sulfate	4.65	mg/L	2	5		92.9%	90	110					

SampleID: G2503796-003CLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388584

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	23	mg/L	1	15	9.88	87.2%	80	120					
Sulfate	156	mg/L	2	20	138	89.2%	80	120					

SampleID: G2503799-003BLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388608

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	32.3	mg/L	1	15	19.4	85.6%	80	120					
Sulfate	82.7	mg/L	2	20	65	88.6%	80	120					

SampleID: G2503801-007DLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388640

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	45.5	mg/L	1	15	32.1	89.7%	80	120					
Sulfate	57.9	mg/L	2	20	39.9	90.1%	80	120					

SampleID: G2503364-001BLFM **SampType:** LFM **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388667

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	283	mg/L	1	15	277	42.6%	80	120				1	
Sulfate	531	mg/L	2	20	526	26.2%	80	120				1	

SampleID: LRB-267767 **SampType:** LRB **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388578

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	< 1	mg/L	1										
Sulfate	< 2	mg/L	2										

SampleID: CB-267767 **SampType:** MBLK **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388569

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	< 1	mg/L	1										
Sulfate	< 2	mg/L	2										

SampleID: QCS-267767 **SampType:** QCS **TestNo:** EPA 300.0 Rev 2.1 **Prep Date:** 3/13/2025 **RunNo:** 317828
BatchID: 267767 **Analysis Date:** 3/13/2025 **SeqNo:** 8388579

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chloride	23.4	mg/L	1	24		97.3%	90	110					
Sulfate	31.1	mg/L	2	32		97.2%	90	110					

SampleID: G2502D96-001EDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393880

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.282	mg/L as N	0.1						0.368	26.7%	20	R	

SampleID: G2502D96-003EDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393882

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.184	mg/L as N	0.1						0.182	1.4%	20		

SampleID: G2503801-006BDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393888

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	< 0.1	mg/L as N	0.1						0.0549		20		

SampleID: G2503823-001BDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317945
BatchID: R317945 **Analysis Date:** 3/17/2025 **SeqNo:** 8393898

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.222	mg/L as N	0.1						0.223	0.2%	20		

SampleID: G2503829-001BDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393925

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	1.18	mg/L as N	0.1						1.17	0.4%	20		

SampleID: G2503801-001BDUP **SampType:** DUP **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393945

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	< 0.1	mg/L as N	0.1								20		

SampleID: LCS **SampType:** LCS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393878

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.782	mg/L as N	0.1	0.82		95.4%	90	110					

SampleID: LCS **SampType:** LCS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317945
BatchID: R317945 **Analysis Date:** 3/17/2025 **SeqNo:** 8393900

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.804	mg/L as N	0.1	0.82		98.1%	90	110					

SampleID: LCS **SampType:** LCS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393923

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.758	mg/L as N	0.1	0.82		92.4%	90	110					

SampleID: CCB **SampType:** MBLK **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393876

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	< 0.1	mg/L as N	0.1										

SampleID: CCB **SampType:** MBLK **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317945
BatchID: R317945 **Analysis Date:** 3/17/2025 **SeqNo:** 8393891

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	< 0.1	mg/L as N	0.1										

SampleID: CCB **SampType:** MBLK **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393921

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	< 0.1	mg/L as N	0.1										

SampleID: G2503801-006BMS **SampType:** MS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317944
BatchID: R317944 **Analysis Date:** 3/17/2025 **SeqNo:** 8393889

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	1.02	mg/L as N	0.1	1	0.0549	96.2%	90	110					

SampleID: G2503823-001BMS **SampType:** MS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317945
BatchID: R317945 **Analysis Date:** 3/17/2025 **SeqNo:** 8393899

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	1.2	mg/L as N	0.1	1	0.223	97.5%	90	110					

SampleID: G2503829-001BMS **SampType:** MS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393926

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	2.07	mg/L as N	0.1	1	1.17	90.0%	90	110					

SampleID: G2503801-001BMS **SampType:** MS **TestNo:** EPA 350.1 Rev 2.0 **Prep Date:** **RunNo:** 317946
BatchID: R317946 **Analysis Date:** 3/17/2025 **SeqNo:** 8393946

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Ammonia Nitrogen	0.916	mg/L as N	0.1	1		91.6%	90	110					

SampleID: G2503405-003BDUP **SampType:** DUP **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403707

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	0.967	mg/L as N	0.05						0.97	0.3%	20		

SampleID: G2503405-004BDUP **SampType:** DUP **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403709

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	1.65	mg/L as N	0.05						1.66	0.5%	20		

SampleID: G2503742-005BDUP **SampType:** DUP **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403711

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	< 0.05	mg/L as N	0.05								20		

SampleID: G2503801-008BDUP **SampType:** DUP **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403738

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	< 0.05	mg/L as N	0.05								20		

SampleID: LCS-268224 **SampType:** LCS **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403705

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	0.954	mg/L as N	0.05	1		95.4%	90	110					

SampleID: MBLK-268224 **SampType:** MBLK **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403703

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	< 0.05	mg/L as N	0.05										

SampleID: G2503742-005BMS **SampType:** MS **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403712

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	1.03	mg/L as N	0.05	1		102.6%	90	110					

SampleID: G2503801-008BMS **SampType:** MS **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403740

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate - Nitrite	1	mg/L as N	0.05	1		100.2%	90	110					

SampleID: G2503801-008BDUP **SampType:** DUP **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403737

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	< 0.05	mg/L as N	0.05								20		

SampleID: LCS-268224 **SampType:** LCS **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403704

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	0.954	mg/L as N	0.05	1		95.4%	90	110					

SampleID: MBLK-268224 **SampType:** MBLK **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403702

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	< 0.05	mg/L as N	0.05										

SampleID: G2503801-008BMS **SampType:** MS **TestNo:** EPA 353.2 Rev 2.0 **Prep Date:** 3/19/2025 **RunNo:** 318214
BatchID: 268224 **Analysis Date:** 3/21/2025 **SeqNo:** 8403739

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Nitrate Nitrogen	1	mg/L as N	0.05	1		100.2%	90	110			20		

SampleID: LCS-267911 **SampType:** LCS **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267911 **Analysis Date:** 3/18/2025 **SeqNo:** 8397500

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	0.002	mg/L	0.0002	0.002		100.0%	85	115					

SampleID: LCS-267919 **SampType:** LCS **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267919 **Analysis Date:** 3/18/2025 **SeqNo:** 8397565

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	0.00203	mg/L	0.0002	0.002		101.5%	85	115					

SampleID: G2503801-002EMS **SampType:** MS **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267919 **Analysis Date:** 3/18/2025 **SeqNo:** 8397577

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	0.00196	mg/L	0.0002	0.002		98.0%	85	115					

SampleID: G2503806-005IMS **SampType:** MS **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267919 **Analysis Date:** 3/18/2025 **SeqNo:** 8397604

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	0.00207	mg/L	0.0002	0.002		103.5%	85	115					

SampleID: G2503801-002EMSD **SampType:** MSD **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267919 **Analysis Date:** 3/18/2025 **SeqNo:** 8397629

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	0.00201	mg/L	0.0002						0.00196	2.5%	20		

SampleID: PB-267911 **SampType:** PB **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267911 **Analysis Date:** 3/18/2025 **SeqNo:** 8397493

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	< 0.0002	mg/L	0.0002										

SampleID: PB-267919 **SampType:** PB **TestNo:** EPA 7470A **Prep Date:** 3/17/2025 **RunNo:** 318041
BatchID: 267919 **Analysis Date:** 3/18/2025 **SeqNo:** 8397564

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Mercury	< 0.0002	mg/L	0.0002										

SampleID: LCS-267899 **SampType:** LCS **TestNo:** EPA 8011 **Prep Date:** 3/17/2025 **RunNo:** 318072
BatchID: 267899 **Analysis Date:** 3/19/2025 **SeqNo:** 8398989

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.117	µg/L	0.04	0.125		93.6%	60	140					
1,2-Dibromoethane	0.112	µg/L	0.04	0.125		89.6%	60	140					
Surr: 1,1,2,2-Tetrachloroethane	0.253	µg/L	0	0.286		88.5%	60	140					

SampleID: MBLK-267899 **SampType:** MBLK **TestNo:** EPA 8011 **Prep Date:** 3/17/2025 **RunNo:** 318072
BatchID: 267899 **Analysis Date:** 3/18/2025 **SeqNo:** 8398966

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	< 0.04	µg/L	0.04										
1,2-Dibromoethane	< 0.04	µg/L	0.04										
Surr: 1,1,2,2-Tetrachloroethane	0.441	µg/L	0	0.571		77.2%	60	140					

SampleID: G2503801-002CMS **SampType:** MS **TestNo:** EPA 8011 **Prep Date:** 3/17/2025 **RunNo:** 318072
BatchID: 267899 **Analysis Date:** 3/18/2025 **SeqNo:** 8398969

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.109	µg/L	0.04	0.125		87.2%	60	140					
1,2-Dibromoethane	0.118	µg/L	0.04	0.125		94.4%	60	140					
Surr: 1,1,2,2-Tetrachloroethane	0.243	µg/L	0	0.286		85.0%	60	140					

SampleID: G2503801-002CMSD **SampType:** MSD **TestNo:** EPA 8011 **Prep Date:** 3/17/2025 **RunNo:** 318072
BatchID: 267899 **Analysis Date:** 3/18/2025 **SeqNo:** 8398970

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,2-Dibromo-3-chloropropane	0.105	µg/L	0.04						0.109	3.7%	20		
1,2-Dibromoethane	0.111	µg/L	0.04						0.118	6.1%	20		
Surr: 1,1,2,2-Tetrachloroethane	0.232	µg/L	0	0.286		81.1%	60	140	0.243				

SampleID: 20 PPB LCS **SampType:** LCS **TestNo:** EPA 8260 D **Prep Date:** **RunNo:** 317953
BatchID: R317953 **Analysis Date:** 3/17/2025 **SeqNo:** 8394308

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	19.1	µg/L	1	20		95.5%	81	125					
1,1,1-Trichloroethane	20.1	µg/L	1	20		100.7%	71	125					
1,1,2,2-Tetrachloroethane	18.7	µg/L	1	20		93.3%	77	118					
1,1,2-Trichloroethane	18.7	µg/L	1	20		93.3%	80	125					
1,1-Dichloroethane	20.8	µg/L	1	20		103.8%	71	123					
1,1-Dichloroethene	19.4	µg/L	1	20		97.2%	67	124					

1,2,3-Trichloropropane	19.1	µg/L	1	20		95.4%	72	120					
1,2-Dichlorobenzene	18.6	µg/L	1	20		93.2%	77	120					
1,2-Dichloroethane	20.4	µg/L	1	20		101.9%	72	123					
1,2-Dichloropropane	18.9	µg/L	1	20		94.7%	78	121					
1,4-Dichlorobenzene	18.8	µg/L	1	20		94.1%	76	123					
2-Butanone	19.7	µg/L	5	20		98.4%	63	134					
2-Hexanone	18.7	µg/L	5	20		93.7%	58	132					
4-Methyl-2-Pentanone	18.6	µg/L	1	20		92.9%	70	130					
Acetone	21.2	µg/L	10	20		106.1%	66	138					
Benzene	20.6	µg/L	1	20		102.9%	72	126					
Bromochloromethane	20.3	µg/L	1	20		101.4%	72	125					
Bromodichloromethane	18.7	µg/L	1	20		93.7%	71	138					
Bromoform	22.1	µg/L	1	20		110.7%	71	125					
Bromomethane	17.5	µg/L	1	20		87.4%	48	148					
Carbon Disulfide	18.8	µg/L	1	20		93.9%	62	133					
Carbon Tetrachloride	20.2	µg/L	1	20		100.9%	68	133					
Chlorobenzene	18.5	µg/L	1	20		92.6%	77	119					
Chlorodibromomethane	19.4	µg/L	1	20		97.2%	74	131					
Chloroethane	21.7	µg/L	1	20		108.6%	62	140					
Chloroform	20.4	µg/L	1	20		101.8%	70	125					
Chloromethane	20.4	µg/L	1	20		101.8%	65	129					
cis-1,2-Dichloroethene	20.3	µg/L	1	20		101.7%	75	121					
cis-1,3-Dichloropropene	19.1	µg/L	1	20		95.3%	71	129					
Dibromomethane	18.9	µg/L	1	20		94.5%	77	118					
Dichlorobromomethane	18.7	µg/L	1	20		93.7%	56	145					
Ethylbenzene	19	µg/L	1	20		94.9%	76	118					
Iodomethane	20.4	µg/L	5	20		102.1%	47	146					
Methyl Ethyl Ketone	19.7	µg/L	5	20		98.4%	63	134					
Methyl-tert-butyl ether	19.7	µg/L	1	20		98.7%	68	122					
Methylene Chloride	19.5	µg/L	1	20		97.6%	68	132					
Styrene	18.5	µg/L	1	20		92.4%	78	120					
Tetrachloroethene	17.3	µg/L	1	20		86.3%	63	131					
Toluene	18.4	µg/L	1	20		92.2%	75	125					
trans-1,2-Dichloroethene	19.7	µg/L	1	20		98.7%	70	124					

trans-1,3-Dichloropropene	20.1	µg/L	1	20		100.6%	70	126					
trans-1,4-Dichloro-2-butene	20.5	µg/L	2	20		102.4%	46	137					
Tribromomethane	22.1	µg/L	1	20		110.7%	71	125					
Trichloroethene	18.8	µg/L	1	20		94.0%	73	123					
Trichlorofluoromethane	19.6	µg/L	1	20		98.2%	63	133					
Trichloromethane	20.4	µg/L	1	20		101.8%	73	123					
Vinyl Acetate	20.7	µg/L	1	20		103.6%	67	131					
Vinyl Chloride	18.9	µg/L	1	20		94.5%	60	137					
Total Xylene	58	µg/L	2	60		96.7%	77	121					
Surr: 1,2-Dichloroethane-d4	32.3	µg/L	0	30		107.8%	70	130					
Surr: 4-Bromofluorobenzene	29.8	µg/L	0	30		99.4%	70	130					
Surr: Dibromofluoromethane	32.6	µg/L	0	30		108.6%	70	130					
Surr: Toluene-d8	29.8	µg/L	0	30		99.4%	70	130					

SampleID: BLANK **SampType:** MBLK **TestNo:** EPA 8260 D **Prep Date:** **RunNo:** 317953

BatchID: R317953 **Analysis Date:** 3/17/2025 **SeqNo:** 8394310

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	< 1	µg/L	1										
1,1,1-Trichloroethane	< 1	µg/L	1										
1,1,2,2-Tetrachloroethane	< 1	µg/L	1										
1,1,2-Trichloroethane	< 1	µg/L	1										
1,1-Dichloroethane	< 1	µg/L	1										
1,1-Dichloroethene	< 1	µg/L	1										
1,2,3-Trichloropropane	< 1	µg/L	1										
1,2-Dichlorobenzene	< 1	µg/L	1										
1,2-Dichloroethane	< 1	µg/L	1										
1,2-Dichloropropane	< 1	µg/L	1										
1,4-Dichlorobenzene	< 1	µg/L	1										
2-Butanone	< 5	µg/L	5										
2-Hexanone	< 5	µg/L	5										
4-Methyl-2-Pentanone	< 1	µg/L	1										
Acetone	< 10	µg/L	10										
Benzene	< 1	µg/L	1										

Bromochloromethane	< 1	µg/L	1										
Bromodichloromethane	< 1	µg/L	1										
Bromoform	< 1	µg/L	1										
Bromomethane	< 1	µg/L	1										
Carbon Disulfide	< 1	µg/L	1										
Carbon Tetrachloride	< 1	µg/L	1										
Chlorobenzene	< 1	µg/L	1										
Chlorodibromomethane	< 1	µg/L	1										
Chloroethane	< 1	µg/L	1										
Chloroform	< 1	µg/L	1										
Chloromethane	< 1	µg/L	1										
cis-1,2-Dichloroethene	< 1	µg/L	1										
cis-1,3-Dichloropropene	< 1	µg/L	1										
Dibromomethane	< 1	µg/L	1										
Dichlorobromomethane	< 1	µg/L	1										
Ethylbenzene	< 1	µg/L	1										
Iodomethane	< 5	µg/L	5										
Methyl Ethyl Ketone	< 5	µg/L	5										
Methyl-tert-butyl ether	< 1	µg/L	1										
Methylene Chloride	< 1	µg/L	1										
Styrene	< 1	µg/L	1										
Tetrachloroethene	< 1	µg/L	1										
Toluene	< 1	µg/L	1										
trans-1,2-Dichloroethene	< 1	µg/L	1										
trans-1,3-Dichloropropene	< 1	µg/L	1										
trans-1,4-Dichloro-2-butene	< 2	µg/L	2										
Tribromomethane	< 1	µg/L	1										
Trichloroethene	< 1	µg/L	1										
Trichlorofluoromethane	< 1	µg/L	1										
Trichloromethane	< 1	µg/L	1										
Vinyl Acetate	< 1	µg/L	1										
Vinyl Chloride	< 1	µg/L	1										
Total Xylene	< 2	µg/L	2										
Surr: 1,2-Dichloroethane-d4	33.2	µg/L	0	30		110.6%	70	130					

Surr: 4-Bromofluorobenzene	29.8	µg/L	0	30		99.3%	70	130					
Surr: Dibromofluoromethane	32.9	µg/L	0	30		109.8%	70	130					
Surr: Toluene-d8	29.8	µg/L	0	30		99.3%	70	130					

SampleID: G2503717-004GMS **SampType:** MS **TestNo:** EPA 8260 D **Prep Date:** **RunNo:** 317953

BatchID: R317953 **Analysis Date:** 3/17/2025 **SeqNo:** 8394314

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	20.2	µg/L	1	20		101.0%	76	117					
1,1,1-Trichloroethane	23.5	µg/L	1	20		117.6%	76	130					
1,1,2,2-Tetrachloroethane	19.2	µg/L	1	20		95.9%	71	117					
1,1,2-Trichloroethane	19.3	µg/L	1	20		96.3%	76	126					
1,1-Dichloroethane	23.1	µg/L	1	20		115.3%	66	126					
1,1-Dichloroethene	23.7	µg/L	1	20		118.4%	73	135					
1,2,3-Trichloropropane	19.4	µg/L	1	20		97.0%	70	115					
1,2-Dichlorobenzene	19.6	µg/L	1	20		98.1%	74	111					
1,2-Dichloroethane	21.3	µg/L	1	20		106.3%	71	123					
1,2-Dichloropropane	20.5	µg/L	1	20		102.4%	78	122					
1,4-Dichlorobenzene	20	µg/L	1	20		99.8%	70	121					
2-Butanone	19.1	µg/L	5	20		95.6%	57	125					
2-Hexanone	18.1	µg/L	5	20		90.5%	70	126					
4-Methyl-2-Pentanone	18.2	µg/L	1	20		91.2%	71	123					
Acetone	18.2	µg/L	10	20		91.0%	51	133					
Benzene	22.9	µg/L	1	20		114.8%	60	125					
Bromochloromethane	21.7	µg/L	1	20		108.5%	72	123					
Bromodichloromethane	19.9	µg/L	1	20		99.7%	68	132					
Bromoform	21	µg/L	1	20		105.2%	65	117					
Bromomethane	19.6	µg/L	1	20		97.8%	59	137					
Carbon Disulfide	22.6	µg/L	1	20		113.1%	67	146					
Carbon Tetrachloride	24.2	µg/L	1	20		121.1%	67	132					
Chlorobenzene	20	µg/L	1	20		100.1%	75	120					
Chlorodibromomethane	20	µg/L	1	20		99.9%	70	123					
Chloroethane	25.3	µg/L	1	20		126.4%	57	145					
Chloroform	22.1	µg/L	1	20		110.6%	71	125					

Chloromethane	24.5	µg/L	1	20		122.5%	62	136					
cis-1,2-Dichloroethene	22.2	µg/L	1	20		110.9%	72	125					
cis-1,3-Dichloropropene	20.1	µg/L	1	20		100.5%	71	117					
Dibromomethane	19.8	µg/L	1	20		98.8%	75	115					
Dichlorobromomethane	19.9	µg/L	1	20		99.7%	76	121					
Ethylbenzene	21	µg/L	1	20		105.1%	72	122					
Iodomethane	23.6	µg/L	5	20		117.8%	54	145					
Methyl Ethyl Ketone	19.1	µg/L	5	20		95.6%	57	125					
Methyl-tert-butyl ether	20.5	µg/L	1	20		102.6%	71	123					
Methylene Chloride	21	µg/L	1	20		104.8%	65	125					
Styrene	19.9	µg/L	1	20		99.3%	67	127					
Tetrachloroethene	19.5	µg/L	1	20		97.6%	64	129					
Toluene	20.4	µg/L	1	20		101.9%	75	120					
trans-1,2-Dichloroethene	22.7	µg/L	1	20		113.6%	69	118					
trans-1,3-Dichloropropene	21.3	µg/L	1	20		106.3%	66	122					
trans-1,4-Dichloro-2-butene	20.9	µg/L	2	20		104.6%	46	131					
Tribromomethane	21	µg/L	1	20		105.2%	66	120					
Trichloroethene	21.6	µg/L	1	20		107.9%	72	122					
Trichlorofluoromethane	25	µg/L	1	20		124.9%	70	134					
Trichloromethane	22.1	µg/L	1	20		110.6%	71	123					
Vinyl Acetate	21.1	µg/L	1	20		105.3%	62	135					
Vinyl Chloride	23.6	µg/L	1	20		117.9%	64	137					
Total Xylene	63.6	µg/L	2	60		106.0%	72	120					
Surr: 1,2-Dichloroethane-d4	32	µg/L	0	30		106.8%	70	130					
Surr: 4-Bromofluorobenzene	30.3	µg/L	0	30		101.0%	70	130					
Surr: Dibromofluoromethane	32.9	µg/L	0	30		109.8%	70	130					
Surr: Toluene-d8	29.8	µg/L	0	30		99.3%	70	130					

SampleID: G2503717-004GMS **SampType:** MSD **TestNo:** EPA 8260 D **Prep Date:** **RunNo:** 317953

BatchID: R317953 **Analysis Date:** 3/17/2025 **SeqNo:** 8394316

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
1,1,1,2-Tetrachloroethane	19.2	µg/L	1						20.2	4.9%	16		
1,1,1-Trichloroethane	22.6	µg/L	1						23.5	3.8%	15		

1,1,2,2-Tetrachloroethane	18.5	µg/L	1						19.2	3.4%	14		
1,1,2-Trichloroethane	18.6	µg/L	1						19.3	3.3%	15		
1,1-Dichloroethane	22.1	µg/L	1						23.1	4.3%	17		
1,1-Dichloroethene	22.6	µg/L	1						23.7	4.8%	17		
1,2,3-Trichloropropane	18.6	µg/L	1						19.4	4.1%	14		
1,2-Dichlorobenzene	18.8	µg/L	1						19.6	4.4%	13		
1,2-Dichloroethane	20.6	µg/L	1						21.3	3.2%	14		
1,2-Dichloropropane	19.6	µg/L	1						20.5	4.4%	12		
1,4-Dichlorobenzene	19.1	µg/L	1						20	4.6%	16		
2-Butanone	19.3	µg/L	5						19.1	1.0%	23		
2-Hexanone	17.7	µg/L	5						18.1	2.2%	18		
4-Methyl-2-Pentanone	17.9	µg/L	1						18.2	1.5%	18		
Acetone	19	µg/L	10						18.2	4.5%	23		
Benzene	21.9	µg/L	1						22.9	4.5%	15		
Bromochloromethane	20.8	µg/L	1						21.7	4.4%	15		
Bromodichloromethane	18.9	µg/L	1						19.9	5.1%	18		
Bromoform	20.2	µg/L	1						21	4.0%	22		
Bromomethane	18.9	µg/L	1						19.6	3.4%	27		
Carbon Disulfide	21.4	µg/L	1						22.6	5.3%	17		
Carbon Tetrachloride	23	µg/L	1						24.2	5.3%	14		
Chlorobenzene	19.2	µg/L	1						20	4.0%	14		
Chlorodibromomethane	19	µg/L	1						20	5.1%	16		
Chloroethane	24.5	µg/L	1						25.3	3.0%	21		
Chloroform	21.3	µg/L	1						22.1	3.7%	13		
Chloromethane	23.8	µg/L	1						24.5	3.0%	16		
cis-1,2-Dichloroethene	21.2	µg/L	1						22.2	4.4%	12		
cis-1,3-Dichloropropene	19.5	µg/L	1						20.1	3.2%	16		
Dibromomethane	19	µg/L	1						19.8	4.0%	14		
Dichlorobromomethane	18.9	µg/L	1						19.9	5.1%	16		
Ethylbenzene	20.2	µg/L	1						21	3.8%	16		
Iodomethane	22.7	µg/L	5						23.6	3.5%	22		
Methyl Ethyl Ketone	19.3	µg/L	5						19.1	1.0%	21		
Methyl-tert-butyl ether	20.1	µg/L	1						20.5	2.3%	16		
Methylene Chloride	20.4	µg/L	1						21	2.8%	25		

Styrene	19	µg/L	1						19.9	4.6%	17		
Tetrachloroethene	18.8	µg/L	1						19.5	3.8%	16		
Toluene	19.5	µg/L	1						20.4	4.2%	13		
trans-1,2-Dichloroethene	21.8	µg/L	1						22.7	4.3%	19		
trans-1,3-Dichloropropene	20.3	µg/L	1						21.3	4.4%	15		
trans-1,4-Dichloro-2-butene	20.1	µg/L	2						20.9	3.9%	17		
Tribromomethane	20.2	µg/L	1						21	4.0%	18		
Trichloroethene	20.4	µg/L	1						21.6	5.7%	15		
Trichlorofluoromethane	23.1	µg/L	1						25	8.0%	22		
Trichloromethane	21.3	µg/L	1						22.1	3.7%	14		
Vinyl Acetate	20.4	µg/L	1						21.1	3.1%	17		
Vinyl Chloride	22.8	µg/L	1						23.6	3.5%	20		
Total Xylene	60.8	µg/L	2						63.6		18		
Surr: 1,2-Dichloroethane-d4	32.2	µg/L	0	30		107.4%	70	130	32				
Surr: 4-Bromofluorobenzene	30.1	µg/L	0	30		100.2%	70	130	30.3				
Surr: Dibromofluoromethane	32.7	µg/L	0	30		108.9%	70	130	32.9				
Surr: Toluene-d8	29.9	µg/L	0	30		99.6%	70	130	29.8				

SampleID: LCS 50-268113 **SampType:** LCS1 **TestNo:** HACH 8000 **Prep Date:** 3/18/2025 **RunNo:** 318083
BatchID: 268113 **Analysis Date:** 3/19/2025 **SeqNo:** 8399466

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chemical Oxygen Demand	53.3	mg/L	10	50		106.5%	90	110					

SampleID: MBLK-1-268113 **SampType:** MBLK-1 **TestNo:** HACH 8000 **Prep Date:** 3/18/2025 **RunNo:** 318083
BatchID: 268113 **Analysis Date:** 3/19/2025 **SeqNo:** 8399467

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chemical Oxygen Demand	< 10	mg/L	10										

SampleID: G2503806-001BMS **SampType:** MS **TestNo:** HACH 8000 **Prep Date:** 3/18/2025 **RunNo:** 318083
BatchID: 268113 **Analysis Date:** 3/19/2025 **SeqNo:** 8399464

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chemical Oxygen Demand	70.8	mg/L	10	50	17.1	107.3%	75	125					

SampleID: G2503806-001BMSD **SampType:** MSD **TestNo:** HACH 8000 **Prep Date:** 3/18/2025 **RunNo:** 318083
BatchID: 268113 **Analysis Date:** 3/19/2025 **SeqNo:** 8399465

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Chemical Oxygen Demand	69.4	mg/L	10		17.1				70.8	2.0%	20		

SampleID: BLANK-267957 **SampType:** BLANK **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267957 **Analysis Date:** 3/17/2025 **SeqNo:** 8395398

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	< 20	mg/L	20										

SampleID: BLANK-267958 **SampType:** BLANK **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267958 **Analysis Date:** 3/17/2025 **SeqNo:** 8395400

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	< 20	mg/L	20										

SampleID: BLANK-268149 **SampType:** BLANK **TestNo:** SM 2540 C-15 **Prep Date:** 3/19/2025 **RunNo:** 318107
BatchID: 268149 **Analysis Date:** 3/19/2025 **SeqNo:** 8400432

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	< 20	mg/L	20										

SampleID: G2503796-001ADUP **SampType:** DUP **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267957 **Analysis Date:** 3/17/2025 **SeqNo:** 8395486

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	330	mg/L	20						328	0.6%	10		

SampleID: G2503799-001ADUP **SampType:** DUP **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267957 **Analysis Date:** 3/17/2025 **SeqNo:** 8395508

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	266	mg/L	20						264	0.8%	10		

SampleID: G2503819-002ADUP **SampType:** DUP **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267958 **Analysis Date:** 3/17/2025 **SeqNo:** 8395571

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	272	mg/L	20						268	1.5%	10		

SampleID: G2503796-004ADUP **SampType:** DUP **TestNo:** SM 2540 C-15 **Prep Date:** 3/19/2025 **RunNo:** 318107
BatchID: 268149 **Analysis Date:** 3/19/2025 **SeqNo:** 8400447

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	312	mg/L	20						310	0.6%	10		

SampleID: G2503844-005BDUP **SampType:** DUP **TestNo:** SM 2540 C-15 **Prep Date:** 3/19/2025 **RunNo:** 318107
BatchID: 268149 **Analysis Date:** 3/19/2025 **SeqNo:** 8400458

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	154	mg/L	20						150	2.6%	10		

SampleID: LCS-267957 **SampType:** LCS **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267957 **Analysis Date:** 3/17/2025 **SeqNo:** 8395670

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	254	mg/L	20	292		87.0%	79	106					

SampleID: LCS-267958 **SampType:** LCS **TestNo:** SM 2540 C-15 **Prep Date:** 3/17/2025 **RunNo:** 317983
BatchID: 267958 **Analysis Date:** 3/17/2025 **SeqNo:** 8395671

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	226	mg/L	20	292		77.4%	79	106				S	

SampleID: LCS-268149 **SampType:** LCS **TestNo:** SM 2540 C-15 **Prep Date:** 3/19/2025 **RunNo:** 318107
BatchID: 268149 **Analysis Date:** 3/19/2025 **SeqNo:** 8400602

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Total dissolved solids	238	mg/L	20	292		81.5%	79	106					

SampleID: G2503791-001ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393121

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.04	S.U.	0						7	0.6%	20	H	

SampleID: G2503796-001ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393236

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.72	S.U.	0						7.67	0.6%	20	H	

SampleID: G2503798-005ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393288

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	8.08	S.U.	0						8.07	0.1%	20	H	

SampleID: G2503651-001ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393339

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	6.42	S.U.	0						6.37	0.8%	20	H	

SampleID: G2503806-005ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393394

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.21	S.U.	0						7.16	0.7%	20	H	

SampleID: G2503829-003ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393431

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.87	S.U.	0						7.86	0.1%	20	H	

SampleID: G2503840-001ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393474

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	8.1	S.U.	0						8.07	0.4%	20	H	

SampleID: G2503840-007ADUP **SampType:** DUP **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393510

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	8.35	S.U.	0						8.31	0.5%	20	H	

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393090

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7	S.U.	0	7		100.0%	98	102					

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393279

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.02	S.U.	0	7		100.3%	98	102					

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393329

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.04	S.U.	0	7		100.6%	98	102					

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/16/2025 **SeqNo:** 8393423

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.03	S.U.	0	7		100.4%	98	102					

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393496

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.04	S.U.	0	7		100.6%	98	102					

SampleID: pH LCS 7 **SampType:** LCS **TestNo:** SM 4500-H+ B-11 **Prep Date:** **RunNo:** 317922
BatchID: R317922 **Analysis Date:** 3/17/2025 **SeqNo:** 8393545

Analyte	Calc Val	Units	PQL	Spk Val	SPKrefval	REC	Low Limit	High Limit	RPDrefval	RPD	RPDlimit	Qual	Text Rslt
Lab pH	7.03	S.U.	0	7		100.4%	98	102					

Analytical QC Summary Report

Prep Batch Report

Prep Batch: 267767
Prep Code: INPR_IC
Prep Start Date: 3/13/2025 3:18:00 PM
Prep End Date: 3/13/2025 3:18:00 PM
Technician: Adam C. Brown
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
CB-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
G2503358-008C	BRL-GWC-21	Groundwater	3/3/2025 2:43:00 PM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503359-003D	EXP W-1	Groundwater	3/5/2025 9:45:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503363-001E	MW09A	Groundwater	3/5/2025 2:26:00 PM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503364-001B	Outfall 003	Aqueous	3/4/2025 12:15:00 PM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503364-001BDUP		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503364-001BLFM		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503364-002B	Conemaugh River	Aqueous	3/4/2025 12:25:00 PM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503365-001C	SP6	Surface Water	3/6/2025 8:30:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503365-002C	SP11	Surface Water	3/6/2025 8:45:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-001D	SSL-GWC-1	Groundwater	3/5/2025 10:50:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-002D	SSL-GWC-2	Groundwater	3/5/2025 9:18:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-003C	SSL-GWC-3R	Groundwater	3/5/2025 9:35:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-004D	SSL-GWC-5	Groundwater	3/5/2025 11:20:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-005C	SSL-GWA-8A	Groundwater	3/4/2025 10:05:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503366-006C	SSL-GWA-10ROCK	Groundwater	3/4/2025 8:50:00 AM	100	100		1.000	3/13/2025 3:18:00 PM	3/13/2025 3:18:00 PM
G2503796-002C	M-21A	Groundwater	3/12/2025 8:55:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503796-003C	M-21B	Groundwater	3/12/2025 9:45:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503796-003CDUP		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503796-003CLFM		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503796-004C	M-22	Groundwater	3/12/2025 10:55:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503798-001D	MW-20	Groundwater	3/12/2025 10:50:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503798-002D	Leachate	Groundwater	3/12/2025 11:20:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503798-003D	MW-21	Groundwater	3/12/2025 11:50:00 AM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503798-004D	MW-6	Groundwater	3/12/2025 12:30:00 PM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM

G2503798-005D	MW-6 DUP	Groundwater	3/12/2025 12:30:00 PM	100	100		1.000	3/13/2025 12:46:00 PM	3/13/2025 12:46:00 PM
G2503799-001B	M-4	Groundwater	3/12/2025 11:55:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-002B	M-7A	Groundwater	3/12/2025 12:20:00 PM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-003B	M-9	Groundwater	3/12/2025 11:30:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-003BDUP		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-003BLFM		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-004B	M-14	Groundwater	3/12/2025 6:20:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-005B	M-15	Groundwater	3/12/2025 8:05:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503799-006B	M-18	Groundwater	3/12/2025 7:30:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-001D	MW-7	Groundwater	3/12/2025 8:00:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-002D	MW-9	Groundwater	3/12/2025 8:40:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-003D	MW-10	Groundwater	3/12/2025 9:45:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-004D	MW-11	Groundwater	3/12/2025 10:30:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-005D	MW-1	Groundwater	3/12/2025 11:50:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-006D	MW-2	Groundwater	3/12/2025 2:10:00 PM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-007D	MW-5	Groundwater	3/12/2025 1:15:00 PM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-007DDUP		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-007DLFM		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503801-008D	MW-8	Groundwater	3/12/2025 3:15:00 PM	100	100		1.000	3/13/2025 1:14:00 PM	3/13/2025 1:14:00 PM
G2503806-001E	104	Groundwater	3/12/2025 10:20:00 AM	100	100		1.000	3/13/2025 2:30:00 PM	3/13/2025 2:30:00 PM
G2503806-003E	102A	Groundwater	3/12/2025 1:20:00 PM	100	100		1.000	3/13/2025 2:30:00 PM	3/13/2025 2:30:00 PM
G2503806-005E	103A	Groundwater	3/12/2025 5:25:00 PM	100	100		1.000	3/13/2025 2:30:00 PM	3/13/2025 2:30:00 PM
G2503809-001B	Sample 01 (PW 4)	Gas Well Liquid	3/10/2025 10:00:00 AM	100	100		1.000	3/13/2025 2:30:00 PM	3/13/2025 2:30:00 PM
G2503809-002B	Sample 02 (PW 5)	Gas Well Liquid	3/10/2025 2:00:00 PM	100	100		1.000	3/13/2025 2:30:00 PM	3/13/2025 2:30:00 PM
HRQC 1000-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
HRQC-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
IPC-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
LFB-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
LFB2-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM
LRB-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM

QCS-267767		Aqueous	3/13/2025 12:00:00 AM	100	100		1.000	3/13/2025 7:35:00 AM	3/13/2025 7:35:00 AM

Prep Batch Report

Prep Batch: 267899
Prep Code: PREP_8011
Prep Start Date: 3/17/2025 9:00:43 AM
Prep End Date: 3/17/2025 11:36:11 AM
Technician: Aleya G Shreckengost
Prep Factor Units: Ml

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503801-001C	MW-7	Groundwater	3/12/2025 8:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-002C	MW-9	Groundwater	3/12/2025 8:40:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-002CMS		Aqueous	3/17/2025 12:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-002CMSD		Aqueous	3/17/2025 12:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-003C	MW-10	Groundwater	3/12/2025 9:45:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-004C	MW-11	Groundwater	3/12/2025 10:30:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-005C	MW-1	Groundwater	3/12/2025 11:50:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-006C	MW-2	Groundwater	3/12/2025 2:10:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-007C	MW-5	Groundwater	3/12/2025 1:15:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-008C	MW-8	Groundwater	3/12/2025 3:15:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-009A	FB2	Aqueous	3/12/2025 10:40:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503801-010A	T Blank	Aqueous	3/13/2025 11:11:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503806-001D	104	Groundwater	3/12/2025 10:20:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503806-003D	102A	Groundwater	3/12/2025 1:20:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503806-005D	103A	Groundwater	3/12/2025 5:25:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503806-007A	TB-SP2	Aqueous	3/12/2025 10:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503826-001E	MW-11	Aqueous	3/12/2025 9:56:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503826-002E	MW-4	Aqueous	3/12/2025 11:19:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503826-003E	Field Dup	Aqueous	3/12/2025 12:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503827-001F	Leachate	Aqueous	3/12/2025 12:15:00 PM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503827-002A	Trip Blank	Aqueous	3/12/2025 12:00:01 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
G2503850-001D	GWA-2	Groundwater	3/11/2025 9:22:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
LCS-267899		Aqueous	3/17/2025 12:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM
MBLK-267899		Aqueous	3/17/2025 12:00:00 AM	35	35		1.000	3/17/2025 9:00:44 AM	3/17/2025 11:36:11 AM

Prep Batch Report

Prep Batch: 267911
Prep Code: HG_7470_PREP
Prep Start Date: 3/17/2025 9:00:00 AM
Prep End Date: 3/17/2025 11:00:00 AM
Technician: Kristy L Botteicher
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503801-001E	MW-7	Groundwater	3/12/2025 8:00:00 AM	25	25		1.000	3/17/2025 9:00:00 AM	3/17/2025 11:00:00 AM
LCS-267911		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 9:00:00 AM	3/17/2025 11:00:00 AM
PB-267911		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 9:00:00 AM	3/17/2025 11:00:00 AM

Prep Batch Report

Prep Batch: 267919
Prep Code: HG_7470_PREP
Prep Start Date: 3/17/2025 11:30:00 AM
Prep End Date: 3/17/2025 1:30:00 PM
Technician: Kristy L Botteicher
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503801-002E	MW-9	Groundwater	3/12/2025 8:40:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-002EMS		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-002EMSD		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-003E	MW-10	Groundwater	3/12/2025 9:45:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-004E	MW-11	Groundwater	3/12/2025 10:30:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-005E	MW-1	Groundwater	3/12/2025 11:50:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-006E	MW-2	Groundwater	3/12/2025 2:10:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-007E	MW-5	Groundwater	3/12/2025 1:15:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-008E	MW-8	Groundwater	3/12/2025 3:15:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503801-009B	FB2	Aqueous	3/12/2025 10:40:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503806-001I	104	Groundwater	3/12/2025 10:20:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503806-003I	102A	Groundwater	3/12/2025 1:20:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503806-005I	103A	Groundwater	3/12/2025 5:25:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503806-005IMS		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503849-001C	GWC-1	Groundwater	3/11/2025 10:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503850-001J	GWA-2	Groundwater	3/11/2025 9:22:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503861-001I	105	Groundwater	3/13/2025 1:10:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503861-003I	101	Groundwater	3/13/2025 9:30:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM

G2503861-005I	112S	Groundwater	3/13/2025 4:30:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503874-001K	GWB-112	Groundwater	3/12/2025 9:15:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503874-002K	GWB-113	Groundwater	3/12/2025 10:35:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503874-003J	GWC-101	Groundwater	3/12/2025 2:40:00 PM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
G2503878-001F	SWC-1	Surface Water	3/13/2025 8:15:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
LCS-267919		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM
PB-267919		Aqueous	3/17/2025 12:00:00 AM	25	25		1.000	3/17/2025 11:30:00 AM	3/17/2025 1:30:00 PM

Prep Batch Report

Prep Batch: 267927
Prep Code: MEPREP200.7

Prep Start Date: 3/17/2025 7:15:00 AM
Prep End Date: 3/17/2025 12:45:00 PM

Technician: Kristy L Botteicher
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503772-008B	161	Surface Water	3/12/2025 1:10:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-008BDUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-008BMS		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-009B	162	Surface Water	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-010B	014	Surface Water	3/12/2025 8:40:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503781-001D	LCZ	Leachate	3/12/2025 1:45:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503783-001D	LIT	Leachate	3/12/2025 1:10:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503785-001G	Effluent	Waste Water	3/12/2025 9:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-001F	M-20	Groundwater	3/12/2025 10:10:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-002F	M-21A	Groundwater	3/12/2025 8:55:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-003F	M-21B	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-003FMS		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-004F	M-22	Groundwater	3/12/2025 10:55:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-001F	MW-20	Groundwater	3/12/2025 10:50:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-002F	Leachate	Groundwater	3/12/2025 11:20:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-003F	MW-21	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503801-001E	MW-7	Groundwater	3/12/2025 8:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
LCS1-267927		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM

PB-267927		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM

Prep Batch Report

Prep Batch: 267929
Prep Code: MEPREP200.8
Prep Start Date: 3/17/2025 7:15:00 AM
Prep End Date: 3/17/2025 12:45:00 PM
Technician: Kristy L Botteicher
Prep Factor Units:

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503772-008B	161	Surface Water	3/12/2025 1:10:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-008BDUP			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-009B	162	Surface Water	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503772-010B	014	Surface Water	3/12/2025 8:40:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503781-001D	LCZ	Leachate	3/12/2025 1:45:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503783-001D	LIT	Leachate	3/12/2025 1:10:00 PM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503785-001G	Effluent	Waste Water	3/12/2025 9:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-001F	M-20	Groundwater	3/12/2025 10:10:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-002F	M-21A	Groundwater	3/12/2025 8:55:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-002FMS			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-003F	M-21B	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503796-004F	M-22	Groundwater	3/12/2025 10:55:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-001F	MW-20	Groundwater	3/12/2025 10:50:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-002F	Leachate	Groundwater	3/12/2025 11:20:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503798-003F	MW-21	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503801-001E	MW-7	Groundwater	3/12/2025 8:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
G2503801-001EMS			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
LCS2-267929			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM
PB-267929			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:15:00 AM	3/17/2025 12:45:00 PM

Prep Batch Report

Prep Batch: 267934
Prep Code: MEPREP200.7
Prep Start Date: 3/17/2025 7:45:00 AM
Prep End Date: 3/17/2025 1:15:00 PM
Technician: Kristy L Botteicher
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503798-004F	MW-6	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503798-004FDUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503798-004FMS		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503798-005F	MW-6 DUP	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-002E	MW-9	Groundwater	3/12/2025 8:40:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-003E	MW-10	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-004E	MW-11	Groundwater	3/12/2025 10:30:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-005E	MW-1	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-006E	MW-2	Groundwater	3/12/2025 2:10:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-007E	MW-5	Groundwater	3/12/2025 1:15:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-007EMS		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-008E	MW-8	Groundwater	3/12/2025 3:15:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-009B	FB2	Aqueous	3/12/2025 10:40:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503809-001G	Sample 01 (PW 4)	Gas Well Liquid	3/10/2025 10:00:00 AM	5	50		10.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503809-002G	Sample 02 (PW 5)	Gas Well Liquid	3/10/2025 2:00:00 PM	5	50		10.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-001B	SW8	Surface Water	3/13/2025 9:25:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-002B	SW9	Surface Water	3/13/2025 9:15:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-003B	SW10	Surface Water	3/13/2025 9:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-004B	014	Surface Water	3/13/2025 8:10:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
LCS1-267934		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
PB-267934		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM

Prep Batch Report

Prep Batch: 267936
Prep Code: MEPREP200.8

Prep Start Date: 3/17/2025 7:45:00 AM
Prep End Date: 3/17/2025 1:15:00 PM

Technician: Kristy L Botteicher
Prep Factor Units:

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503798-004F	MW-6	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503798-004FDUP			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503798-005F	MW-6 DUP	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM

G2503801-002E	MW-9	Groundwater	3/12/2025 8:40:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-003E	MW-10	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-004E	MW-11	Groundwater	3/12/2025 10:30:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-005E	MW-1	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-006E	MW-2	Groundwater	3/12/2025 2:10:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-006EMS			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-007E	MW-5	Groundwater	3/12/2025 1:15:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-008E	MW-8	Groundwater	3/12/2025 3:15:00 PM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503801-009B	FB2	Aqueous	3/12/2025 10:40:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-001B	SW8	Surface Water	3/13/2025 9:25:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-002B	SW9	Surface Water	3/13/2025 9:15:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-003B	SW10	Surface Water	3/13/2025 9:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-004B	014	Surface Water	3/13/2025 8:10:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
G2503819-004BMS			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
LCS2-267936			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM
PB-267936			3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 7:45:00 AM	3/17/2025 1:15:00 PM

Prep Batch Report

Prep Batch: 267957
Prep Code: WATERPR_TDS
Prep Start Date: 3/17/2025 11:20:00 AM
Prep End Date: 3/17/2025 11:25:00 AM
Technician: Laykin A. Pritts
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
Blank-267957		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503795-001B	Leachate	Leachate	3/12/2025 8:50:00 AM	10	50		5.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503796-001A	M-20	Groundwater	3/12/2025 10:10:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503796-001ADUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503796-002A	M-21A	Groundwater	3/12/2025 8:55:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503796-003A	M-21B	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503796-004A	M-22	Groundwater	3/12/2025 10:55:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503798-001A	MW-20	Groundwater	3/12/2025 10:50:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503798-002A	Leachate	Groundwater	3/12/2025 11:20:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM

G2503798-003A	MW-21	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503798-004A	MW-6	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503798-005A	MW-6 DUP	Groundwater	3/12/2025 12:30:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-001A	M-4	Groundwater	3/12/2025 11:55:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-001ADUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-002A	M-7A	Groundwater	3/12/2025 12:20:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-003A	M-9	Groundwater	3/12/2025 11:30:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-004A	M-14	Groundwater	3/12/2025 6:20:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-005A	M-15	Groundwater	3/12/2025 8:05:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503799-006A	M-18	Groundwater	3/12/2025 7:30:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-001A	MW-7	Groundwater	3/12/2025 8:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-002A	MW-9	Groundwater	3/12/2025 8:40:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-003A	MW-10	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-004A	MW-11	Groundwater	3/12/2025 10:30:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
LCS-267957		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM

Prep Batch Report

Prep Batch: 267958
Prep Code: WATERPR_TDS

Prep Start Date: 3/17/2025 11:20:00 AM
Prep End Date: 3/17/2025 11:25:00 AM

Technician: Laykin A. Pritts
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
Blank-267958		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-005A	MW-1	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-005ADUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-006A	MW-2	Groundwater	3/12/2025 2:10:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-007A	MW-5	Groundwater	3/12/2025 1:15:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503801-008A	MW-8	Groundwater	3/12/2025 3:15:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503804-001G	Outfall 101	Waste Water	3/11/2025 2:00:00 PM	10	50		5.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503814-009A	Cambria 93 001	Surface Water	3/13/2025 10:30:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503814-013A	Cambria 93 SW3	Surface Water	3/13/2025 11:45:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503814-016A	Cambria 93 P27B	Surface Water	3/13/2025 1:35:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM

G2503814-017A	Schrock Ref. MW1	Surface Water	3/13/2025 1:45:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503819-001A	SW8	Surface Water	3/13/2025 9:25:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503819-002A	SW9	Surface Water	3/13/2025 9:15:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503819-002ADUP		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503819-003A	SW10	Surface Water	3/13/2025 9:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-001A	UG10	Surface Water	3/13/2025 1:40:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-002A	UG11	Surface Water	3/13/2025 1:15:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-003A	UG12	Surface Water	3/13/2025 1:10:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-004A	UG13	Surface Water	3/13/2025 1:20:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-005A	Crack	Surface Water	3/13/2025 8:30:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-006A	UG 7	Surface Water	3/13/2025 12:00:00 PM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-007A	001	Surface Water	3/13/2025 10:10:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
G2503820-008A	002	Surface Water	3/13/2025 9:20:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM
LCS-267958		Aqueous	3/17/2025 12:00:00 AM	50	50		1.000	3/17/2025 11:20:00 AM	3/17/2025 11:25:00 AM

Prep Batch Report

Prep Batch: 268113
Prep Code: INPR_COD
Prep Start Date: 3/18/2025 3:02:00 PM
Prep End Date: 3/18/2025 5:02:00 PM
Technician: Emma M. Ferlan
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
CCV 1-268113		Aqueous	3/19/2025 12:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503798-001B	MW-20	Groundwater	3/12/2025 10:50:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503798-002B	Leachate	Groundwater	3/12/2025 11:20:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503798-003B	MW-21	Groundwater	3/12/2025 11:50:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503798-004B	MW-6	Groundwater	3/12/2025 12:30:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503798-005B	MW-6 DUP	Groundwater	3/12/2025 12:30:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503799-001C	M-4	Groundwater	3/12/2025 11:55:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503799-002C	M-7A	Groundwater	3/12/2025 12:20:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503799-003C	M-9	Groundwater	3/12/2025 11:30:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503799-004C	M-14	Groundwater	3/12/2025 6:20:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503799-005C	M-15	Groundwater	3/12/2025 8:05:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM

G2503799-006C	M-18	Groundwater	3/12/2025 7:30:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-001B	MW-7	Groundwater	3/12/2025 8:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-002B	MW-9	Groundwater	3/12/2025 8:40:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-003B	MW-10	Groundwater	3/12/2025 9:45:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-004B	MW-11	Groundwater	3/12/2025 10:30:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-005B	MW-1	Groundwater	3/12/2025 11:50:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-006B	MW-2	Groundwater	3/12/2025 2:10:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-007B	MW-5	Groundwater	3/12/2025 1:15:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503801-008B	MW-8	Groundwater	3/12/2025 3:15:00 PM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503806-001B	104	Groundwater	3/12/2025 10:20:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503806-001BMS		Groundwater	3/19/2025 12:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
G2503806-001BMSD		Groundwater	3/19/2025 12:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
LCS 50-268113		Aqueous	3/19/2025 12:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM
MBLK-1-268113		Aqueous	3/19/2025 12:00:00 AM	2	2		1.000	3/18/2025 3:02:00 PM	3/18/2025 5:02:00 PM

Prep Batch Report

Prep Batch: 268149
Prep Code: WATERPR_TDS

Prep Start Date: 3/19/2025 11:20:00 AM
Prep End Date: 3/19/2025 11:25:00 AM

Technician: Laykin A. Pritts
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
Blank-268149		Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503796-004A	M-22	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503796-004ADUP		Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503799-005A	M-15	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-001A	MW-7	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-002A	MW-9	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-004A	MW-11	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-005A	MW-1	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-006A	MW-2	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503801-008A	MW-8	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503814-013A	Cambria 93 SW3	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM

G2503814-016A	Cambria 93 P27B	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503844-005B	GWC-207R	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503844-005BDUP		Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503844-013B	GWC-212	Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-001A	M-48	Groundwater	3/17/2025 9:37:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-002A	M-51	Groundwater	3/17/2025 9:41:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-003A	M-50	Groundwater	3/17/2025 10:32:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-004A	M-49	Groundwater	3/17/2025 11:04:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-005A	M-19	Groundwater	3/17/2025 11:28:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503952-006A	M-12	Groundwater	3/17/2025 12:39:00 PM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503954-001A	M-11	Groundwater	3/17/2025 9:27:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
G2503954-002A	M-09A	Groundwater	3/17/2025 10:09:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM
LCS-268149		Aqueous	3/19/2025 12:00:00 AM	50	50		1.000	3/19/2025 11:20:00 AM	3/19/2025 11:25:00 AM

Prep Batch Report

Prep Batch: 268224
Prep Code: INPR_NO3

Prep Start Date: 3/19/2025 5:30:00 PM
Prep End Date: 3/19/2025 6:20:00 PM

Technician: Holly N. Montgomery
Prep Factor Units: mL

Sample ID	ClientSampID	Matrix	Collection Date	Samp Amt	Fin Vol	PQual	Factor	Prep Start	Prep End
G2503405-003B	MW-7I(S)	Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503405-003BDUP		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503405-004B	MW-8D	Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503405-004BDUP		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503742-005B	MW-26	Groundwater	3/11/2025 3:08:00 PM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503742-005BDUP		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503742-005BMS		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-001B	MW-7	Groundwater	3/12/2025 8:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-002B	MW-9	Groundwater	3/12/2025 8:40:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-003B	MW-10	Groundwater	3/12/2025 9:45:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-004B	MW-11	Groundwater	3/12/2025 10:30:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-005B	MW-1	Groundwater	3/12/2025 11:50:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM

G2503801-006B	MW-2	Groundwater	3/12/2025 2:10:00 PM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-007B	MW-5	Groundwater	3/12/2025 1:15:00 PM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-008B	MW-8	Groundwater	3/12/2025 3:15:00 PM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-008BDUP		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503801-008BMS		Groundwater	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503830-001C	MW-245R	Groundwater	3/12/2025 11:30:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-001B	M-48	Groundwater	3/17/2025 9:37:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-002B	M-51	Groundwater	3/17/2025 9:41:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-003B	M-50	Groundwater	3/17/2025 10:32:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-004B	M-49	Groundwater	3/17/2025 11:04:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-005B	M-19	Groundwater	3/17/2025 11:28:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
G2503952-006B	M-12	Groundwater	3/17/2025 12:39:00 PM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
LCS-268224		Aqueous	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM
MBLK-268224		Aqueous	3/20/2025 12:00:00 AM	50	50		1.000	3/19/2025 5:30:00 PM	3/19/2025 6:20:00 PM

Batch Reference Report

Client Samp ID	Test No	Batch ID
MW-1	ASTM D1067-16	R317922
MW-10	ASTM D1067-16	R317922
MW-11	ASTM D1067-16	R317922
MW-2	ASTM D1067-16	R317922
MW-5	ASTM D1067-16	R317922
MW-7	ASTM D1067-16	R317922
MW-8	ASTM D1067-16	R317922
MW-9	ASTM D1067-16	R317922
FB2	EPA 200.7 Rev 4.4	267934
MW-1	EPA 200.7 Rev 4.4	267934
MW-10	EPA 200.7 Rev 4.4	267934
MW-11	EPA 200.7 Rev 4.4	267934
MW-2	EPA 200.7 Rev 4.4	267934
MW-5	EPA 200.7 Rev 4.4	267934
MW-7	EPA 200.7 Rev 4.4	267927
MW-8	EPA 200.7 Rev 4.4	267934
MW-9	EPA 200.7 Rev 4.4	267934
FB2	EPA 200.8 Rev 5.4	267936
MW-1	EPA 200.8 Rev 5.4	267936
MW-10	EPA 200.8 Rev 5.4	267936
MW-11	EPA 200.8 Rev 5.4	267936
MW-2	EPA 200.8 Rev 5.4	267936
MW-5	EPA 200.8 Rev 5.4	267936
MW-7	EPA 200.8 Rev 5.4	267929

MW-8	EPA 200.8 Rev 5.4	267936
MW-9	EPA 200.8 Rev 5.4	267936
MW-1	EPA 300.0 Rev 2.1	267767
MW-10	EPA 300.0 Rev 2.1	267767
MW-11	EPA 300.0 Rev 2.1	267767
MW-2	EPA 300.0 Rev 2.1	267767
MW-5	EPA 300.0 Rev 2.1	267767
MW-7	EPA 300.0 Rev 2.1	267767
MW-8	EPA 300.0 Rev 2.1	267767
MW-9	EPA 300.0 Rev 2.1	267767
MW-1	EPA 350.1 Rev 2.0	R317944
MW-10	EPA 350.1 Rev 2.0	R317944
MW-11	EPA 350.1 Rev 2.0	R317944
MW-2	EPA 350.1 Rev 2.0	R317944
MW-5	EPA 350.1 Rev 2.0	R317944
MW-7	EPA 350.1 Rev 2.0	R317946
MW-8	EPA 350.1 Rev 2.0	R317945
MW-9	EPA 350.1 Rev 2.0	R317944
MW-1	EPA 353.2 Rev 2.0	268224
MW-10	EPA 353.2 Rev 2.0	268224
MW-11	EPA 353.2 Rev 2.0	268224
MW-2	EPA 353.2 Rev 2.0	268224
MW-5	EPA 353.2 Rev 2.0	268224
MW-7	EPA 353.2 Rev 2.0	268224
MW-7	EPA 353.2 Rev 2.0	R318214
MW-8	EPA 353.2 Rev 2.0	268224

MW-9	EPA 353.2 Rev 2.0	268224
FB2	EPA 7470A	267919
MW-1	EPA 7470A	267919
MW-10	EPA 7470A	267919
MW-11	EPA 7470A	267919
MW-2	EPA 7470A	267919
MW-5	EPA 7470A	267919
MW-7	EPA 7470A	267911
MW-8	EPA 7470A	267919
MW-9	EPA 7470A	267919
FB2	EPA 8011	267899
MW-1	EPA 8011	267899
MW-10	EPA 8011	267899
MW-11	EPA 8011	267899
MW-2	EPA 8011	267899
MW-5	EPA 8011	267899
MW-7	EPA 8011	267899
MW-8	EPA 8011	267899
MW-9	EPA 8011	267899
T Blank	EPA 8011	267899
FB2	EPA 8260 D	R317953
MW-1	EPA 8260 D	R317953
MW-10	EPA 8260 D	R317953
MW-11	EPA 8260 D	R317953
MW-2	EPA 8260 D	R317953
MW-5	EPA 8260 D	R317953

MW-7	EPA 8260 D	R317953
MW-8	EPA 8260 D	R317953
MW-9	EPA 8260 D	R317953
T Blank	EPA 8260 D	R317953
MW-1	HACH 8000	268113
MW-10	HACH 8000	268113
MW-11	HACH 8000	268113
MW-2	HACH 8000	268113
MW-5	HACH 8000	268113
MW-7	HACH 8000	268113
MW-8	HACH 8000	268113
MW-9	HACH 8000	268113
MW-1	SM 2540 C-15	268149
MW-10	SM 2540 C-15	267957
MW-11	SM 2540 C-15	268149
MW-2	SM 2540 C-15	268149
MW-5	SM 2540 C-15	267958
MW-7	SM 2540 C-15	268149
MW-8	SM 2540 C-15	268149
MW-9	SM 2540 C-15	267957
MW-1	SM 4500-CO2 D	R317922
MW-10	SM 4500-CO2 D	R317922
MW-11	SM 4500-CO2 D	R317922
MW-2	SM 4500-CO2 D	R317922
MW-5	SM 4500-CO2 D	R317922
MW-7	SM 4500-CO2 D	R317922

MW-8	SM 4500-CO2 D	R317922
MW-9	SM 4500-CO2 D	R317922
MW-1	SM 4500-H+ B-11	R317922
MW-10	SM 4500-H+ B-11	R317922
MW-11	SM 4500-H+ B-11	R317922
MW-2	SM 4500-H+ B-11	R317922
MW-5	SM 4500-H+ B-11	R317922
MW-7	SM 4500-H+ B-11	R317922
MW-8	SM 4500-H+ B-11	R317922
MW-9	SM 4500-H+ B-11	R317922

Table I ON Qualifiers

Qualifier	Description
1	Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.
B	Analyte detected in the associated method Blank.
B1	Dilution water blank exceeded method criterion.
C1	CCV recovery above the acceptance limits. Results may be biased high.
C2	CCV recovery below the acceptance limits. Results may be biased low.
C3	ICV recovery above the acceptance limits. Results may be biased high.
C4	ICV recovery below the acceptance limits. Results may be biased low.
D1	The analysis did not meet the minimum DO depletion of at least 2 mg/L.
D2	The analysis did not meet the minimum residual DO of at least 1 mg/L.
D3	Sample required dilution due to a matrix interference.
D4	Sample was diluted in the extraction steps due to marked matrix interferences.
D5	Sample required dilution due to a chloride interference.
D6	Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.
D7	Sample was digested at a dilution due to the formation of a post-digestion precipitate.
D8	Sample was digested at a dilution to achieve method compliant matrix spike recovery.
D9	Sample was digested at a dilution to meet method compliant digestion criteria.
E	Value above quantitation range.
E2	Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.
F1	Fecal sample tested positive for residual chlorine.
H	Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
H1	Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.
H2	Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.
H3	Sample was re-analyzed outside of hold time due to error during original analysis.
H4	The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.
I1	Internal standard recovery above method acceptance limits. Results are estimated.
I2	Internal standard recovery was below method acceptance limits. Results are estimated.
IP	One of the instrument performance checks ( ) did not meet the acceptance criteria.
J	Indicates an estimated value.
L1	LCS above the acceptance limits. Result may be biased high.
L2	LCS below the acceptance limits. Result may be biased low.

L3	Analyte was spiked into the LCS, but was not recovered.
M1	Matrix Spike recovery above the acceptance limits.
M2	Matrix Spike recovery below the acceptance limits.
M4	The matrix spike failed high for the surrogate.
M5	The matrix spike failed low for the surrogate.
M6	The reporting limits were raised due to sample matrix interference.
M7	Recovery for matrix spike could not be quantified due to matrix interference.
M8	Analyte was spiked into the MS, but was not recovered.
M9	Analyte concentration was determined by the method of standard addition (MSA).
N1	The lab does not hold accreditation from PA-DEP for this parameter by this method
N2	PADEP does not accredit labs for this analyte by this method.
N3	The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).
N4	PADEP does not accredit labs for this analyte by this method in drinking water.
ND	Not Detected.
O1	The flashpoint tester cannot detect below 50 degrees F.
O2	Result is temperature of the sample when flame observed. No flash observed. Result qualified.
O4	Sample was received with headspace.
O5	Sample was received in incorrect container and is not compliant with 40CFR136 Table II.
O6	Insufficient sample volume was received to comply with the method.
P1	The pH of the sample was >2 and is not compliant with 40CFR136 Table II.
P2	Sample contained residual chlorine and is not compliant with 40CFR136 Table II
P3	The pH of the sample was <10 and is not compliant with 40CFR136 Table II.
P4	Field preservation does not meet EPA or method recommendations for this analysis.
P5	Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.
P6	Sample required additional preservative upon receipt.
P7	The sample was received unpreserved.
P8	The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.
Q1	Qualified Data See Case Narrative.
Q2	Reported lower result from the dual detector. See case narrative.
Q3	Sample detected multiple Aroclors. See case narrative.
Q4	Weathering or degradation observed for PCBs. See case narrative.
Q5	Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.
Q6	Peak Height/Area used in quantification is documented in the case narrative.

R	Relative Percent Difference (RPD) was above the control limit.
R1	RPD above control limits between matrix spike and MS duplicates.
R2	RPD above the control limit between duplicates.
R3	RSD above the control limit between replicates.
R4	RPD above control limits between Inorganic Carbon check and spike.
R5	RPD above control limits between control sample and control sample duplicates.
R6	Dual Column/Detector RDP >40%. Higher result reported.
S	Recovery for the spiked control sample outside accepted limits.
S2	Surrogate recovery in the blank was below the control limit.
S3	Surrogate recovery in the blank was above the control limit.
S4	Surrogate recovery in the LCS is above the control limit.
S5	Surrogate recovery in the LCS is below the control limit.
SR	Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.
T	Sample temperature received outside the regulatory limit and is not compliant with 40CFR Part136 Table II (for NPW samples).
T1	Sample temperature received outside the regulatory limit. (Primarily for SCM samples).
TC	The MS tune check (tailing factor) did not meet the acceptance criteria.
U	The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.

Note 1: Other comments to clarify test results may be used. Examples include MCL (Contaminant Limit), and MDA (minimum detectable activity). The Q1 code requires additional qualifier information be described in the Case Narrative.

Note 2: NA is used in the Laboratory QC report as “Not Applicable.”

DAY 1

Form F-5002, 03.24
*** Lab Work Order # G2503682

REQUEST FOR LABORATORY ANALYTICAL SERVICES

Chain of Custody (COC)

Shuttle/Cooler ID#

Billing Client

Company WASTE MANAGEMENT - PAPPY'S LANDFILL	**Name** GLEN SCHULTZ	**E-mail Address** GSCHULTZ@WM.COM	
Mailing Address WASTE MANAGEMENT	**Telephone No.** —	**Landfill Site** PAPPY'S LANDFILL	
City, State, Zip COLUMBIA MD 21046	**State Sampled** MARYLAND	**PWS Number** —	**Date Results Required** STANDARD

Special Instruction/Project ID/Analyte List/Comment:
MW-6 1 Vial Broken upon Receipt. DP

*PC-1: Nitric acid (HNO_3)
*PC-2: Hydrochloric acid (HCL)
*PC-3: Sulfuric acid (H_2SO_4)
*PC-4: Sodium Hydroxide (NaOH)
*PC-5: Sodium Thiosulfate ($Na_2S_2O_3$)
*PC-6: Ascorbic acid ($C_6H_8O_6$)
*PC-7: Zinc acetate ($C_4H_6O_4Zn$) / Sodium Hydroxide (NaOH)
*PC-8: Ammonium chloride (NH_4CL)
*PC-9: Copper Sulfate ($CuSO_4 \cdot 5H_2O$)

SR 1st Review: AMM CS 2nd Review: NRB

ANALYSIS REQUESTED

Enter 'X' in box below to indicate request and use appropriate preservation code listed to the left

CLIENT SAMPLE ID	Lab Use Only	DATE SAMPLED	TIME (24 hr)	SAMPLE MATRIX	SAMPLE TYPE	Number of Containers	Dissolved Metals Field Filtered: Y/N	Preservative*: WATER-ALK-D1067/TDS-SM2540 Preservative*: UNFIXED	Preservative*: COD-HACH8000/NH3-350.1/NO3NO2 Preservative*: H_2SO_4	Preservative*: TOT-METALS/HG-7470/200.8-TOT Preservative*: HNO_3	Preservative*: IC-300.0 IC-300.0-28 Preservative*: UNFIXED	Preservative*: EPA8260 VOA Preservative*: HCL	Preservative*: EDB-8011 Preservative*: HCL	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt 2
MW-4	001	3-11-25	1025	GW	G	10	—	1	1	1	1	3	3										
MW-12	002	3-11-25	1155	GW	G	10	—	1	1	1	1	3	3										
MW-13	003	3-11-25	1305	GW	G	10	—	1	1	1	1	3	3										
MW-6	004	3-11-25	1425	GW	G	10	—	1	1	1	1	3	3										
MW-3	005	3-11-25	1605	GW	G	10	—	1	1	1	1	3	3										
FB-1	006	3-11-25	1530	—	—	7				1		3	3										

Ice present on receipt: X Yes or ___ No

Relinquished by:	**Date/Time:** 3-11-25 / 1720	**Received by:**	**Date/Time:**
Relinquished by:	**Date/Time:**	**Received at lab by:**	**Date/Time:**
Printed Sampler Name: JEFF CAMPBELL		**Logged in by:**	**Date/Time:** 3-12-25 11:08

Sample Matrix: **GW** Ground Water | **ST** Storm Water | **SW** Surface Water | **PW** Potable Water | **WW** Wastewater | **SO** Soil | **SL** Sludge | **C** Coal | **SLD** Solid | **O** Other

Sample Type: **G** Grab | **C** Composite | **D** Distribution/DW | **E** Entry Point/DW | **R** Raw/DW | **S** Special/DW | **O** Other | **nHZ** Not Hazardous / **HZ** Hazardous | PO/Quote #:

Please return completed form and samples to **Geochemical Testing • 2005 N Center Ave • Somerset, PA • 15501** • 814-443-1671 • (Fax: 814-445-6729)

SAMPLES MUST BE RECEIVED ON ICE.

Day 2

Form F-5002, 03.24
*** Lab Work Order # G2503801

REQUEST FOR LABORATORY ANALYTICAL SERVICES

Chain of Custody (COC)

Shuttle/Cooler ID#

Billing Client

Company WASTE MANAGEMENT - PAPPYS LANDFILL	**Name** GLEN SCHULTZ	**E-mail Address** GSCHULTZ@WM.COM
Mailing Address WASTE MANAGEMENT	**Telephone No.** —	**Landfill Site** PAPPYS LANDFILL
City, State, Zip COLUMBIA MD 21046	**State Sampled** MARYLAND	**PWS Number** —	**Date Results Required** STANDARD

Special Instruction/Project ID/Analyte List/Comment:

*PC-1: Nitric acid (HNO_3)
*PC-2: Hydrochloric acid (HCL)
*PC-3: Sulfuric acid (H_2SO_4)
*PC-4: Sodium Hydroxide (NaOH)
*PC-5: Sodium Thiosulfate ($Na_2S_2O_3$)
*PC-6: Ascorbic acid ($C_6H_8O_6$)
*PC-7: Zinc acetate ($C_4H_6O_4Zn$) / Sodium Hydroxide (NaOH)
*PC-8: Ammonium chloride (NH_4CL)
*PC-9: Copper Sulfate ($CuSO_4 \cdot 5H_2O$)

SR 1st Review: MSF CS 2nd Review: NRB

ANALYSIS REQUESTED

Enter 'X' in box below to indicate request and use appropriate preservation code listed to the left

CLIENT SAMPLE ID	Lab Use Only	DATE SAMPLED	TIME (24 hr)	SAMPLE MATRIX	SAMPLE TYPE	Number of Containers	Dissolved Metals Field Filtered: Y/N Preservative*:	WATER_ALK-D1067,TDS-SM2540C Preservative*: UNFIXED	COD-HACH8000,NH3-350.1,NO3-NO2 Preservative*: H2SO4	TOT-METALS,HG-7470,200.8-TOT Preservative*: HNO3	IC-300.0,IC-300.0-28 Preservative*:UNFIXED	SW8260-VOA Preservative*: HCL	EDB-8011 Preservative*: HCL	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt 5
MW-7	001	3-12-25	0800	GW	G	10	—	1	1	1	1	3	3											
MW-9	002	3-12-25	0840	GW	G	10	—	1	1	1	1	3	3											
MW-10	003	3-12-25	0945	GW	G	10	—	1	1	1	1	3	3											
MW-11	004	3-12-25	1030	GW	G	10	—	1	1	1	1	3	3											
MW-1	005	3-12-25	1150	GW	G	10	—	1	1	1	1	3	3											
MW-2	006	3-12-25	1410	GW	G	10	—	1	1	1	1	3	3											
MW-5	007	3-12-25	1315	GW	G	10	—	1	1	1	1	3	3											
MW-8	008	3-12-25	1515	GW	G	10	—	1	1	1	1	3	3											
FB-2	009	3-12-25	1040	~~GW~~	—	7	—			1		3	3											
T Blank	010						✓																	

Ice present on receipt: X Yes or ___ No

Relinquished by: Jeff Campbell	**Date/Time:** 3-12-25/1710	**Received by:**	**Date/Time:**
Relinquished by:	**Date/Time:**	**Received at lab by:**	**Date/Time:** 3-13-25 1112
Printed Sampler Name: JEFF CAMPBELL		**Logged in by:**	**Date/Time:**

Sample Matrix: **GW** Ground Water | **ST** Storm Water | **SW** Surface Water | **PW** Potable Water | **WW** Wastewater | **SO** Soil | **SL** Sludge | **C** Coal | **SLD** Solid | **O** Other

Sample Type: **G** Grab | **C** Composite | **D** Distribution/DW | **E** Entry Point/DW | **R** Raw/DW | **S** Special/DW | **O** Other | **nHZ** Not Hazardous / **HZ** Hazardous | PO/Quote #:

Please return completed form and samples to **Geochemical Testing • 2005 N Center Ave • Somerset, PA • 15501** • 814-443-1671 • (Fax: 814-445-6729)

SAMPLES MUST BE RECEIVED ON ICE.

Seal

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.:
Sample Point: MW-4 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/11/25	0950	135	—	175 gal	—

Note: *For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w Water Vol in Tubing Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.*

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N
Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump; B-Peristaltic Pump; C-QED Bladder Pump; D-Bailer; E-Piston Pump; F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable; B-Pressure; C-Vacuum; X-Other —
Sample Tube Type: D
A-Teflon; B-Stainless Steel; C-PVC; D-Polypropylene; X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 79.04 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 79.90 (ft)
Stick Up (from ground elevation): 2.85 (ft)
Casing ID: 4.0 (in)
Casing Materia: PVC

Note: *Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.*

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
0950	1st	5.25 1st	1.108	12.79	0.5	7.22	268.0	79.13
0955	2nd	5.81 2nd	1.103	13.34	0.0	6.91	240.0	79.13
1000	3rd	6.09 3rd	1.101	13.52	1.50	6.83	224.0	79.14
1005	4th	6.25 4th	1.101	13.62	4.55	6.69	211.5	79.14
1010		6.31	1.101	13.64	3.74	6.58	211.3	79.20
1015		6.35	1.101	13.81	2.48	6.49	206.0	79.20
1020		6.35	1.101	13.82	2.06	6.41	205.0	79.24
1025		6.36	1.101	13.73	1.97	6.38	222.0	79.24
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/11/25	6.36	1.101	13.73	1.97	6.38	222.0	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other: —
Weather Conditions (required daily, or as conditions change):
Direction/Speed: NO WIND
Outlook: SUNNY 61
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 22/8 AT 75 PSI

SAMPLE TIME = 10:25

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (If more than one sampler, all should sign):

Date	Name	Signature	Company
03/11/25	JEFF CAMPBELL		TETRA TECH
03/11/25	ALEX BENZADI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE - LF -
Site No.:
Sample Point: MW-12
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/11/25	1115	140 MW	—	3.25	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w: Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump
B-Peristaltic Pump
C-QED Bladder Pump
D-Bailer
E-Piston Pump
F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
Sample Tube Type: D

A-In-line Disposable
B-Pressure
C-Vacuum
X-Other —

A-Teflon
B-Stainless Steel
C-PVC
D-Polypropylene
X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 79.07 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 148.5 (ft)
Stick Up (from ground elevation): 3.35 (ft)
Casing ID: 4.0 (in)
Casing Materia: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
1115	1st	7.24	1.190	14.64	22.1	.60	-71.0	80.10
1120	2nd	7.36	1.189	14.60	53.8	.43	-49.6	80.24
1125	3rd	7.44	1.189	14.58	63.0	.29	-66.6	80.52
1130	4th	7.50	1.188	14.51	174.0	.25	-59.9	80.65
1135		7.54	1.187	14.20	109.0	.22	-41.0	80.91
1140		7.56	1.187	14.63	68.5	.18	-37.0	81.06
1145		7.57	1.187	14.57	41.2	.17	-41.0	81.19
1150		7.58	1.187	14.66	29.3	.17	-47.0	81.30
1155		7.58	1.187	14.64	26.1	.16	-50.0	81.36
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: — Units —
03/11/25	7.58	1.187	14.64	26.1	.16	-50.0	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other —

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 1MPH W
Outlook: SUNNY 68°
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 22/8 AT 70 PSI

- SAMPLE TIME = 1155 AM

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols. If more than one sampler, all should sign).

Date	Name	Signature	Company
03/11/25	JEFF CAMPBELL		TETRA TECH
03/11/25	Alex Benzad.		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE – CF

Site No.:

Sample Point: MW-13 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/11/25	1225	40	—	25	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w Water Vol in Tubing/Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A- Submersible Pump; B-Peristaltic Pump; C-QED Bladder Pump; D-Bailer; E-Piston Pump; F-Dipper/Bottle

X-Other:

Filter Device: Y or (N) — 0.45 µ or — µ (circle or fill in)

Filter Type: —

A-In-line Disposable; B-Pressure; C-Vacuum; X-Other: —

Sample Tube Type: D

A-Teflon; B-Stainless Steel; C-PVC; D-Polypropylene; X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)

Depth to Water (DTW) (from TOC): 63.80 (ft)

Groundwater Elevation (site datum, from TOC): — (ft/msl)

Total Well Depth (from TOC): 136.1 (ft)

Stick Up (from ground elevation): 2.20 (AG) (BG)

Casing ID: 4.0 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1225	1st	7.69	1219	15.20	21	5.59	99.0	64.11
1230	2nd	6.97	1214	15.91	1.7	3.40	127.0	64.25
1235	3rd	6.46	1219	16.31	0.0	2.31	146.0	64.58
1240	4th	6.33	1214	16.34	0.0	1.91	155.0	64.95
1245		6.32	1212	16.41	0.3	1.67	160.0	65.16
1250		6.30	1211	16.51	1.8	1.73	165.0	65.43
1255		6.30	1210	16.48	2.5	1.68	169.0	65.84
1300		6.30	1219	16.45	3.1	1.68	172.0	66.07
1305		6.29	1218	16.30	3.5	1.65	175.0	66.50
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/11/25	6.29	1218	16.30	3.5	1.65	175.0	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR

Odor: ODORLESS

Color: COLORLESS

Other: —

Weather Conditions (required daily, or as conditions change):

Direction/Speed: 3mph/W

Outlook: SUNNY 71°

Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 25/5 AT 75 PSI

- SAMPLE TIME = 1305

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/11/25	JEFF CAMPBELL		TETRA TECH
03/11/25	ALEX BENCARDI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.:
Sample Point: MW-16 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs.min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03 11 25	1400	.25	—	2.5	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing, Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or (N) — 0.45 µ or ____ µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 42.45 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 53.7 (ft)
Stick Up (from ground elevation): 1.95 (ft)
Casing ID: 4.0 (in)
Casing Materia: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1400	1st	6.36	1.159	13.91	1.17	5.66	189.0	43.15
1405	2nd	5.02	1.166	13.94	0.10	1.87	272.0	43.34
1410	3rd	4.90	1.165	13.88	0.10	1.50	297.0	43.47
1415	4th	4.91	1.167	13.84	0.10	1.43	309.0	43.60
1420		4.88	1.168	13.79	0.10	1.58	321.0	43.63
1425		4.89	1.169	13.85	0.10	1.76	327.0	43.68
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other Units
03 11 25	4.89	1.169	13.85	0.10	1.70	327.0	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR — Odor: ODORLESS — Color: COLORLESS — Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: 2MPH/W — Outlook: SUNNY 71° — Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 26/4 AT 50 PSI

- SAMPLE TIME = 1425

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
3/11/25	JEFF CAMPBELL		TETRA TECH
3/11/25	ALEX BENEDI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.: —
Sample Point: MW-3
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs.min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/11/25	1510	1.55	—	45	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w Water Vol in Tubing, Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N
Purging Device: C
Sampling Device: C
A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle
X-Other:
Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 78.13 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 1402 (ft)
Stick Up (from ground elevation): 4.45 (ft)
Casing ID: 4.0 (in)
Casing Materia: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
1510	1st	5.55	1.163	14.58	0.0	8.14	189.0	78.25
1515	2nd	11.72	1.435	20.97	0.0	6.59	-29	78.58
1520	3rd	11.50	1.293	20.92	0.0	2.76	-32	78.61
1525	4th	11.00	1.204	21.03	0.0	5.31	-24	78.60
1530		10.74	1.176	21.05	0.0	6.58	-7	78.60
1535		10.20	1.164	20.83	0.0	6.59	4.0	78.60
1540		9.91	1.159	20.92	1.2	6.33	10.0	78.60
1545		9.60	1.163	21.16	5.4	5.87	14.0	78.69
1550		9.72	1.163	21.10	2.8	5.83	8.0	78.67
1555		9.76	1.165	21.11	0.0	6.57	7.0	78.66
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/11/25	9.23	1.171	20.94	2.4	1.73	-11	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other: —
Weather Conditions (required daily, or as conditions change):
Direction/Speed: 3MPH/W
Outlook: SUNNY 730
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 20/10 AT 70PSI
- SEE PAGE 2
- SAMPLE TIME = 1605

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/11/25	JEFF CAMPBELL		TETRA TECH
03/11/25	Alex Benradi		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.:
Sample Point: MW3 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/11/25					

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing, Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or (N) — 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC) (ft/msl)	Depth to Water (DTW) (from TOC) (ft)	Groundwater Elevation (site datum, from TOC) (ft/msl)
	77.60	

Total Well Depth (from TOC) (ft)	Stick Up (from ground elevation)	Casing ID (in)	Casing Material
140.2	4.45 (IN)	4.0	PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1600	1st	9.40	1169	20.96	0.0	1.75	-10	78.60
1605	2nd	9.23	1171	20.94	0.4	1.73	-11	78.68
	3rd							
	4th							
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/11/25							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: _____ Odor: _____ Color: _____ Other: _____

Weather Conditions (required daily, or as conditions change): Direction/Speed: _____ Outlook: _____ Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

* SEE PAGE 1 FOR THIS WELL

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols. (If more than one sampler, all should sign).

Date	Name	Signature	Company
03/11/25	JEFF CAMPBELL		TETRA TECH
03/11/25	Alex Benzadi		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF

Site No.:

Sample Point: FB-1 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503682

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: Y or N

Purging Device:

Sampling Device:

X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or N — 0.45 µ or ____ µ (circle or fill in)

Filter Type:

A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sample Tube Type:

A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Materia.

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit		pH (std)		Conductance (SC/EC) (µmhos/cm @ 25 °C)		Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
		1st		1st							
		2nd		2nd							
		3rd		3rd							
		4th		4th							
Suggested range for 3 consec. readings or note Permit/State requirements:			+/- 0.2		+/- 3%		–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03 11 25							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR — Odor: ODORLESS — Color: COLORLESS — Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: 6/W — Outlook: SUNNY 72 — Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

- FIELD BLANK 1 SAMPLED AT 1530

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03,11,25	JEFF CAMPBELL		TETRA TECH
03,11,25	Alex Benzaid	Alex Benzaid	TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

WELL CONDITION INSPECTION FORM

WASTE MANAGEMENT

Site: PARRY'S LANDFILL Personnel: JEFF CAMPBELL

Date: 3-12-25 Page 1 of 1

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MW-7	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	QED HORIBA	☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-9	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-10	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-11	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-1	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-2	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☑ Turbid	☑ OK ☐ Inadequate	
MW-5	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-8	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☑ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.

Return this form to site manager

WELL CONDITION INSPECTION FORM

WASTE MANAGEMENT

Site: PAPPY'S LANDFILL Personnel: JEFF CAMPBELL

Date: 3-11-25 Page 1 of 1

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MW-4	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	QED HORIBA	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-12	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	↓	☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-13	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-6	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-3	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.

Return this form to site manager

FIELD INFORMATION FORM

WM WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.: ---
Sample Point: MW-7
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/12/25	0735	:25	---	50	---

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w Water Vol in Tubing Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump
B-Peristaltic Pump
C-QED Bladder Pump
D-Bailer
E-Piston Pump
F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or --- µ circle or fill in)
Filter Type: ---
Sample Tube Type: D

A-In-line Disposable
B-Pressure
C-Vacuum
X-Other: ---

A-Teflon
B-Stainless Steel
C-PVC
D-Polypropylene
X-Other: ---

WELL DATA

Well Elevation (at TOC): --- (ft/msl)
Depth to Water (DTW) (from TOC): 49.19 (ft)
Groundwater Elevation (site datum, from TOC): --- (ft/msl)
Total Well Depth (from TOC): 100.6 (ft)
Stick Up (from ground elevation): 4.45 (ft)
Casing ID: 4.0 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
0735	1st	4.33	1.105	12.73	3.6	5.6	241.0	50.50
0740	2nd	4.09	0.999	13.64	0.0	2.9	290	52.62
0745	3rd	4.25	0.999	13.52	0.0	2.2	295	54.52
0750	4th	4.23	0.998	13.56	0.0	1.6	307	56.32
0755		4.23	0.998	13.69	0.0	1.4	320	57.53
0800		4.19	0.998	13.07	0.0	2.3	316	58.07
			~~0.998~~					
Suggested range for 3 consec. readings or note Permit/State requirements		+/- 0.2	+/- 3%	---	---	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/12/25	4.19	0.998	13.07	0.0	2.3	316	---

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other: ---

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 0 MPH
Outlook: SUNNY
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 20/10 at 75PSI

- SAMPLE TIME = 0800

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TETRA TECH
03/12/25	ALEX BENRAD		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.:
Sample Point: MW-9 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs.min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/12/25	0820	:20		1.0	

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or (N) — 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC): (ft/msl)
Depth to Water (DTW) (from TOC): 27.58 (ft)
Groundwater Elevation (site datum, from TOC): (ft/msl)
Total Well Depth (from TOC): 42.9 (ft)
Stick Up (from ground elevation): 4.45 (ft) W
Casing ID: 4.0 (in)
Casing Materia: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
0820	1st	4.63	1st .0314	14.78	0.0	5.44	298.0	28.70
0825	2nd	4.57	2nd .0314	14.81	0.0	5.53	311.0	29.71
0830	3rd	4.56	3rd .0314	14.77	0.0	5.67	314.0	30.82
0835	4th	4.44	4th .0314	14.85	0.0	5.25	305.0	32.40
0840		4.62	.0317	14.90	0.0	5.20	305.0	32.35
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/12/25							

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: CLEAN
Odor: ODORLESS
Color: COLORLESS
Other —

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 0 MPH
Outlook: SUNNY 48°
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 20/10 AT 50 PSI

- SAMPLE TIME = 0840

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (If more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TEKTECH
03/12/25	Alex Benzadi		TEKTECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE - LF

Site No.: ---

Sample Point: MW-10

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/12/25	1030	120 min	---	10	---

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

X-Other:

Filter Device: Y or (N) — 0.45 µ or — µ (circle or fill in)

Filter Type: —

A-In-line Disposable, B-Pressure, C-Vacuum, X-Other: —

Sample Tube Type: D

A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC)	Depth to Water (DTW) (from TOC)	Groundwater Elevation (site datum, from TOC)
--- (ft/msl)	14.56 (ft)	--- (ft/msl)

Total Well Depth (from TOC)	Stick Up (from ground elevation)	Casing ID	Casing Material
14.25 (ft)	19.0 (in)	4.0 (in)	PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1010	1st	5.69	1.591	12.79	15.6	6.59	195.0	14.69
1015	2nd	6.16	.6115	12.90	4.0	4.82	100.0	14.80
1020	3rd	6.21	.6117	12.94	2.6	4.8	76.0	14.84
1025	4th	6.22	.6117	13.00	2.6	4.61	65.0	14.88
1030		6.22	.6118	13.06	2.1	4.59	53.0	14.99
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/12/25							---

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.*

FIELD COMMENTS

Sample Appearance: CLEAR

Odor: ODORLESS Color: COLORLESS Other: —

Weather Conditions (required daily, or as conditions change): Direction/Speed: 4 MPH/SW Outlook: SUNNY/510 Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 55/5 AT 20PSI
- ADJUSTED PURGE RATE = 20/10 AT 25 PSI
- SAMPLE TIME = 1030

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TETRA TECH
03/12/25	ALEX BONRADI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE - LF
Site No.:
Sample Point: MW-11
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs.min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03 12 25	09 15	1.30		5.0	

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump
B-Peristaltic Pump
C-QED Bladder Pump
D-Bailer
E-Piston Pump
F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable
B-Pressure
C-Vacuum
X-Other: —

Sample Tube Type: D
A-Teflon
B-Stainless Steel
C-PVC
D-Polypropylene
X-Other: —

WELL DATA

Well Elevation (at TOC): (ft/msl)
Depth to Water (DTW) (from TOC): 45.65 (ft)
Groundwater Elevation (site datum, from TOC): (ft/msl)
Total Well Depth (from TOC): 94.5 (ft)
Stick Up (from ground elevation): 3.20 (ft)
Casing ID: 4.0 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
09:15	1st	4.01	1st .026	13.27	5.3	2.52	295.0	45.70
09:20	2nd	3.91	2nd .026	14.01	8.1	1.31	246.0	45.71
09:25	3rd	3.78	3rd .026	14.04	4.5	1.48	254.0	45.70
09:30	4th	4.01	4th .026	14.06	3.3	1.81	251.0	45.70
09:35		4.03	.026	14.11	4.3	1.11	251.0	45.63
09:40		4.04	.026	14.12	4.0	2.05	258.0	45.70
09:45		3.96	.026	14.16	4.3	3.56	257.0	45.58
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	—	—	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03 12 25	3.96	.026	14.16	4.3	3.56	257.0	

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other:

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 4 MPH SW
Outlook: SUNNY 48°
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

- STARTING PURGE RATE = 48/12 AT 45psi
- ADJUSTED PURGE RATE = 20/10 AT 50PSI
- SAMPLE TIME = 0945

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TETRA TECH
03/12/25	ALEX BEHZADI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.: [redacted]
Sample Point: MW-1
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03 12 25	1125	25	—	20	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w: Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N
Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 66.92 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 149.0 (ft)
Stick Up (from ground elevation): 1.90 (ft)
Casing ID: 4.0 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
1125	1st	11.20 1st	7.39 1st	12.77	3.0	9.06	-43	67.18
1130	2nd	11.38 2nd	8.00 2nd	13.64	2.0	6.07	-56	67.43
1135	3rd	11.57 3rd	9.84 3rd	13.85	1.2	5.04	-69	67.77
1140	4th	11.63 4th	1.07 4th	13.82	1.0	4.91	-71	68.05
1145		11.64	1.06	13.86	1.0	5.16	-70	68.22
1150		11.63	1.05	13.85	1.1	5.0	-69	68.45
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: / Units
03 12 25	11.63	1.05	13.85	1.1	5.0	-69	— / —

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit/Site.

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other: —

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 7 MPH/SW
Outlook: SUNNY 61°
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

STARTING PURGE RATE = 23/7 AT 45 psi
ADJUSTED PSI TO 60 FROM 45 psi
SAMPLE TIME = 1150

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
3/12/25	JEFF CAMPBELL	[signature]	TETRA TECH
3/12/25	ALEX BENZADI	[signature]	TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE. LF
Site No.:
Sample Point: MW-2
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/12/25	1345	:25	—	20	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w: Water Vol in Tubing/Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N
Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump; B-Peristaltic Pump; C-QED Bladder Pump; D-Bailer; E-Piston Pump; F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable; B-Pressure; C-Vacuum; X-Other —
Sample Tube Type: D
A-Teflon; B-Stainless Steel; C-PVC; D-Polypropylene; X-Other: —

WELL DATA

Well Elevation (at TOC): — (ft/msl)
Depth to Water (DTW) (from TOC): 40.04 (ft)
Groundwater Elevation (site datum, from TOC): — (ft/msl)
Total Well Depth (from TOC): 149.8 (ft)
Stick Up (from ground elevation): 4.90 (ft) W
Casing ID: 4.0 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1345		1st 11.63	1st 1.414	14.33	4.1	5.10	-8.0	40.64
1350		2nd 11.74	2nd 1.418	14.68	2.8	5.04	-38.0	41.18
1355		3rd 11.77	3rd 1.419	14.68	2.7	4.71	-46.0	41.58
1400		4th 11.77	4th 1.419	14.63	2.4	5.05	-52.0	41.93
1406		11.77	1.511	14.73	2.2	5.02	-54.0	42.29
1410		11.78	1.511	14.57	2.8	4.98	-55.0	42.73
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: — Units —
03/12/25	11.78	1.511	14.57	2.8	4.98	-55	—

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State/Permit Site.

FIELD COMMENTS

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other —
Weather Conditions (required daily, or as conditions change):
Direction/Speed: 5MPH/SW
Outlook: SUNNY/70
Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

STARTING PURGE RATE = 24/6 AT 65 PSI

- SAMPLE TIME = 1410

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
3/12/25	JEFF CAMPBELL		TETRATECH
3/12/25	Alex Benzadi		TETRATECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF
Site No.:
Sample Point: MW-5
Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03 12 25	1240	135	—	20	—

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing, Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C
Sampling Device: C
X-Other:

A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Device: Y or (N) — 0.45 µ or — µ (circle or fill in)
Filter Type: —
A-In-line Disposable, B-Pressure, C-Vacuum, X-Other —
Sample Tube Type: D
A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other: —

WELL DATA

Well Elevation (at TOC): (ft/msl)
Depth to Water (DTW) (from TOC): 2245 (ft)
Groundwater Elevation (site datum, from TOC): (ft/msl)
Total Well Depth (from TOC): 227 (ft)
Stick Up (from ground elevation): 450 (in)
Casing ID: 4.0 (in)
Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
1240		1st 7.61	1st .214	14.23	910	3.98	1650	2272
1245		2nd 5.29	2nd .214	14.05	1014	3.45	2450	2291
1250		3rd 4.78	3rd .213	14.06	1010	3.30	2660	2303
1255		4th 4.67	4th .214	14.00	1710	3.44	2760	2308
1300		4.64	.215	14.00	1810	3.38	2840	2308
1305		4.60	.214	14.02	2013	3.44	2880	2310
1310		4.58	.214	13.98	2015	3.19	2910	2311
1315		4.58	.213	13.92	1819	3.50	2960	2311

Suggested range for 3 consec. readings or note Permit/State requirements: | +/- 0.2 | +/- 3% | – | – | +/- 10% | +/- 25 mV | Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03 12 25	4.58	.213	13.92	1819	3.50	2960	—

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit/Site.*

Sample Appearance: CLEAR
Odor: ODORLESS
Color: COLORLESS
Other: —

Weather Conditions (required daily, or as conditions change):
Direction/Speed: 5MPH/SW
Outlook: SUNNY 60
Precipitation: Y (or) N

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

- STARTING PURGE RATE = 25/5 AT 30 PSI

- SAMPLE TIME = 1315

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TETRA TECH
03/12/25	ALEX BENVADI		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE LF

Site No.:

Sample Point: MW-8

Sample ID

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory)

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs:min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED
03/12/25					

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing/Flow Cell and Tubing/Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: (Y) or N

Purging Device: C

Sampling Device: C

X-Other:

A- Submersible Pump; B-Peristaltic Pump; C-QED Bladder Pump; D-Bailer; E-Piston Pump; F-Dipper/Bottle

Filter Device: Y or (N) 0.45 µ or ___ µ (circle or fill in)

Filter Type: —

A-In-line Disposable; B-Pressure; C-Vacuum; X-Other: —

Sample Tube Type: D

A-Teflon; B-Stainless Steel; C-PVC; D-Polypropylene; X-Other: —

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): 8390 (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): 1490 (ft)

Stick Up (from ground elevation): 310 (N) (ft)

Casing ID: 4.0 (in)

Casing Material: PVC

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORP (mV)	DTW (ft)
1445	1st	9.13	1.147	15.12	49.7	6.73	63	84.18
1450	2nd	6.47	1.166	15.12	36.2	1.08	-54	84.78
1455	3rd	5.99	1.185	15.06	27.0	0.39	-60	85.28
1500	4th	5.87	1.189	15.09	18.7	0.25	-62	85.76
1505		5.80	1.189	15.06	15.3	0.20	-60	86.21
1510		5.72	1.188	15.18	12.0	0.17	-54	86.59
1515		5.64	1.187	15.10	10.6	0.15	-48	87.18
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional (i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units
03/12/25	5.64	1.187	15.10	10.6	0.15	-48	

Final Field Readings are required (i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.

Sample Appearance: CLEAR

Odor: ODORLESS

Color: COLORLESS

Other:

Weather Conditions (required daily, or as conditions change):

Direction/Speed: 7MPH/SW

Outlook: SUNNY/69D

Precipitation: Y or (N)

Specific Comments (including purge/well volume calculations if required):

FIELD COMMENTS

- STARTING PURGE RATE = 20/10 AT 75 PSI
- ADJUSTED PSI TO 85 PSI
- SAMPLE TIME = 1515

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/12/25	JEFF CAMPBELL		TETRA TECH
03/12/25	Alex Benzadi		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

FIELD INFORMATION FORM

WASTE MANAGEMENT

Site Name: OAK AVE - LF

Site No.:

Sample Point: FB-2 (Sample ID)

This Waste Management Field Information Form is Required
This form is to be completed, in addition to any State Forms. The Field Form is submitted along with the Chain of Custody Forms that accompany the sample containers (i.e. with the cooler that is returned to the laboratory).

Laboratory Use Only/Lab ID: G2503801

PURGE INFO

PURGE DATE (MM DD YY)	PURGE TIME (2400 Hr Clock)	ELAPSED HRS (hrs.min)	WATER VOL IN CASING (Gallons)	ACTUAL VOL PURGED (Gallons)	WELL VOLs PURGED

Note: For Passive Sampling, replace "Water Vol in Casing" and "Well Vols Purged" w/ Water Vol in Tubing, Flow Cell and Tubing Flow Cell Vols Purged. Mark changes, record field data, below.

PURGE/SAMPLE EQUIPMENT

Purging and Sampling Equipment ... Dedicated: Y or N

Filter Device: Y or N — 0.45 µ or ____ µ (circle or fill in)

Purging Device: A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Filter Type: A-In-line Disposable, B-Pressure, C-Vacuum, X-Other

Sampling Device: A- Submersible Pump, B-Peristaltic Pump, C-QED Bladder Pump, D-Bailer, E-Piston Pump, F-Dipper/Bottle

Sample Tube Type: A-Teflon, B-Stainless Steel, C-PVC, D-Polypropylene, X-Other:

X-Other:

WELL DATA

Well Elevation (at TOC): (ft/msl)

Depth to Water (DTW) (from TOC): (ft)

Groundwater Elevation (site datum, from TOC): (ft/msl)

Total Well Depth (from TOC): (ft)

Stick Up (from ground elevation): (ft)

Casing ID: (in)

Casing Materia

Note: Total Well Depth, Stick Up, Casing Id, etc. are optional and can be from historical data, unless required by Site/Permit. Well Elevation, DTW, and Groundwater Elevation must be current.

STABILIZATION DATA (Optional)

Sample Time (2400 Hr Clock)	Rate/Unit	pH (std)	Conductance (SC/EC) (µmhos/cm @ 25 °C)	Temp. (°C)	Turbidity (ntu)	D.O. (mg/L - ppm)	eH/ORF (mV)	DTW (ft)
1st		1st	1st					
2nd		2nd	2nd					
3rd		3rd	3rd					
4th		4th	4th					
Suggested range for 3 consec. readings or note Permit/State requirements:		+/- 0.2	+/- 3%	–	–	+/- 10%	+/- 25 mV	Stabilize

Stabilization Data Fields are Optional *(i.e. complete stabilization readings for parameters required by WM, Site, or State). These fields can be used where four (4) field measurements are required by State/Permit/Site. If a Data Logger or other Electronic format is used, fill in final readings below and submit electronic data separately to Site. If more fields above are needed, use separate sheet or form.*

FIELD DATA

SAMPLE DATE (MM DD YY)	pH (std)	CONDUCTANCE (umhos/cm @ 25°C)	TEMP. (°C)	TURBIDITY (ntu)	DO (mg/L-ppm)	eH/ORP (mV)	Other: Units

Final Field Readings are required *(i.e. record field measurements, final stabilized readings, passive sample readings before sampling for all field parameters required by State Permit Site.*

FIELD COMMENTS

Sample Appearance: Odor: Color: Other:

Weather Conditions (required daily, or as conditions change): Direction/Speed: Outlook: Precipitation: Y or N

Specific Comments (including purge/well volume calculations if required):

FIELD BLANK 2 SAMPLED AT

I certify that sampling procedures were in accordance with applicable EPA, State, and WM protocols (if more than one sampler, all should sign):

Date	Name	Signature	Company
03/__/25	JEFF CAMPBELL		TETRA TECH
03/__/25	Alex Buncadi		TETRA TECH

DISTRIBUTION: WHITE/ORIGINAL - Stays with Sample, YELLOW - Returned to Client, PINK - Field Copy

WELL CONDITION INSPECTION FORM

WASTE MANAGEMENT

Site: PARRY'S LANDFILL Personnel: JEFF CAMPBELL

Date: 3-12-25 Page 1 of 1

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MW-7	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	QED HORIBA	☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-9	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-10	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-11	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-1	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-2	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☑ Turbid	☑ OK ☐ Inadequate	
MW-5	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
MW-8	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☑ Clear ☐ Turbid	☑ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☑ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.

Return this form to site manager

WELL CONDITION INSPECTION FORM

WASTE MANAGEMENT

Site: PAPPY'S LANDFILL Personnel: JEFF CAMPBELL

Date: 3-11-25 Page 1 of 1

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MW-4	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	QED HORIBA	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-12	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No	↓	☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-13	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-6	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
MW-3	☑ OK ☐ Damaged	☑ OK ☐ Damaged	☑ OK ☐ Inadequate	☑ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.

Return this form to site manager

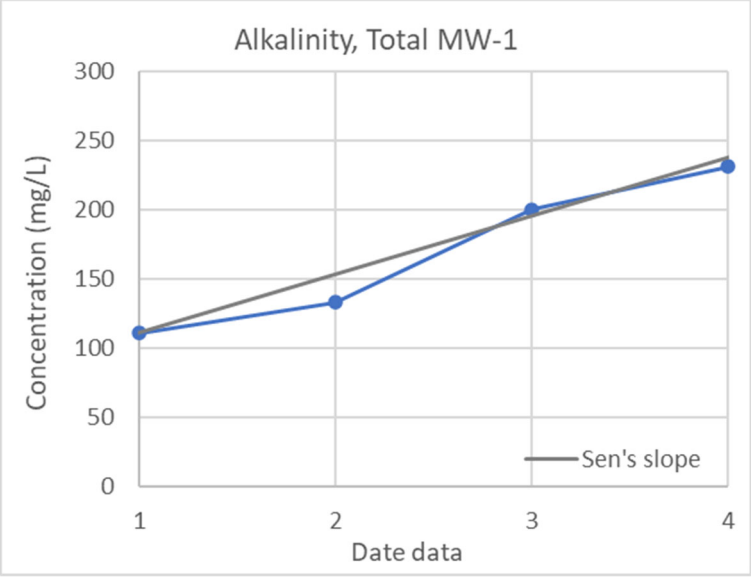
APPENDIX B: STATISTICAL WORKSHEETS

Mann-Kendall Trend Analysis	Parameter: Alkalinity, Total	Location: MW-1

Mann-Kendall trend test
data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Alkalinity, Total MW-1`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
    42.25

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend



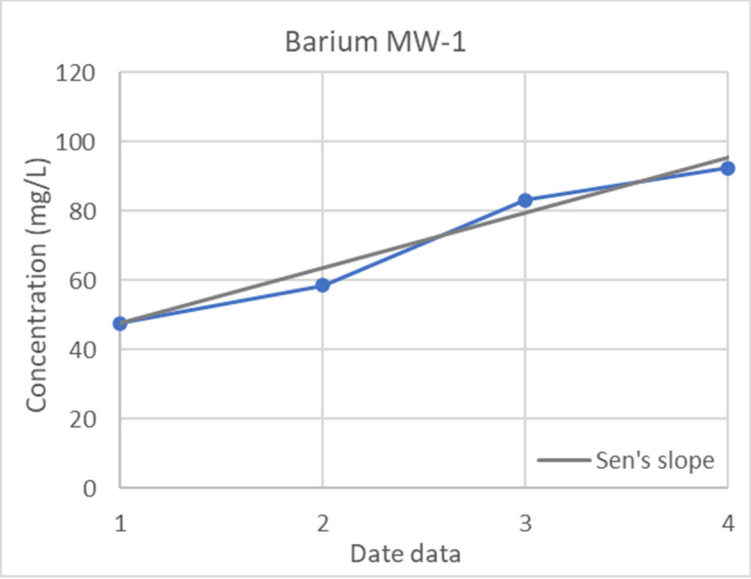
Mann-Kendall Trend Analysis	Parameter: Barium	Location: MW-1

Mann-Kendall trend test

data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Barium MW-1`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
    15.925

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

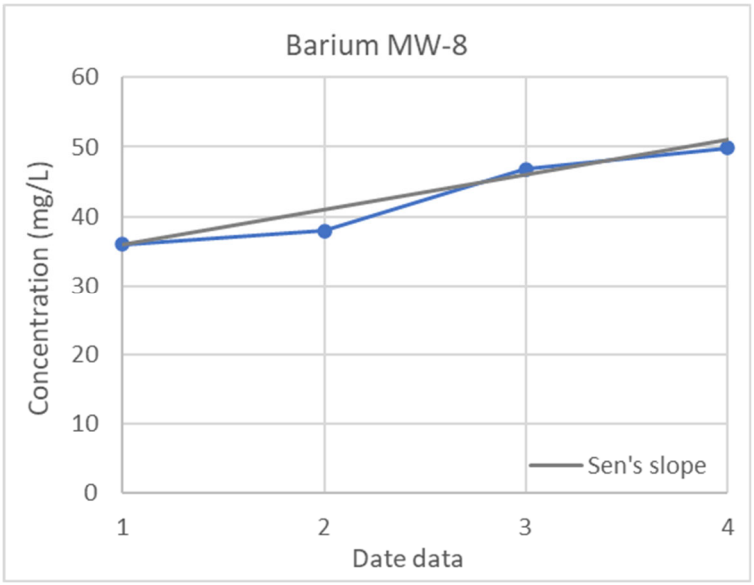


Mann-Kendall Trend Analysis	Parameter: Barium	Location: MW-8

Mann-Kendall trend test
data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

data: R_Input$`Barium MW-8`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
         5

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

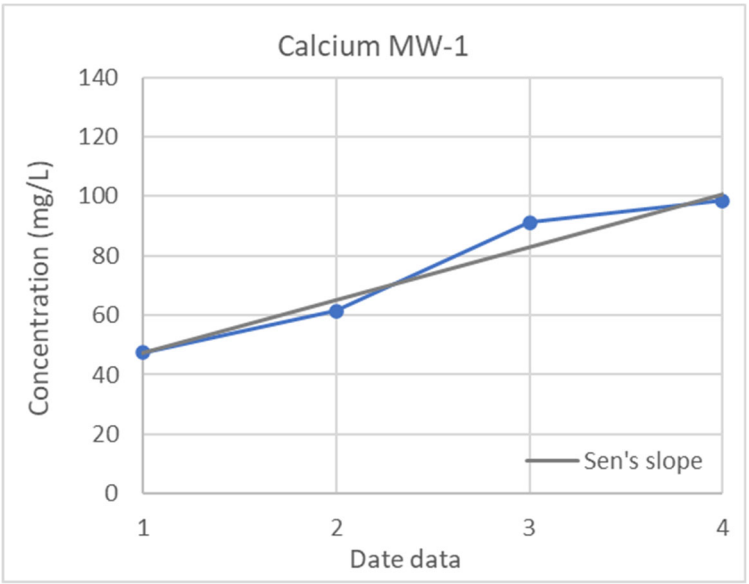


Mann-Kendall Trend Analysis	Parameter: Calcium	Location: MW-1

Mann-Kendall trend test
data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
S varS tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Calcium MW-1`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
17.80833

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

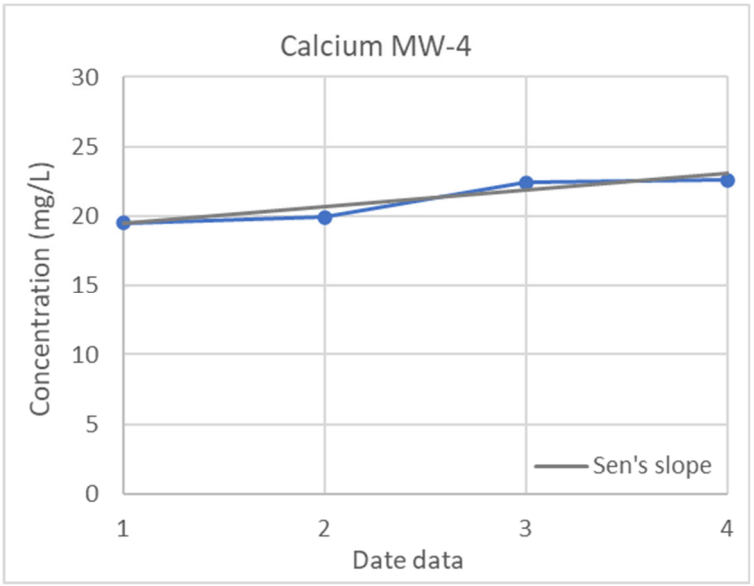


Mann-Kendall Trend Analysis	Parameter: Calcium	Location: MW-4

Mann-Kendall trend test
data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Calcium MW-4`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
  1.191667

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

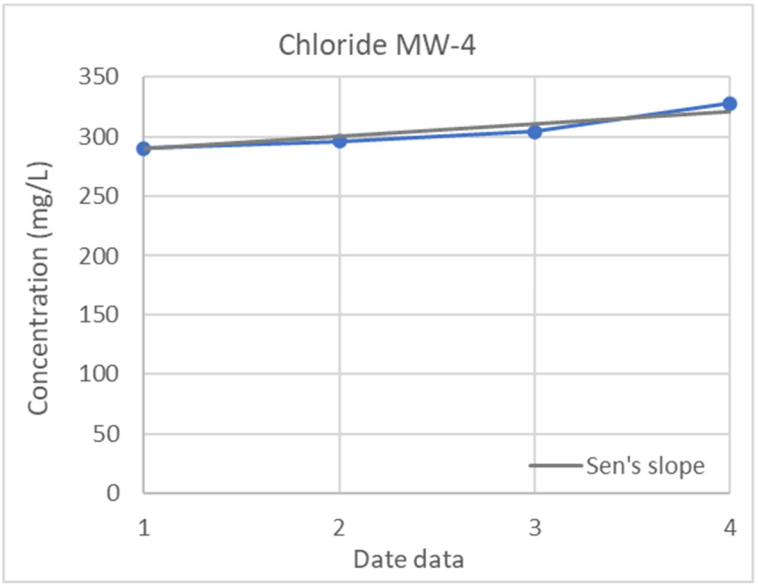


Mann-Kendall Trend Analysis	Parameter: Chloride	Location: MW-4

Mann-Kendall trend test
data: column
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Chloride MW-4`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
  10.33333

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

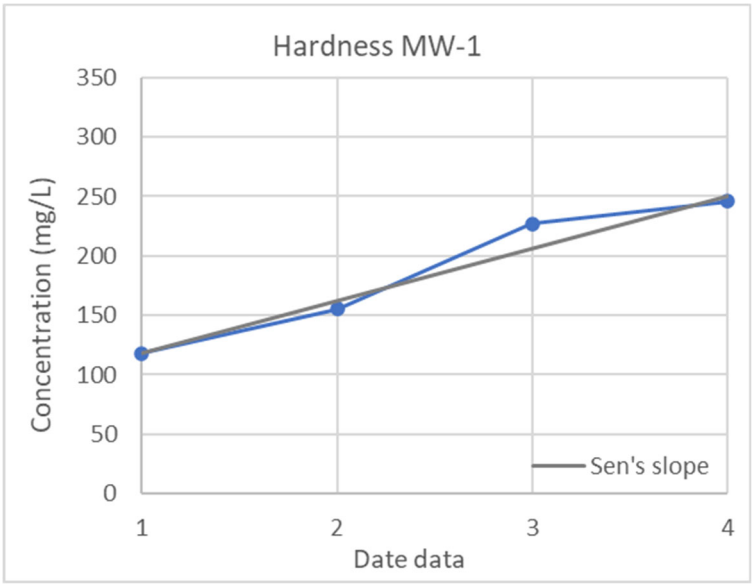


Mann-Kendall Trend Analysis	Parameter: Hardness	Location: MW-1

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Hardness MW-1`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
  44.08333

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

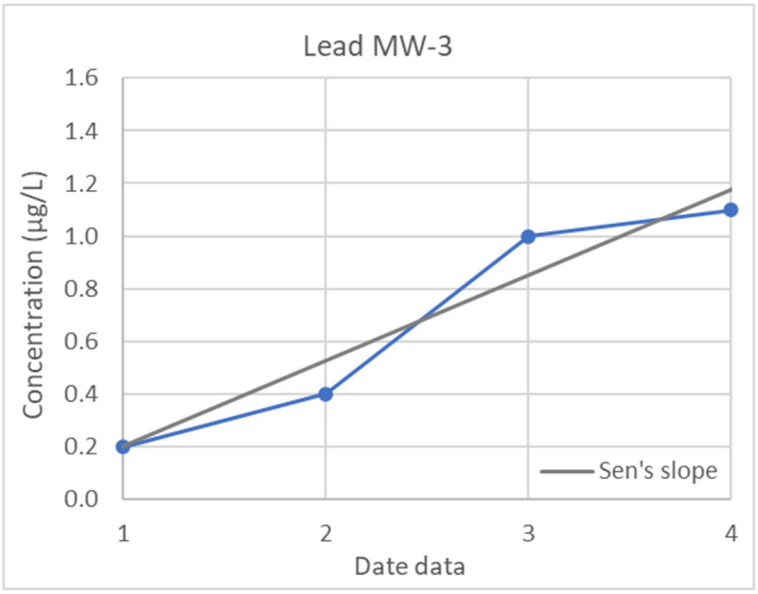


Mann-Kendall Trend Analysis	Parameter: Lead	Location: MW-3

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

      Sen's slope
data: R_Input$`Lead MW-3`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
     0.325

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

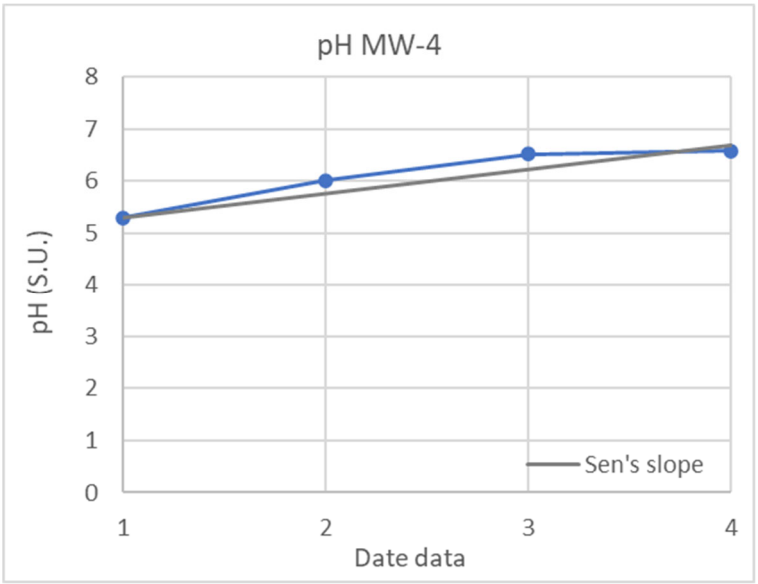


Mann-Kendall Trend Analysis	Parameter: pH (lab)	Location: MW-4

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
S varS tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`pH MW-4`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
0.465

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

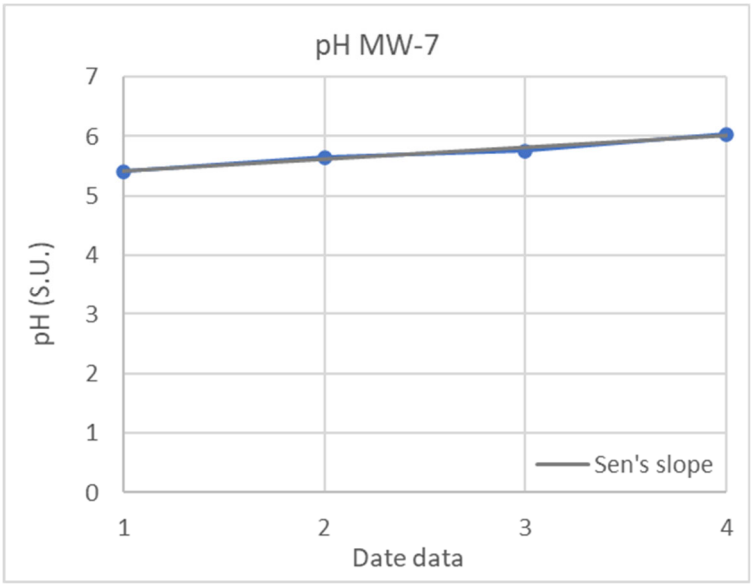


Mann-Kendall Trend Analysis	Parameter: pH (lab)	Location: MW-7

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
      S   varS   tau
6.000000 8.666667 1.000000

      Sen's slope
data: R_Input$`pH MW-7`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
 0.1983333

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

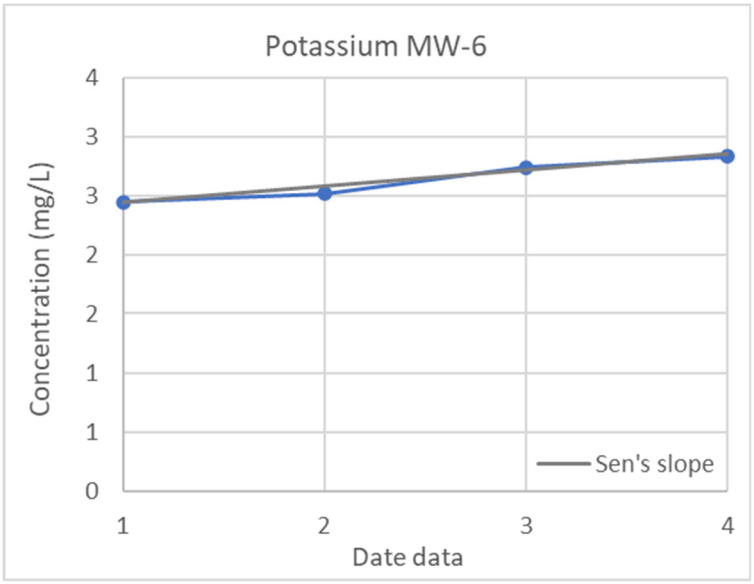


Mann-Kendall Trend Analysis	Parameter: Potassium	Location: MW-6

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
S varS tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Potassium MW-6`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
0.1358333

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

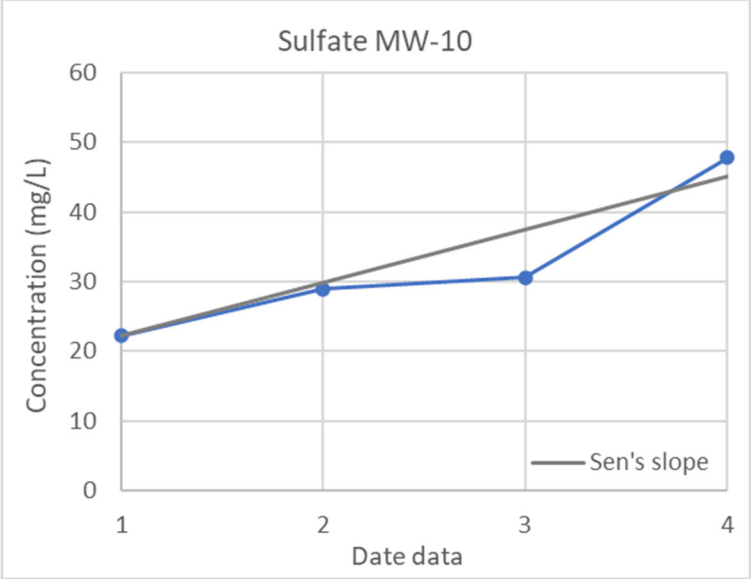


Mann-Kendall Trend Analysis	Parameter: Sulfate	Location: MW-10

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
S varS tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Sulfate MW-10`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
7.616667

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend

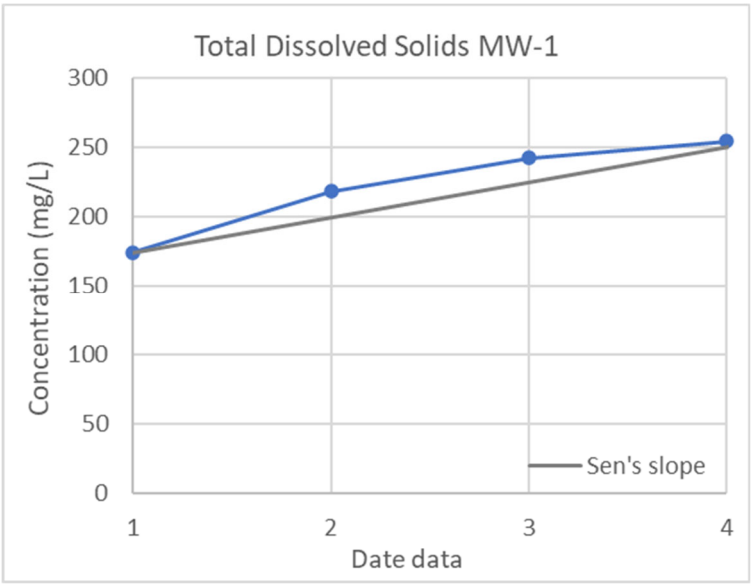


Mann-Kendall Trend Analysis	Parameter: Total Dissolved Solids	Location: MW-1

Mann-Kendall trend test
data: na.omit(column)
z = 2.0381, n = 4, p-value = 0.04154
alternative hypothesis: true S is not equal to 0
sample estimates:
S varS tau
6.000000 8.666667 1.000000

Sen's slope
data: R_Input$`Total Dissolved Solids MW-1`
z = 1.6984, n = 4
alternative hypothesis: true z is not equal to 0
95 percent confidence interval:
sample estimates:
Sen's slope
25.33333

S > 0 and the p-value of 0.04154 < 0.05 indicating a statistically significant upward trend



APPENDIX C: LEACHATE DISCHARGE MONITORING REPORTS

100 Brandywine Blvd, Suite 300
Newtown, PA 18940-4000
Office (215) 269-2198
gschultz@wm.com

February 7, 2025

William W. Smith, Jr., Superintendent of Laboratories
Department of Public Works
Division of Water & Sewer - Operations
1212 Chelsea Road
Perryman, Maryland 21130

Subject: Quarterly Monitoring Report – 4th Quarter 2024
Pappy, Inc. – Oak Avenue Rubble Fill
Industrial Wastewater Discharge Permit No. A-O-003

Dear Mr. Smith:

Please find enclosed the 4th Quarter 2024 Monitoring Report submitted in accordance with the Permit listed above. The permit identifies the authorized entity as the Pappy, Inc. Oak Avenue Rubble Fill located at 1020 Oak Avenue, Joppa, Maryland.

Leachate was sampled during the reporting period in accordance with the conditions set forth in the above referenced permit. All analytical results were observed to be within the allowable limits contained in the permit.

If you have any questions or comments regarding this Quarterly Report, please contact me at (215) 269-2198.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Glen Schultz
Pappy, Inc.
Area Director

Enclosure

KCI TECHNOLOGIES

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD • SPARKS, MD 21152 • 410-316-7800 • (FAX) 410-316-7817

February 7, 2025

Mr. David Kaasa
District Manager
Environmental Legacy Management Group
Waste Management, Inc.
10376 Bullock Drive
King George, VA 22485

RE: Waste Water Discharge Permit #A-O-003 for Oak Avenue Rubble Fill 4th Quarter 2024

Dear Mr. Kaasa,

On behalf of Pappy, Inc., we are pleased to submit herewith the following information in accordance with the requirements of the above wastewater discharge permit for the reporting period of October 1, 2024 through December 31, 2024. The attached information includes the certificate of analysis prepared by Geochemical Testing of the sample collected from the leachate holding tank during the reporting period. The leachate was stored in the holding tank located on site. During this reporting period, no leachate was hauled offsite for disposal.

Effective October 1, 2012, the Harford County Permit relaxed the frequency of leachate sampling from monthly to quarterly. During this most recent quarter, the leachate was sampled on October 10, 2024. The pH value of the leachate sample based upon lab analysis was 7.88, while the field pH was 7.15 (each within the permitted range of 6.0 – 9.0).

The sample collected during the month of October 2024 was analyzed for Volatile Organic Compounds (VOCs) as specified in the permit. No VOCs were detected above the laboratory Minimum Detection Limit (MDL). In addition, a trip blank was collected for quality assurance (QA) and analyzed for VOCs. No VOC analytes were detected above the MDL in the trip blank. Results of analyses performed at the laboratory are enclosed.

There were reportedly no accidental spills, discharges, or other unintentional incidents that could have caused a violation or upset condition during the reporting period.

Sincerely,

Jeffrey Gernand

Jeffrey Gernand, PE, PG
Sr. Project Manager
Environmental Discipline

(410) 891-1810
Jeffrey.Gernand@kci.com

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Friday, October 18, 2024

DAVID KAASA
OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
6994 COLUMBIA GATEWAY, STE 200
COLUMBIA, MD 21046

RE: Pappy's 619Q- Quarterly Leachate Order No.: G2410757

Dear DAVID KAASA:

Geochemical Testing received 2 sample(s) on 10/11/2024 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

Nate R. Bergstresser
Client Support

Report(s) To:
DAVID KAASA
ERICA RIOS
JEFF GERNAND, KCI Technologies
JOSEPH CHURCH, Golder
TIM WOLFE, KCI Technologies

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *18-Oct-24*

CLIENT: OAK AVENUE RUBBLE FILL - PAPPYS
Project: Pappy's 619Q- Quarterly Leachate
Lab Order: G2410757

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biased low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

C5 Positive values verified by second column confirmation.

C6 Confirmation analysis by another detector or chromatographic column was not performed.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O3 The reporting limits were raised due to the high concentration of non-target compounds.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates.

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

T3 Target analyte found in trip/field blank.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *18-Oct-24*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	Leachate
Lab Order:	G2410757		
Project:	Pappy's 619Q- Quarterly Leachate	**Collection Date:**	10/10/2024 8:20:00 AM
Lab ID:	G2410757-001	**Sampled By:**	TetraTech
Matrix:	LEACHATE	**DateReceived:**	10/11/2024 10:21:59 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	7.15		0		S.U.			10/10/24 8:20 AM
Temperature (Field)	10.7		0		deg C			10/10/24 8:20 AM
PH BY SM 4500 H+B			Analyst: **GMG**					**SM 4500-H+ B-11**
Lab pH	7.88	H	0		S.U.	1		10/14/24 1:29 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 624.1**
1,1,1-Trichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
1,1,2,2-Tetrachloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
1,1,2-Trichloroethane	0.50	U	0.50	5.0	µg/L	1		10/11/24 5:10 PM
1,1-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
1,1-Dichloroethene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
1,2-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
1,2-Dichloropropane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
2-Chloroethylvinyl ether	0.50	U	0.50	10	µg/L	1		10/11/24 5:10 PM
Acrolein	2.00	U	2.00	5.0	µg/L	1		10/11/24 5:10 PM
Acrylonitrile	0.50	U	0.50	1.0	µg/L	1		10/11/24 5:10 PM
Benzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Bromomethane	0.50	U	0.50	10	µg/L	1		10/11/24 5:10 PM
Carbon Tetrachloride	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Chlorobenzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Chlorodibromomethane	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:10 PM
Chloroethane	0.20	U	0.20	10	µg/L	1		10/11/24 5:10 PM
Chloromethane	0.50	U	0.50	10	µg/L	1		10/11/24 5:10 PM
cis-1,2-Dichloroethene	0.20	U	0.20	0.5	µg/L	1		10/11/24 5:10 PM
Dichlorobromomethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Ethylbenzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Methylene Chloride	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:10 PM
Tetrachloroethene	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:10 PM
Toluene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
trans-1,2-Dichloroethene	0.50	U	0.50	5.0	µg/L	1		10/11/24 5:10 PM
Tribromomethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Trichloroethene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Trichloromethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Vinyl Chloride	0.20	U	0.20	10	µg/L	1		10/11/24 5:10 PM
trans-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
cis-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:10 PM
Surr: 1,2-Dichloroethane-d4	112		0	78-122	%REC	1		10/11/24 5:10 PM
Surr: 4-Bromofluorobenzene	101		0	74-123	%REC	1		10/11/24 5:10 PM
Surr: Toluene-d8	101		0	79-117	%REC	1		10/11/24 5:10 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *18-Oct-24*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	Trip Blank
Lab Order:	G2410757		
Project:	Pappy's 619Q- Quarterly Leachate	**Collection Date:**	10/11/2024 10:20:00 AM
Lab ID:	G2410757-002	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	10/11/2024 10:21:59 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 624.1**
1,1,1-Trichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
1,1,2,2-Tetrachloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
1,1,2-Trichloroethane	0.50	U	0.50	5.0	µg/L	1		10/11/24 5:34 PM
1,1-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
1,1-Dichloroethene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
1,2-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
1,2-Dichloropropane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
2-Chloroethylvinyl ether	0.50	U	0.50	10	µg/L	1		10/11/24 5:34 PM
Acrolein	2.00	U	2.00	5.0	µg/L	1		10/11/24 5:34 PM
Acrylonitrile	0.50	U	0.50	1.0	µg/L	1		10/11/24 5:34 PM
Benzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Bromomethane	0.50	U	0.50	10	µg/L	1		10/11/24 5:34 PM
Carbon Tetrachloride	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Chlorobenzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Chlorodibromomethane	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:34 PM
Chloroethane	0.20	U	0.20	10	µg/L	1		10/11/24 5:34 PM
Chloromethane	0.50	U	0.50	10	µg/L	1		10/11/24 5:34 PM
cis-1,2-Dichloroethene	0.20	U	0.20	0.5	µg/L	1		10/11/24 5:34 PM
Dichlorobromomethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Ethylbenzene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Methylene Chloride	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:34 PM
Tetrachloroethene	0.40	U	0.40	5.0	µg/L	1		10/11/24 5:34 PM
Toluene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
trans-1,2-Dichloroethene	0.50	U	0.50	5.0	µg/L	1		10/11/24 5:34 PM
Tribromomethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Trichloroethene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Trichloromethane	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Vinyl Chloride	0.20	U	0.20	10	µg/L	1		10/11/24 5:34 PM
trans-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
cis-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		10/11/24 5:34 PM
Surr: 1,2-Dichloroethane-d4	111		0	78-122	%REC	1		10/11/24 5:34 PM
Surr: 4-Bromofluorobenzene	102		0	74-123	%REC	1		10/11/24 5:34 PM
Surr: Toluene-d8	102		0	79-117	%REC	1		10/11/24 5:34 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Form F-5002, 08.21
*** Lab Work Order # G2410757

REQUEST FOR LABORATORY ANALYTICAL SERVICES

Chain of Custody (COC)

Shuttle/Cooler ID#

Billing Client

Company: WASTE MANAGEMENT - PAPPY'S LANDFILL	Name: DAVID KASA	E-mail Address: DKASA@WM.COM	
Mailing Address: WASTE MANAGEMENT	Telephone No.: 479-295-4676	Landfill Site: PAPPY'S LANDFILL	
City, State, Zip: COLUMBIA MD 21046	State Sampled: MARYLAND	PWS Number: —	Date Results Required: STANDARD

Special Instruction/Project ID/Analyte List/Comment:

pH: 7.15
Temp: 10.7°C

NRB 10/18/24

SR 1st Review: TSS CS 2nd Review: AOA

*PC-1: Nitric acid (HNO_3)
*PC-2: Hydrochloric acid (HCL)
*PC-3: Sulfuric acid (H_2SO_4)
*PC-4: Sodium Hydroxide (NaOH)
*PC-5: Sodium Thiosulfate ($Na_2S_2O_3$)
*PC-6: Ascorbic acid ($C_6H_8O_6$)
*PC-7: Zinc acetate ($C_4H_6O_4Zn$) / Sodium Hydroxide (NaOH)
*PC-8: Ammonium chloride (NH_4CL)
*PC-9: Copper Sulfate ($CuSO_4 \cdot 5H_2O$)
*PC-I: Ice *PC-N: None *PC-O: Other

ANALYSIS REQUESTED

Enter 'X' in box below to indicate request and use appropriate preservation code listed to the left

CLIENT SAMPLE ID	Lab Use Only	DATE SAMPLED	TIME (24 hr)	SAMPLE MATRIX	SAMPLE TYPE	Number of Containers	Dissolved Metals Field Filtered: Y(N) Preservative*:	PH-4500-H3 Preservative*: UNFIXED	EPA624-UOA Preservative*: HCL	MSUCA-EPA624.4A-UCA Preservative*: UNFIXED	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt ✓
PAPPY'S-LEACHATE	001	10-10-24	0820	LEACHATE	G	5		1	2	2													
Trip Blank (MSA)	002																						

Ice present on receipt: Y Yes or ___ No

Relinquished by:	Date/Time: 10-10-24 - 1020	Received by:	Date/Time: 10/11/24 1021
Relinquished by:	Date/Time:	Received at lab by:	Date/Time:
Printed Sampler Name: JEFF CAMPBELL		Logged in by:	Date/Time:

Sample Matrix: GW Ground Water | ST Storm Water | SW Surface Water | PW Potable Water | WW Wastewater | SO Soil | SL Sludge | C Coal | PO/Quote #:

Sample Type: G Grab | C Composite | D Distribution/DW | E Entry Point/DW | R Raw/DW | S Special/DW | O Other | nHZ Not Hazardous / HZ Hazardous

Please return completed form and samples to **Geochemical Testing • 2005 N Center Ave • Somerset, PA • 15501** • 814-443-1671 • (Fax: 814-445-6729)

SAMPLES MUST BE RECEIVED ON ICE.

100 Brandywine Blvd, Suite 300
Newtown, PA 18940-4000
Office (267) 751-9486
dmellott@wm.com

April 7, 2025

William W. Smith, Jr., Superintendent of Laboratories
Department of Public Works
Division of Water & Sewer - Operations
1212 Chelsea Road
Perryman, Maryland 21130

Subject: Quarterly Monitoring Report – First Quarter 2025
Pappy, Inc. – Oak Avenue Rubble Fill
Industrial Wastewater Discharge Permit No. A-O-003

Dear Mr. Smith:

Please find enclosed the First Quarter 2025 Monitoring Report submitted in accordance with the Permit listed above. The permit identifies the authorized entity as the Pappy, Inc. Oak Avenue Rubble Fill located at 1020 Oak Avenue, Joppa, Maryland.

Leachate was sampled during the reporting period in accordance with the conditions set forth in the above referenced permit. All analytical results were observed to be within the allowable limits contained in the permit.

If you have any questions or comments regarding this quarterly report, please contact me at (267) 751-9486.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Dallas Mellott
Pappy, Inc.
Landfill Operations Manager

Enclosure

TETRA TECH

April 7, 2025

Dallas Mellott
Landfill Operations Manager
Environmental Legacy Management Group
Waste Management, Inc.
100 Brandywine Blvd, Suite 300
Newtown, PA 18940

RE: Waste Water Discharge Permit #A-O-003 – First Quarter 2025
Oak Avenue Rubble Landfill
1020 Oak Avenue, Joppa, MD

Dear Dallas,

On behalf of Pappy, Inc., we are pleased to submit herewith the following information in accordance with the requirements of the above wastewater discharge permit for the reporting period of January 1, 2025 through March 31, 2025. The attached information includes the certificate of analysis prepared by Geochemical Testing of the sample collected from the leachate holding tank during the reporting period. The leachate was stored in the holding tank located on site. During this reporting period, 54,000 gallons of leachate were hauled offsite for disposal.

Effective October 1, 2012, the Harford County Permit relaxed the frequency of leachate sampling from monthly to quarterly. During this most recent quarter, the leachate was sampled on February 10, 2025. The pH value of the leachate sample based upon lab analysis was 7.0, while the field pH was 6.7 (each within the permitted range of 6.0 – 9.0).

The sample collected during the month of February 2025 was analyzed for volatile organic compounds (VOCs) as specified in the permit. No VOCs were detected above the laboratory Practical Quantitation Limit (PQL). In addition, a trip blank was collected for quality assurance (QA) and analyzed for VOCs. No VOC analytes were detected above the PQL in the trip blank. Results of analyses performed at the laboratory are enclosed.

There were reportedly no accidental spills, discharges, or other unintentional incidents that could have caused a violation or upset condition during the reporting period.

Please contact me at 410-990-4607 or peter.rich@tetratech.com with any questions.

Sincerely,

Peter A. Rich, P.E.
Principal Engineer

Enclosure

TETRA TECH
980 Awald Road, Suite 302, Annapolis, MD 21403
Tel 410.990.4607 Fax 410-990-4749 www.tetratech.com

Waste Management
Pappy's Inc
Oak Ave. Joppa, MD

Qtr 1				Qtr 2				Qtr 3				Qtr 4			
Date	Manifest #	Ph	Gallons	Date	Manifest #	Ph	Gallons	Date	Manifest #	Ph	Gallons	Date	Manifest #	Ph	Gallons
EMAIL to TSchneck@wm.com, CC Dkaasa@wm.com															
January			0												
February															
02/13/25	271547	7.14	18,000												
02/14/25	271549	7.72	12,000												
02/18/25	271550	8.12	24,000												
March															
			0												
												Total Gallons:			
Total Gallons:			**54,000**	Total Gallons:			**0**	Total Gallons:			**0**	Total Gallons:			**0**

GEOCHEMICAL TESTING
Environmental and Energy Analysis

2005 N. Center Ave.
Somerset, PA 15501

814/443-1671
814/445-6666
FAX: 814/445-6729

Tuesday, February 18, 2025

DAVID KAASA
OAK AVENUE RUBBLE FILL - PAPPYS LANDFILL
6994 COLUMBIA GATEWAY, STE 200
COLUMBIA, MD 21046

RE: Pappy's 619Q- Quarterly Leachate Order No.: G2502610

Dear DAVID KAASA:

Geochemical Testing received 2 sample(s) on 2/12/2025 for the analyses presented in the following report.

There were no problems with sample receipt protocols and analyses met the TNI/NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Joelle Streczywilk
Environmental Laboratory Manager

Nate R. Bergstresser
Client Support

Report(s) To:
DAVID KAASA
ERICA RIOS
JEFF GERNAND, KCI Technologies
JOSEPH CHURCH, Golder
TIM WOLFE, KCI Technologies

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306PA DEP

Geochemical Testing

Date: *18-Feb-25*

CLIENT: OAK AVENUE RUBBLE FILL - PAPPYS
Project: Pappy's 619Q- Quarterly Leachate
Lab Order: G2502610

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

Glossary:

H - Method Hold Time exceeded and is not compliant with 40CFR136 Table II.
U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.
B - Analyte detected in the associated Method Blank
Q1 - See case narrative
ND - Not Detected
MCL - Contaminant Limit
J - Indicates an estimated value.
Q - Qualifier
QL -Quantitation Limit
DF - Dilution Factor
S - Surrogate Recovery outside accepted recovery limits
T - Sample received above required temperature and is not compliant with 40CFR136 Table II.
T1 - Sample received above required temperature
MDA - Minimum Detectable Activity.
** - Value exceeds Action Limit
TICs - Tentatively Identified Compounds.
E - Value above quantitation range

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Glossary (continued)

1 Spike recovery limits are not applicable when the sample concentration exceeds the spike concentration by a factor of four or greater.

B1 Dilution water blank exceeded method criterion.

C1 CCV recovery above the acceptance limits. Results may be biased high.

C2 CCV recovery below the acceptance limits. Results may be biasec low.

C3 ICV recovery above the acceptance limits. Results may be biased high.

C4 ICV recovery below the acceptance limits. Results may be biased low.

D1 The analysis did not meet the minimum DO depletion of at least 2 mg/L.

D2 The analysis did not meet the minimum residual DO of at least 1 mg/L.

D3 Sample required dilution due to a matrix interference.

D4 Sample was diluted in the extraction steps due to marked matrix interferences.

D5 Sample required dilution due to a chloride interference.

D6 Sample was diluted and the reporting limits were raised to achieve method compliant internal standard recovery.

D7 Sample was digested at a dilution due to the formation of a post-digestion precipitate.

D8 Sample was digested at a dilution to achieve method compliant matrix spike recovery.

D9 Sample was digested at a dilution to meet method compliant digestion criteria.

E2 Unable to obtain a stable weight within specified limits due to sample matrix. Value is estimated.

F1 Fecal sample tested positive for residual chlorine.

H1 Due to under-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H2 Due to over-depletion from the initial dilutions for BOD, the sample was reanalyzed outside the hold time.

H3 Sample was re-analyzed outside of hold time due to error during original analysis.

H4 The Nitrite result used to report Nitrate was analyzed past the 48-hour holding time.

I1 Internal standard recovery above method acceptance limits. Results are estimated.

I2 Internal standard recovery was below method acceptance limits. Results are estimated.

IP One of the instrument performance checks ( ) did not meet the acceptance criteria.

L1 LCS above the acceptance limits. Result may be biased high.

L2 LCS below the acceptance limits. Result may be biased low.

L3 Analyte was spiked into the LCS, but was not recovered.

M1 Matrix Spike recovery above the acceptance limits.

M2 Matrix Spike recovery below the acceptance limits.

M4 The matrix spike failed high for the surrogate.

M5 The matrix spike failed low for the surrogate.

M6 The reporting limits were raised due to sample matrix interference.

M7 Recovery for matrix spike could not be quantified due to matrix interference.

M8 Analyte was spiked into the MS, but was not recovered.

M9 Analyte concentration was determined by the method of standard addition (MSA).

N1 The lab does not hold accreditation from PA-DEP for this parameter by this method

N2 PADEP does not accredit labs for this analyte by this method.

N3 The lab is accredited for this method in West Virginia, but not in PA (its primary accrediting body).

N4 PADEP does not accredit labs for this analyte by this method in drinking water.

O1 The flashpoint tester cannot detect below 50 degrees F.

O2 Result is temperature of the sample when flame observed. No flash observed. Result qualified.

O4 Sample was received with headspace.

O5 Sample was received in incorrect container and is not compliant with 40CFR136 Table II.

O6 Insufficient sample volume was received to comply with the method.

P1 The pH of the sample was >2 and is not compliant with 40CFR136 Table II.

P2 Sample contained residual chlorine and is not compliant with 40CFR136 Table II

P3 The pH of the sample was <10 and is not compliant with 40CFR136 Table II.

P4 Field preservation does not meet EPA or method recommendations for this analysis.

P5 Acid preservation may not be appropriate for the analysis of 2-Chloroethylvinyl ether.

P6 Sample required additional preservative upon receipt.

P7 The sample was received unpreserved.

P8 The pH of the sample was < 9 and is not compliant with 40 CFR136 Table II.

Q2 Reported lower result from the dual detector. See case narrative.

Q3 Sample detected multiple Aroclors. See case narrative.

Q4 Weathering or degradation observed for PCBs. See case narrative.

Q5 Positive PCB interference qualified in peak(s) that cannot be removed. See case narrative.

Q6 Peak Height/Area used in quantification is documented in the case narrative.

R Relative Percent Difference (RPD) was above the control limit.

R1 RPD above control limits between matrix spike and MS duplicates

R2 RPD above the control limit between duplicates.

R3 RSD above the control limit between replicates.

R4 RPD above control limits between Inorganic Carbon check and spike.

R5 RPD above control limits between control sample and control sample duplicates.

R6 Dual Column/Detector RDP >40%. Higher result reported.

S2 Surrogate recovery in the blank was below the control limit.

S3 Surrogate recovery in the blank was above the control limit.

S4 Surrogate recovery in the LCS is above the control limit.

S5 Surrogate recovery in the LCS is below the control limit.

SR Analyte recovery was outside the accepted recovery limits and above the control limit for RPD.

TC The MS tune check (tailing factor) did not meet the acceptance criteria.

Laboratory Results

Geochemical Testing

Date: *18-Feb-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	Leachate
Lab Order:	G2502610		
Project:	Pappy's 619Q- Quarterly Leachate	**Collection Date:**	2/10/2025 2:05:00 PM
Lab ID:	G2502610-001	**Sampled By:**	TetraTech
Matrix:	LEACHATE	**DateReceived:**	2/12/2025 10:23:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
FIELD PARAMETERS			Analyst:					**FIELD**
pH (Field)	6.7		0		S.U.			02/10/25 2:05 PM
Temperature (Field)	8.6		0		deg C			02/10/25 2:05 PM
PH BY SM 4500 H+B			Analyst: **CBS**					**SM 4500-H+ B-11**
Lab pH	7.00	H	0		S.U.	1		02/12/25 1:54 PM
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 624.1**
1,1,1-Trichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
1,1,2,2-Tetrachloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
1,1,2-Trichloroethane	0.50	U	0.50	5.0	µg/L	1		02/12/25 6:01 PM
1,1-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
1,1-Dichloroethene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
1,2-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
1,2-Dichloropropane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
2-Chloroethylvinyl ether	0.50	U	0.50	10	µg/L	1		02/12/25 6:01 PM
Acrolein	2.00	U	2.00	5.0	µg/L	1		02/12/25 6:01 PM
Acrylonitrile	0.50	U	0.50	1.0	µg/L	1		02/12/25 6:01 PM
Benzene	< 5.0		0.20	5.0	µg/L	1		02/12/25 6:01 PM
Bromomethane	0.50	U	0.50	10	µg/L	1		02/12/25 6:01 PM
Carbon Tetrachloride	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Chlorobenzene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Chlorodibromomethane	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:01 PM
Chloroethane	0.20	U	0.20	10	µg/L	1		02/12/25 6:01 PM
Chloromethane	0.50	U	0.50	10	µg/L	1		02/12/25 6:01 PM
cis-1,2-Dichloroethene	0.20	U	0.20	0.5	µg/L	1		02/12/25 6:01 PM
Dichlorobromomethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Ethylbenzene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Methylene Chloride	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:01 PM
Tetrachloroethene	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:01 PM
Toluene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
trans-1,2-Dichloroethene	0.50	U	0.50	5.0	µg/L	1		02/12/25 6:01 PM
Tribromomethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Trichloroethene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Trichloromethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Vinyl Chloride	0.20	U	0.20	10	µg/L	1		02/12/25 6:01 PM
trans-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
cis-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:01 PM
Surr: 1,2-Dichloroethane-d4	112		0	78-122	%REC	1		02/12/25 6:01 PM
Surr: 4-Bromofluorobenzene	95.2		0	74-123	%REC	1		02/12/25 6:01 PM
Surr: Toluene-d8	104		0	79-117	%REC	1		02/12/25 6:01 PM

ACCREDITED IN ACCORDANCE WITH nelac

I.D. 56-00306 PA DEP

Laboratory Results

Geochemical Testing

Date: *18-Feb-25*

CLIENT:	OAK AVENUE RUBBLE FILL - PAPPYS	**Client Sample ID:**	Trip Blank
Lab Order:	G2502610		
Project:	Pappy's 619Q- Quarterly Leachate	**Collection Date:**	2/12/2025 10:22:00 AM
Lab ID:	G2502610-002	**Sampled By:**	TetraTech
Matrix:	AQUEOUS	**DateReceived:**	2/12/2025 10:23:27 AM

Analyses	Result	Q	MDL	PQL	Units	DF	Date Prepared	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Analyst: **MEG**					**EPA 624.1**
1,1,1-Trichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
1,1,2,2-Tetrachloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
1,1,2-Trichloroethane	0.50	U	0.50	5.0	µg/L	1		02/12/25 6:25 PM
1,1-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
1,1-Dichloroethene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
1,2-Dichloroethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
1,2-Dichloropropane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
2-Chloroethylvinyl ether	0.50	U	0.50	10	µg/L	1		02/12/25 6:25 PM
Acrolein	2.00	U	2.00	5.0	µg/L	1		02/12/25 6:25 PM
Acrylonitrile	0.50	U	0.50	1.0	µg/L	1		02/12/25 6:25 PM
Benzene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Bromomethane	0.50	U	0.50	10	µg/L	1		02/12/25 6:25 PM
Carbon Tetrachloride	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Chlorobenzene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Chlorodibromomethane	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:25 PM
Chloroethane	0.20	U	0.20	10	µg/L	1		02/12/25 6:25 PM
Chloromethane	0.50	U	0.50	10	µg/L	1		02/12/25 6:25 PM
cis-1,2-Dichloroethene	0.20	U	0.20	0.5	µg/L	1		02/12/25 6:25 PM
Dichlorobromomethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Ethylbenzene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Methylene Chloride	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:25 PM
Tetrachloroethene	0.40	U	0.40	5.0	µg/L	1		02/12/25 6:25 PM
Toluene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
trans-1,2-Dichloroethene	0.50	U	0.50	5.0	µg/L	1		02/12/25 6:25 PM
Tribromomethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Trichloroethene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Trichloromethane	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Vinyl Chloride	0.20	U	0.20	10	µg/L	1		02/12/25 6:25 PM
trans-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
cis-1,3-Dichloropropene	0.20	U	0.20	5.0	µg/L	1		02/12/25 6:25 PM
Surr: 1,2-Dichloroethane-d4	114		0	78-122	%REC	1		02/12/25 6:25 PM
Surr: 4-Bromofluorobenzene	101		0	74-123	%REC	1		02/12/25 6:25 PM
Surr: Toluene-d8	105		0	79-117	%REC	1		02/12/25 6:25 PM

ACCREDITED IN ACCORDANCE WITH nelac
I.D. 56-00306 PA DEP

Form F-5002, 03.24
*** Lab Work Order # G2502610

REQUEST FOR LABORATORY ANALYTICAL SERVICES

Chain of Custody (COC)

Shuttle/Cooler ID#

Billing Client

Company: WASTE MANAGEMENT - PAPPY'S LANDFILL
Name: DAVE KAASA
E-mail Address: DKAASA@WM.COM
Mailing Address: WASTE MANAGEMENT
Telephone No.: 479-295-4676
Landfill Site: PAPPY'S LANDFILL
City, State, Zip: COLUMBIA MD 21046
State Sampled: MARYLAND
PWS Number: —
Date Results Required: STANDARD

Special Instruction/Project ID/Analyte List/Comment:

PH = 6.71
TEMP = 8.6

*PC-1: Nitric acid (HNO_3)
*PC-2: Hydrochloric acid (HCL)
*PC-3: Sulfuric acid (H_2SO_4)
*PC-4: Sodium Hydroxide (NaOH)
*PC-5: Sodium Thiosulfate ($Na_2S_2O_3$)
*PC-6: Ascorbic acid ($C_6H_8O_6$)
*PC-7: Zinc acetate ($C_4H_6O_4Zn$) / Sodium Hydroxide (NaOH)
*PC-8: Ammonium chloride (NH_4CL)
*PC-9: Copper Sulfate ($CuSO_4 \cdot 5H_2O$)

SR 1st Review: AMM CS 2nd Review: NBB

ANALYSIS REQUESTED

Enter 'X' in box below to indicate request and use appropriate preservation code listed to the left

CLIENT SAMPLE ID	Lab Use Only	DATE SAMPLED	TIME (24 hr)	SAMPLE MATRIX	SAMPLE TYPE	Number of Containers	Dissolved Metals Field Filtered: Y/N	Preservative*: PH-4500-HB	Preservative*: EPA624-U04	Preservative*: M5VOA-EPA624-AA-U04	Preservative*: UNFIXED	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Preservative*:	Cooler (s) Temperature on Receipt
PAPPY'S - LEACHATE	001	2-10-25	1405	LEACHATE	LEACHATE	5		1	2	2															

Ice present on receipt: ✓ Yes or ___ No

Relinquished by: Jeff Gmbel — Date/Time: 2-10-25 - 1535
Relinquished by: — Date/Time:
Printed Sampler Name: JEFF GMBEL

Received by: — Date/Time:
Received at lab by: — Date/Time: 2-12-25 1023
Logged in by: — Date/Time:

Sample Matrix: **GW** Ground Water | **ST** Storm Water | **SW** Surface Water | **PW** Potable Water | **WW** Wastewater | **SO** Soil | **SL** Sludge | **C** Coal | **SLD** Solid | **O** Other

Sample Type: **G** Grab | **C** Composite | **D** Distribution/DW | **E** Entry Point/DW | **R** Raw/DW | **S** Special/DW | **O** Other | **nHZ** Not Hazardous / **HZ** Hazardous | PO/Quote #:

Please return completed form and samples to **Geochemical Testing • 2005 N Center Ave • Somerset, PA • 15501** • 814-443-1671 • (Fax: 814-445-6729)

SAMPLES MUST BE RECEIVED ON ICE.

APPENDIX D: LANDFILL BOUNDARY PROBE MONITORING RESULTS

Device Name	Date Time	CH4 (Methane)(%)	CO2 (Carbon Dioxide)(%)	O2 (Oxygen)(%)	Balance Gas (%)
WMPLPB01	11/25/2024 15:01	0	9.7	7.5	82.8
WMPLPB02	11/25/2024 14:59	0	0.9	18.9	80.2
WMPLPB03	11/25/2024 14:56	0	8.4	12.7	78.9
WMPLPB04	11/25/2024 15:07	5.6	23	0	71.4
WMPLPB05	11/25/2024 15:10	0.6	20.9	0	78.5
WMPLPB06	11/25/2024 15:13	11.1	21.9	1.6	65.4
WMPLPB07	11/25/2024 14:43	0	5.3	15	79.7
WMPLPB08	11/25/2024 14:40	0	5.7	12.8	81.5
WMPLPB09	11/25/2024 14:37	0	4.8	16.1	79.1
WMPLPB10	11/25/2024 14:35	0	5.7	14.4	79.9
WMPLPB11	11/25/2024 14:28	0	0.8	19.7	79.5
WMPLPB12	11/25/2024 14:29	0	0.9	19	80.1
WMPLPB13	11/25/2024 14:32	0	3.8	15.7	80.5
WMPLPB14	11/25/2024 14:23	0	1.4	18.7	79.9
WMPLPB15	11/25/2024 14:25	0	7.7	10.5	81.8
WMPLPB16	11/25/2024 13:53	0	0.4	20	79.6
WMPLPB17	11/25/2024 15:30	20.4	29	0	50.6
WMPLPB18	11/25/2024 14:20	0	0.7	19.1	80.2
WMPLPB19	11/25/2024 14:17	0	0.6	19.3	80.1
WMPLPB20	11/25/2024 14:05	0.1	5.5	14.5	79.9
WMPLPB21	11/25/2024 13:49	0	3.9	16.6	79.5

Device Name	Date Time	CH4 (Methane)(%)	CO2 (Carbon Dioxide)(%)	O2 (Oxygen)(%)	Balance Gas (%)
WMPLPB01	2/5/2025 14:54	0	0.1	20.4	79.5
WMPLPB02	2/5/2025 14:51	0	0.7	20.3	79
WMPLPB03	2/5/2025 14:47	0	7.1	14.1	78.8
WMPLPB04	2/5/2025 14:44	0.2	2.2	17.8	79.8
WMPLPB05	2/5/2025 14:41	0	3	19.8	77.2
WMPLPB06	2/5/2025 14:38	4.8	13.1	6.2	75.9
WMPLPB07	2/5/2025 14:34	0	10.2	10.2	79.6
WMPLPB08	2/5/2025 14:31	0	2.3	16.8	80.9
WMPLPB09	2/5/2025 14:28	0	3.4	17.3	79.3
WMPLPB10	2/5/2025 14:25	0	3.6	15.8	80.6
WMPLPB11	2/5/2025 14:18	0	0.6	20.3	79.1
WMPLPB12	2/5/2025 14:19	0	0.7	19	80.3
WMPLPB13	2/5/2025 14:22	0	0	20.3	79.7
WMPLPB14	2/5/2025 14:12	0	1.1	19.1	79.8
WMPLPB15	2/5/2025 14:15	0	3.6	11.9	84.5
WMPLPB16	2/5/2025 13:49	0	0.5	20.1	79.4
WMPLPB17	2/5/2025 13:53	0	0	20.4	79.6
WMPLPB18	2/5/2025 14:07	0	0	20.5	79.5
WMPLPB19	2/5/2025 14:02	0	0.1	20.4	79.5
WMPLPB20	2/5/2025 13:58	0	0.9	19.1	80
WMPLPB21	2/5/2025 13:45	0	2.4	16.9	80.7

APPENDIX E: TOPOGRAPHIC SURVEY


N 580500
E 982000
N 580000
E 982500
N 579000
E 983000
E 983500
N 581000
N 581500
E 984000
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